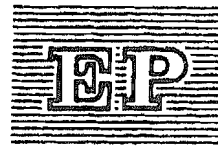




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AD HOC WORKING GROUP OF LEGAL AND TECHNICAL EXPERTS ON BIOLOGICAL DIVERSITY

First session
Nairobi, 19-23 November 1990

REPORT OF THE AD HOC WORKING GROUP OF LEGAL AND TECHNICAL EXPERTS ON BIOLOGICAL DIVERSITY ON THE WORK OF ITS FIRST SESSION

I. INTRODUCTION

1. The Governing Council of the United Nations Environment Programme (UNEP) in its decisions 14/26 and 15/34 formally recognized and re-emphasized the need for concerted international action to protect biological diversity on Earth by, inter alia, the implementation of existing legal instruments and agreements in a co-ordinated and effective way and the adoption of a further appropriate international legal instrument, possibly in the form of a framework convention.
2. The first session of the Ad Hoc Working Group of Experts on Biological Diversity, established pursuant to Governing Council decision 14/26, was held in Geneva from 16 to 18 November 1988 (see the report of the first session contained in document UNEP/Bio.Div.1/3) and the Executive Director reported the results to the Governing Council at its fifteenth session held in Nairobi from 15 to 26 May 1989.
3. The second session of the Working Group was convened in Geneva from 19 to 23 February 1990 to advise further on the contents of a new international legal instrument, with particular emphasis on its socio-economic context (see the report of the second session contained in document UNEP/Bio.Div.2/3). The Group requested the Executive Director to commence a number of studies as a means of responding to specific issues in the process of developing the new legal instrument. These studies cover: biodiversity global conservation needs and costs (UNEP/Bio.Div.3/3); current multilateral, bilateral and national financial support for biological diversity conservation (UNEP/Bio.Div.3/4); an analysis of possible financial mechanisms (UNEP/Bio.Div.3/5); the relationship between intellectual property rights and access to genetic resources and biotechnology (UNEP/Bio.Div.3/6); and biotechnology issues (UNEP/Bio.Div.3/7). The results of the studies were presented to the Working Group at its third session.

4. The third session of the Ad Hoc Working Group of Experts on Biological Diversity was held in Geneva from 9 to 13 July 1990 to advise further, inter alia, on the contents of elements for a global framework legal instrument on biological diversity in accordance with decision 15/34 of UNEP's Governing Council. The full report of the third session is contained in document UNEP/Bio.Div.3/12.

5. In dealing with the issues of costs, financial mechanisms and technology transfer, there was common agreement on the acceptance of the broad estimates of the costs involved, but the Group considered that a final figure could only be agreed within a political context and through extensive negotiations and consultations.

6. The Group maintained that the complex issues involved in biotechnology transfer required further expert examination, assisted by a Sub-Working Group on Biotechnology (SWGB), before the set of elements covering the issues could be agreed. The Working Group prepared terms of reference for the Sub-Working Group and requested the Executive Director to arrange for it to meet before the session to examine detailed draft elements. In accordance with these recommendations, the first session of legal and technical experts was preceded by an expert meeting of the open-ended Sub-Working Group from 14 to 17 November 1990, which discussed issues relevant to biotechnology transfer and made recommendations on, inter alia, the scope of biotechnologies to be included in the convention; ways and means of their transfer to and development by developing countries; and how these biotechnologies should be reflected in the planned convention. To assist the Sub-Working Group in its deliberations, the Secretariat had requested the preparation of an in-depth technical report dealing with the role of biotechnology for conservation and sustainable utilization of biological diversity, together with mechanisms for co-operative development (document UNEP/Bio.Div/SWGB.1/3). The full report of the Sub-Working Group is contained in document UNEP/Bio.Div/SWGB/1/5/Rev.1, which is annexed hereto.

7. The Ecosystems Conservation Group had been very active in assisting the Working Group. At its special meeting held on 1 October 1990, it considered the substance of the proposed convention, as well as the matter of draft elements for inclusion in the new legal instrument.

8. Taking note of the progress made towards developing an international legal instrument on biological diversity, the Governing Council, at its second special session held in August 1990, adopted decision GCSS II/5, which urged the Executive Director, in conjunction with the members of the Ecosystems Conservation Group, to accord high priority to the work on biological diversity and biotechnology with a view to arriving at an international legal instrument for the conservation and rational use of biological diversity within a broad socio-economic context, taking particular account of the need to share costs and benefits between developed and developing countries and ways and means to support innovation by local people. In the same decision, the Governing Council called upon the Ad Hoc Working Group of Legal and Technical Experts established for this purpose to proceed expeditiously with its task. The text of decision GCSS II/5 is attached as Annex II.

9. The first session of the Ad Hoc Working Group of Legal and Technical Experts was convened to discuss the reports of the three sessions of the Ad Hoc Working Group of Experts on Biological Diversity (UNEP/Bio.Div.1/3, UNEP/Bio.Div.2/3 and UNEP/Bio.Div.3/12), as well as that of the Sub-Working Group on Biotechnology (UNEP/Bio.Div/SWGB/1/5/Rev.1) and to consider the content of detailed draft elements in preparation for the actual negotiation of draft articles for a convention on biological diversity.

II. ORGANIZATIONAL MATTERS

A. Opening of the session

10. The session was opened by Dr. M.K. Tolba, Executive Director of UNEP. In his opening statement, he outlined four main areas that needed to be reviewed during the meeting in order to develop precise recommendations on how they should be reflected in the proposed new legal instrument: (i) the scope of conservation; (ii) increased scientific research; (iii) economic values; (iv) financing and technology transfer, ensuring (a) protection of genetic diversity; (b) access to genetic resources; (c) access to relevant technologies. With respect to the issue of access to biological resources, the Group would have to consider ways and means of using the FAO Plant Breeders' Rights and Farmers' Rights to help promote conservation of biological resources, especially in the Global South, as well as the definition of preferential treatment criteria for access by owners of genetic resources to gene banks and to biotechnologically manipulated resources.

B. Attendance

11. The session was attended by delegations (technical and legal experts) from the following countries: Argentina, Australia, Austria, Bahamas, Belgium, Bolivia, Brazil, Burkina Faso, Burundi, Canada, Chad, Chile, China, Colombia, Congo, Denmark, Egypt, Ecuador, Ethiopia, Finland, France, Gabon, Gambia, Germany, Ghana, Greece, Guatemala, Guinea, Guyana, India, Indonesia, Iraq, Japan, Kenya, Korea (Republic of), Lesotho, Malawi, Malaysia, Maldives, Malta, Mauritania, Mexico, Morocco, Myanmar, Netherlands, Nigeria, Norway, Peru, Philippines, Portugal, Romania, Sao Tome and Principe, Senegal, Sierra Leone, Spain, Sweden, Switzerland, Syria, Tanzania, Thailand, Turkey, Uganda, Union of Soviet Socialist Republics, United Kingdom, United States of America, Uruguay, Venezuela, Vietnam, Zambia and Zimbabwe.

12. Observers from the following United Nations bodies and specialized agencies were also present: United Nations Environment Programme (UNEP), Food and Agriculture Organization of the United Nations (FAO), United Nations Educational, Scientific and Cultural Organization (Unesco), United Nations Development Programme (UNDP), United Nations Conference on Environment and Development (UNCED), United Nations Industrial Development Organization (UNIDO), United Nations Office for Ocean Affairs and the Law of the Sea (UN/OALOS), and the World Intellectual Property Organization (WIPO).

13. The following international organizations were also represented at the session: European Community, International Board for Plant Genetic Resources (IBPGR), World Wide Fund for Nature (WWF), and Genetic Resources Action International (GRAIN).

14. In addition, the following bodies participated: Kenya Agricultural Research Institute (KARI) and Pro Scientia.

C. Election of officers and adoption of the agenda

15. The following officers were elected for the session:

<u>Chairman:</u>	Mr. Veit Koester (Denmark)
<u>Vice-Chairmen:</u>	Ms. Eleanor W. Savage (USA) Mr. Paul Chabeda (Kenya) Mr. Valentin A. Krassilov (USSR) Ms. Imeria Oddeman (Venezuela)
<u>Rapporteur:</u>	Mr. Made Sri Prana (Indonesia)

16. The following agenda, contained in document UNEP/Bio.Div./WG.2/1/1, was adopted by the Working Group:

1. Opening of the meeting.
2. Organizational matters:
 - (a) Election of Chairman;
 - (b) Adoption of the agenda;
 - (c) Election of Vice-Chairmen and Rapporteur;
 - (d) Organization of work.
3. General considerations:
 - (a) Note by the Executive Director;
 - (b) Reports of the technical Working Group and the Sub-Working Group on Biotechnology.
4. Consideration of elements for inclusion in the global framework convention on biological diversity as recommended by the technical Working Group.
5. Other matters.
6. Adoption of the report.
7. Closure of the meeting.

III. SUBSTANTIVE MATTERS

Agenda item 3 - General Considerations

(a) The Note of the Executive Director was available with all the comments made by the Executive Director in his introductory statement

(b) Reports of the technical Working Group and the Sub-Working Group on Biotechnology

17. The Chairman of the three sessions of the Ad Hoc Working Group of Experts on Biological Diversity, Mr. Veit Koester (Denmark) briefly summarized the outcome of the deliberations on the different issues discussed at the three sessions of the Working Group under three sub-headings in the following way:

(a) The need for a new legal instrument and the nature of the instrument

- there is an urgent need for a new international legal instrument for the conservation of biological diversity;
- a new framework international legal instrument should build upon, co-ordinate and strengthen existing international legal instruments. It must cover the gaps in conservation conventions and avoid duplication;
- a new framework legal instrument should address the full range of biological diversity on three levels: intra-species, inter-species and ecosystems, and both terrestrial and aquatic ecosystems;
- both in-situ and ex-situ conservation should be included in the convention;
- certain issues may need to be considered in separate protocols;
- if feasible, these protocols should be negotiated concurrently with the framework convention;
- the instrument should aim to incorporate concrete and action-oriented measures for conservation and sustainable utilization of biological diversity.

(b) Concerning financing mechanisms

- an international legal instrument without firm commitments to funding would be meaningless;
- those who enjoy most the economic benefits of biological diversity should contribute on an equitable basis to its conservation and sustainable management;

(c) With regard to access to genetic resources and biotechnology

- accessibility to biological diversity and to related technologies are two sides of the same coin;
- biotechnology transfer is an important element in the planned legal instrument, as it has potential to contribute to improved conservation and sustainable utilization of genetic diversity;
- access to genetic resources should be based on mutual agreement and full respect for the permanent sovereignty of States over their natural resources;
- an innovative mechanism that facilitates access to resources and new technologies should be incorporated into the legal instrument;
- the legal instrument should contain provisions on the need for regulation on a national basis of release into the environment of genetically modified organisms and alien species.

18. The Chairman further stated that, due to the complexity of the issue of biotechnology, the Working Group had concluded at its third meeting that the issue should be referred to an open-ended sub-working group of experts on biotechnology that should make appropriate recommendations on the scope of biotechnologies to be included in the convention.

19. Finally, the Chairman observed that detailed summaries of the first and second sessions of the Ad Hoc Working Group are contained in the Notes by the Executive Director from the second session (UNEP/Bio.Div/2/2) and the third session (UNEP/Bio.Div/3/2), as well as in the Note by the Executive Director for the first session of the Ad Hoc Working Group of Legal and Technical Experts on Biological Diversity (UNEP/Bio.Div/WG.2/1/2).

20. The Chairman of the Sub-Working Group on Biotechnology, Mr. Paul Chabeda (Kenya), introduced the report of the Sub-Working Group contained in document UNEP/Bio.Div/SWGB/1/5/Rev.1. He explained that the task of the Sub-Working Group had not been an easy one due to the complexity of the issue of biotechnology. The Sub-Working Group had, however, achieved its goal in reviewing all its terms of reference and could present 43 draft elements on biotechnology to the present meeting (annex to document UNEP/Bio.Div/SWGB/1/5/Rev.1). Attention was drawn to paragraph 24 of the Sub-Working Group's report, in which it was noted that the list of biotechnology elements was not exhaustive nor did it necessarily represent views common to all delegations.

Agenda item 4 - Consideration of elements for inclusion in the global framework convention on biological diversity as recommended by the technical Working Group

21. The secretariat was requested to provide the Group of Experts at its meeting with:

(a) a document containing cross-references to other conventions/agreements with the definition of terms included in chapter II (Definitions and Interpretations) of document UNEP/Bio.Div/WG.2/1/3;

(b) a list of international legal instruments relevant to the work of the Working Group;

(c) the text of the financial mechanisms adopted at the second meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer held in London in June 1990.

22. The Working Group also requested the secretariat to develop further the few paragraphs on the scope of the convention and its objectives, which should mainly be based on the relevant decisions of the UNEP Governing Council. It was emphasized that, in the development of a legal instrument, general as well as specific objectives should be identified.

23. Regarding the report of the meeting of the Sub-Working Group on Biotechnology, some representatives pointed out that paragraph 24 of the report should be referred to while considering the elements. In considering the list of these elements, it should be noted, in particular, that "the list was not exhaustive, nor did it necessarily represent views common to all delegations". Some representatives pointed out that this paragraph should not be referred to out of context, but only in connection with reference to elements for biotechnology.

24. The Working Group agreed that its main target at this session was to reduce the number of elements contained in the document UNEP/Bio.Div/WG.2/1/3, as well as to try to eliminate the brackets in the text. However, the Group was of the opinion that while going through the document, it should not enter into negotiation or editing.

25. It was decided that the main emphasis during the Working Group meeting should be on chapters III, IV, V, VI, VII, VIII, XII, keeping in mind the issues and problems contained in chapters IX, XI, XIII, as well as the question of definitions. It was decided that some of the chapters, particularly those dealing with Settlement of Disputes (chapter XIV), Other Provisions (chapter XV), and Final Clauses (chapter XVI), should not be the subject of discussion at the meeting. Two chapters - chapter XVII - Annexes, and chapter XVIII - Protocols - should be dealt with only if time allowed. Regarding chapter IX on Financial Mechanisms, the Working Group agreed on the importance of this issue, considering, however, that it would not be feasible to have an extensive discussion on the matter at this session.

26. In terms of the name of the convention, one representative held that its title should incorporate wording that signified action in respect of biological diversity, such as "Convention on the conservation of biological diversity".

Chapter III - Fundamental Principles

27. The Working Group decided first of all to discuss chapter III of document UNEP/Bio.Div/WG.2/1/3. While discussing this chapter, the following new elements were proposed for inclusion:

- a principle of preventive/precautionary approach to biological diversity;
- a principle according to which those who damage or destroy must rehabilitate;
- an element based on the "polluter pays" principle;
- a principle of conservation of national biological diversity;
- recognition and reward of informal innovation by local/indigenous people ("farmers' rights");
- a principle stipulating that the conservation of biological diversity is a service rendered to be duly remunerated;
- the additional burden on developing countries arising out of protection of their biological diversity should be met by new and additional funding to be provided by the developed countries through a new multilateral fund to be set up under the convention;
- the benefits of research and development derived from biomaterial taken from developing countries should be made available to developing countries;
- the direct link between the conservation of biodiversity in developing countries and access to their biomaterial with:
(a) their access both to end products made by using such biomaterial and to the relevant technologies; and (b) equitable sharing of the benefits and profits from such use of biomaterial with the country of origin of the biomaterial;
- the special situation of developing countries should be recognized in all relevant provisions of the convention in order to ensure a clear distinction between the obligations and responsibilities of developing countries and those of developed countries.

28. As to the structure of this chapter, it was suggested that it be kept as brief as possible and that elements should not be considered as fundamental principles.

29. Regarding the concepts to be considered for incorporation in the future convention, the Working Group made the following comments:

Paragraph 1

30. The Working Group agreed that the heritage of mankind should not be reflected in the convention. It agreed that the concept of the common concern of humankind in relation to biological diversity should be introduced into the fundamental principles. Some representatives suggested that the common interest of humankind should also be reflected in the draft and that common responsibility followed naturally from the concept of common interest. Several representatives opposed inclusion of common responsibility in the draft. Some also opposed reference to the common interest, which, in the English language, can also be understood as a material interest.

Paragraph 2

31. The discussion over this paragraph led to the conclusion that its wording should be further developed based on Principle 21 of the Stockholm Declaration, as well as on General Assembly Resolutions 44/228 and 44/207. It was emphasized that the sovereignty or sovereign rights of States should be referred to according to customary and conventional international law, including the future convention. It was suggested that the stewardship concept should not be further developed for the purpose of the convention in view of its ambiguity. Several representatives suggested that it should be deleted.

32. It was felt that this paragraph could be moved and reflected in the preamble to the convention or combined with paragraph 5.

Paragraph 3

33. It was felt that the expression "duty" should be replaced by the expression "responsibility". It was also proposed that this paragraph should be replaced by revised wording from the Stockholm Declaration and the World Charter for Nature.

Paragraph 4

34. Some representatives supported paragraph 4, while others were of the opinion that the present wording of the paragraph was rather confusing, particularly with regard to the expression "sustainable use of biological diversity". The view was expressed that in this context sustainable use should refer to the fruits of biodiversity as such. A few representatives proposed that this paragraph should be moved to the preamble.

Paragraph 5

35. It was proposed that this paragraph should be divided into two and that the word "resource" in relation to biological diversity should be replaced by more relevant wording. The issue of socio-economic development should be further considered or possibly deleted, taking into account the controversial nature of this paragraph. The reference to poverty was largely criticized, while there was some support for retaining mismanagement in this paragraph. One representative suggested that the contents of this paragraph should be moved to the preamble. It was emphasized that conservation and socio-economic development must be mutually compatible. Mismanagement, habitat destruction and degradation, and air pollution, which were the main causes of loss of biodiversity, should be recognized as consequences of unsustainable use of resources, as well as of poverty in developing countries.

Paragraph 6

36. Several representatives indicated their preference for the alternative contained in the last sentence of this paragraph, while some suggested its deletion and preferred retaining the first part of the paragraph. Other representatives proposed deletion of the part referring to the sharing of benefits. There was, however, general agreement that the concept of equitable sharing of benefits should be explored further, since it was linked to political matters related to financial co-operation. Some representatives reiterated that this paragraph should include provisions related to the special needs and interests of developing countries. Others considered it appropriate to incorporate into paragraph 6 considerations of due reward for indigenous peoples' knowledge. One representative proposed that the whole paragraph should be moved to chapter IX.

Paragraph 7

37. It was largely agreed that accessibility to biological diversity should be based on mutual agreement between countries. Several representatives objected to the concept of free access as such, while others considered it applicable to research and educational needs. One representative suggested that "open access" might be a better term, though the whole concept could be better dealt with under chapter VI. It was proposed that access to biotechnology should be based on mutual agreement; in this context the interdependence between biotechnology and biodiversity was emphasized. Some representatives stressed that in-situ conservation of biological diversity should be given priority, while others preferred to accord equal weight to in-situ and ex-situ conservation.

38. An observer for an international organization emphasized that it would be advisable if the concepts and principles of the the future convention on conservation of biological diversity was compatible with the International Undertaking on Plant Genetic Resources, so that the Undertaking may eventually become a protocol of the convention.

39. The following representatives submitted to the secretariat their written proposals/amendments to chapter III:

1. Argentina
2. Australia
3. Bahamas
4. Burkina Faso
5. Canada
6. Chad
7. Chile
8. Colombia
9. Ethiopia
10. Finland
11. France
12. Gambia
13. Germany
14. Greece
15. India
16. Indonesia
17. Japan

18. Kenya
19. Lesotho
20. Malawi
21. Malaysia
22. Mexico
23. Netherlands
24. Nigeria
25. Norway
26. Senegal
27. Sweden
28. Switzerland
29. Union of Soviet Socialist Republics
30. United Kingdom
31. United Republic of Tanzania
32. United States of America
33. Venezuela

40. In addition, FAO submitted a written proposal to the secretariat.

Chapter IV - General obligations

41. It was emphasized that the chapter contained a number of repetitions and should be redrafted. Some representatives proposed that the wording should be slightly softened, in particular in relation to the word "duty", while others insisted on stronger obligations. Some representatives stressed that this chapter should refer mainly to obligations related to co-operation in the field of biodiversity and to refraining from activities harmful to biodiversity.

42. Many representatives held that sub-paragraphs (e')*, (e'')* and (f) should be deleted from the text. Some considered that chapter IV should include specific measures to meet the special needs of developing countries. Referring to sub-paragraph (d')*, one representative stated that any provisions regarding additional conditionality for technical and financial assistance should be avoided.

43. Some representatives expressed the view that, in order to avoid overlapping with other chapters, it was necessary to reduce further the number of elements contained in chapter IV. In particular, sub-paragraphs (c), (d')* and (g) were proposed for deletion. One representative suggested that sub-paragraph (d')* could be divided into two separate sub-sections.

44. Several representatives suggested that the obligations contained in chapter IV should, inter alia, take into account the interests of future generations. Some expressed the view that the obligations should reflect the special needs of developing countries, as well as the need to create mechanisms for additional funding. It was also proposed that biotechnology issues should be reflected. An observer for a non-governmental organization emphasized the need for strong commitments to conservation of biological diversity and to the creation of relevant instruments to assist developing countries to meet their commitments under the future convention.

45. It was suggested that the content of this chapter could be consolidated focusing upon the four major obligations concerning action:

- to take appropriate measures to conserve and restore biological diversity at the national and international levels;
- to refrain from action potentially harmful to biological diversity in other States and areas beyond national jurisdiction, utilizing where appropriate the mechanism of environmental impact assessment;
- to develop policies, strategies and programmes for sustainable utilization of biological resources;
- to co-operate in achieving the aims and goals of the convention on conservation of biological diversity.

46. During the discussion on chapter IV, the following new elements were proposed:

- an obligation to promote co-operation in the field of scientific research, education and public awareness;
- an obligation to co-operate in the field of emergency environmental assistance;
- an obligation to prevent harming biological diversity;
- an obligation regarding rehabilitation and compensation for loss, where biological diversity has been destroyed;
- an obligation to assess the environmental impact of activities potentially harmful to biological diversity and to monitor regularly the state of biological diversity;
- an obligation to provide new, additional and appropriate funds and innovative financial mechanisms in order to meet the special needs of developing countries;
- a common endeavour to develop technologies suitable to the conservation, rational utilization and restoration of biological diversity in heterogeneous ecosystems.

47. The following representatives submitted to the secretariat their written proposals/amendments to chapter IV:

1. Australia
2. Burkina Faso
3. Burundi
4. Chile
5. Colombia
6. Finland

7. Gambia
8. Germany
9. Greece
10. India
11. Lesotho
12. Malaysia
13. Switzerland
14. Syrian Arab Republic
15. Thailand
16. Union of Soviet Socialist Republics
17. United Republic of Tanzania
18. United States of America
19. Venezuela
20. Viet Nam

Chapter V - Measures for conservation and sustainable utilization of biological diversity

A. Measures for in-situ conservation of biological diversity

48. There was general consensus that chapter V was one of the most important chapters in the proposed convention. However, there was no clear agreement on individual elements. Several representatives indicated that there should be a better balance between the benefits and burdens referred to in the chapter.

49. One representative considered that the chapter needed a clearer conceptual framework since the implementation of concrete measures would take place within that context. Some representatives expressed the view that the section should explicitly emphasize the fact that all implementation must take place in accordance with national priorities and plans. One suggested that national biological diversity strategies could constitute the main method of implementation.

50. Representatives were divided with regard to the relative weight to be attached to in-situ and ex-situ conservation. Some expressed the view that ex-situ conservation should be covered only in relation to the needs of biological diversity in-situ. Others stated that ex-situ and in-situ were different sides of the same coin and must therefore be on an equal footing. There were differing views as to whether these two items should be treated separately or in the same chapter. One representative argued that, for the sake of clarity if nothing else, the subject should be dealt with under a separate heading.

51. Several representatives suggested that the measures contained in chapter V should include the creation of special economic development areas around protected areas. Some stated that most of the measures for in-situ conservation should be implemented at the national level. One representative proposed that national bodies responsible for implementing measures for in-situ conservation should be established. It was also suggested that criteria for identifying protected areas should be elaborated. Some representatives emphasized that measures for in-situ conservation should be in proper balance with socio-economic interests.

52. The use of the words "obligation" and "duty" in subparagraph (a) were objected to by some representatives. They expressed a preference for weaker language such as "parties should be encouraged" and "intention". Several agreed with the suggestion that subparagraphs (a) and (b) should be merged into one subparagraph. One representative proposed the deletion of subparagraph (c')*.

53. There was mixed reaction to the idea of national lists contained in subparagraph (d) and global lists (ECG comment (1)). If the list were to be global, some representatives suggested that the IUCN list should be used as the starting point, with the CITES list supplementing it. One representative stated that there was a need to articulate more clearly national obligations in relation to any list.

54. Some representatives maintained that subparagraph (e')* should be moved to chapter IX (Financial Mechanisms). One preferred adding the words "particularly to developing countries". Another stated that the obligation to provide financial and other support to developing countries referred to in subparagraph (e')* should apply only to developed countries.

55. The obligation to provide financial and institutional assistance contained in subparagraph (e')* was generally approved, although it was suggested that the obligation be stated as "mainly one of developed countries". A number of representatives expressed the feeling that this subparagraph and the chapter in general did not reflect the special needs of developing countries.

56. One representative proposed that the concept of the rational use of ecosystems should be added to subparagraph (f). Another suggested the inclusion of a reference to "management". One proposed that subparagraph (g) be moved to chapter XII (International Co-operation). Another proposed the deletion of subparagraph (g).

57. A few representatives suggested that subparagraph (h) should be moved either to the preamble or to chapter III (Fundamental Principles). Another representative proposed that subparagraphs (i) and (j) should be combined. Another proposed that subparagraph (i) be amended to include risk assessment studies. One representative opposed the use of the term "sustainable development" in subparagraph (k), since the concept implied social and economic sacrifices. One representative proposed that subparagraphs (k) and (l) be merged. With regard to subparagraph (l), it was considered that measures for financial and technical assistance should take into account better the special needs of developing countries. A number of representatives stressed that recognition of the traditional knowledge of local populations should be included in subparagraph (m). One representative requested that the wording of paragraph (m) not only recognize the knowledge of local populations, but encourage their participation in programmes, plans and projects with the aim of satisfying their needs and achieving better management of protected areas.

58. Several representatives proposed that subparagraphs (n')*, (o')* and (p')* should be moved to chapter IV (General Obligations). One proposed that the last sentence of subparagraph (n')* should be deleted, while several others underlined the need to extend the obligation to notify to include notifying competent international organizations. One representative proposed the addition of an obligation for parties to take concrete measures to ensure the protection and management of areas important to biological diversity; measures to ensure the conservation of species with special emphasis on threatened and migratory species and on species that are relatives of domestic/cultivated species; and measures to regulate the exploitation of species.

- B. Measures for ex-situ conservation of biological diversity
- C. Measures for sustainable utilization of biological diversity
- D. Research and training
- E. Education and public awareness
- F. Environmental impact assessments

59. A comprehensive discussion took place on the elements contained in sections B, C, D, E and F. During the discussion, it was continually stressed that an inherent link between in-situ and ex-situ conservation should be clearly reflected in the provisions of chapter V. Several representatives stated that in-situ conservation was a fundamental aim of the future convention, while ex-situ conservation could be an indispensable tool, but not an aim.

60. Some representatives emphasized that ex-situ conservation and research measures should, as a rule, be implemented in the countries of origin of biological diversity. It was agreed that in implementing measures for conservation and sustainable utilization of biological diversity, due regard should be given to regional and local conditions. It was also considered that the research measures under section D should provide tangible solutions for developing countries and that the measures on education and public awareness should include the development of technical training programmes. While emphasizing the importance of environmental impact assessments, it was proposed by one representative that these should be carried out primarily by countries where potential harm might originate. One representative mentioned the establishment of natural history museums as an important instrument for ex-situ conservation and stressed the need to promote such institutions in developing countries.

61. The following representatives submitted to the secretariat their written proposals/amendments to chapter V:

1. Australia
2. Bolivia
3. Chile
4. Colombia

5. Ecuador
6. France
7. Gambia
8. Germany
9. Guatemala
10. India
11. Indonesia
12. Japan
13. Lesotho
14. Malawi
15. Malaysia
16. Netherlands
17. Norway
18. Peru
19. Sweden
20. Thailand
21. Uganda
22. United Kingdom
23. United States of America
24. Venezuela

62. In addition, the World Wide Fund for Nature provided the secretariat with a written proposal.

Chapter VI - Availability of and access to biological diversity technology and information thereon.

Chapter VII - Transfer of technology for the conservation and utilization of biological diversity

Chapter VIII - Technical assistance to developing countries

63. Because of the close relationship among the chapters, the Working Group decided to consider chapters VI, VII and VIII together.

64. Based upon an introductory statement by the Chairman, it was agreed that the annex to the report of the Sub-Working Group on Biotechnology should be amended to include the additional elements that were handed over to the secretariat, but which, due to time constraints, were not added during the meeting of the Sub-Working Group. The report of the Sub-Working Group and its annex were duly noted and it was agreed that the report, including the statement in paragraph 24, should be used in future proceedings on an equal footing with the material already in hand and the input given during the present meeting. It was decided that the amended annex should be attached to the present report so as to constitute an integral part of the report of this meeting.

65. The Chairman proposed that concepts should be discussed and elaborated, but not the specific language contained in the chapters under discussion. A new element proposed and supported by several representatives was the equitable sharing of benefits with the countries of origin of biological diversity.

66. A few representatives stated that the chapters were too vague and that guidance was required on how they should be elaborated in an operative and meaningful manner. Representatives were divided concerning the overall approach to the transfer of technology. While some insisted that it should take place on a preferential and non-commercial basis, others considered that the notion of "fair and equal" exchange of technology should be applied.
67. Some representatives stated that technology was primarily owned by private industry; therefore, they expressed concern that since States did not own the major part of the technology and cannot intervene or force the private sector, the elaboration of provisions for transfer of technology to developing countries could become cumbersome. Furthermore, property rights were already being dealt with in forums such as WIPO and GATT and should therefore be left to those organizations.
68. A number of representatives opposed this idea and maintained strongly that developed countries should develop a mechanism for transfer of technology from the private sector. Some stated that they would not sign any convention that did not contain adequate provisions related to the development and transfer of technology. Several insisted that intellectual property rights should be reflected in the convention.
69. A few representatives suggested that mention of the conservation of biological diversity should always include a reference to its sustainable utilization.
70. The use of the word "obligation" in this and other chapters elicited numerous comments. Several representatives considered that the language should be weakened, while others wished the word to be retained.
71. Many representatives held that these chapters did not reflect the appropriate balance that should exist between the owners of technology and the owners of genetic resources. Another imbalance noted was between access to biological diversity and technological research and training and information.
72. Several representatives expressed the wish to include a provision stating that research should be developed and conducted in those countries where biological diversity was located and that means should be provided for this. A few stated that technologies, including biotechnologies, should be developed jointly between developed and developing countries.
73. Some representatives stressed the need to focus on biotechnologies that were supportive for biological diversity. One stated that biotechnology should take account of the needs of small farmers and promote sustainable agriculture.
74. There was general agreement that expressions like "poorer" and "richer" countries should not be used in future documents. Some representatives stated that expressions such as "gene-rich" and "technology-rich" also should not be used.

75. Some representatives proposed that subparagraphs VI A. (a), (b) and (c) should be combined in one subparagraph. Some stated that element (g) in chapters VI and VII should be dealt with in Chapter IX. There was discussion regarding the degree of emphasis to be laid on multilateral versus bilateral agreements. Some representatives held that access should be controlled on a wholly bilateral basis. Others expressed the view that bilateral agreements should be used to supplement the multilateral agreements. It was proposed that the term "countries of origin" in subparagraph (c) should be defined in the list of definitions.

76. In connection with Section B of chapter VI, it was considered that certain subparagraphs would be more appropriately dealt with in other chapters. One representative held that access should be limited to published scientific and technical research, while others stated that there should be access to all scientific research, published or unpublished.

77. In discussing chapter VII, one representative expressed the view that genetic technology should not be included. However, this view was opposed by other representatives.

78. One representative stated that the idea that access to biotechnology should be based upon requests from biologists was an interesting one that required further elaboration.

79. Several representatives indicated that the fact that the 1992 United Nations Conference on Environment and Development would deal with biotechnology and the transfer of technology did not mean that these issues should be excluded from the convention on biological diversity.

80. In discussing chapter VIII, several representatives expressed the desire to see the word "co-operation" used rather than the words "assistance" or "aid".

81. Several representatives stressed that a clearing house mechanism should be created to facilitate transfer of technology among countries. Others stated that this new institution was not desirable and that the function should be carried out through the co-ordination and strengthening of existing institutions.

82. Several representatives considered that the fund established as a result of amendments to the Montreal Protocol served as a good model and basis for negotiation. Others stated that it was an example that deserved careful examination. Other representatives, however, did not consider that the Montreal Protocol should be seen as setting a precedent.

83. The following representatives submitted to the secretariat their written proposals/amendments to chapters VI/VII/VIII:

1. Australia
2. Bahamas
3. Burkina Faso
4. Chad
5. Colombia
6. Congo

7. Ecuador
8. Ethiopia
9. France
10. Germany
11. Greece
12. India
13. Japan
14. Malawi
15. Nigeria
16. Thailand.
17. United Kingdom
18. United States of America

84. In addition, FAO provided the secretariat with a written proposal.

Chapter XVIII - Protocols

85. Several representatives expressed the belief that discussing the subject of protocols was still premature.

86. One representative stated that certain subjects warranted protocols. Other representatives stressed that, while the possibility of renegotiating existing treaties as protocols to the convention should not be excluded, the legal and technical difficulties involved should make States hesitate to take such steps. A few representatives stressed that adding relevant conventions to the convention on biological diversity as protocols would be a repetition. One representative stated that as far as possible all issues should be included in the main body of the convention and its annexes and protocols should be kept to a minimum.

87. One representative maintained strongly that the chapter on protocols should be fully discussed in the present forum, as well as proposed possible protocols to the future convention on biological diversity:

- the possibility to develop the FAO Undertaking on Plant Genetic resources;
- a management protocol for habitat conservation;
- a protocol for sustainable utilization and development of biological diversity;
- a protocol on safety of biological diversity.

88. One representative mentioned the inter-relationship between the future forestry convention and the convention on biological diversity. He proposed further that possible future co-operation within the area of biological diversity among UNEP, FAO and WHO should be studied.

Chapter XII - International co-operation

89. One representative appealed for the inclusion of a strong commitment on international co-operation.

Country Studies

90. Questions were raised by representatives concerning country studies that had been proposed at the July 1990 meeting of the Ad Hoc Working Group of Experts. Mr. Olemba, Deputy Assistant Executive Director of UNEP, explained that a total of nine country studies had been proposed to the following countries: Brazil, Germany, Indonesia, Madagascar, Nepal, Peru, Poland, Uganda and Zaire. To date, UNEP had received positive replies from five countries: Brazil, Germany, Indonesia, Peru and Uganda. More countries had been invited to participate in the programme and so far the Bahamas and Malaysia had given their consent.

91. The ECG Group (FAO, Unesco, IUCN, WWF, UNDP) had met to discuss this issue and had studied guidelines for the preparation of the studies so as to develop a set of general principles and guidelines. A number of countries had already generously assisted in funding these studies, but more funding was indispensable.

92. One representative, supported by some others, proposed that the country studies should not only develop guidelines and estimates for the cost of the conservation of biological diversity, but should also contain inventories of biological diversity. One representative announced his Government's intention to consider financing part of the expenses for this task before finalization of the convention.

93. One representative mentioned the importance of carrying out studies on the costs and benefits of biological diversity. One representative mentioned the importance of carrying out studies not only on the costs, but also on the economic benefits of biological diversity. The benefits derived from the conservation of biological diversity would be greater than the costs of its conservation. It was therefore important to demonstrate this and provide an incentive to continue to conserve biodiversity. These ideas should be consistently integrated into the case studies.

Agenda Item 5 - Others Matters

94. The Ad Hoc Working Group of Legal and Technical Experts on Biological Diversity discussed the future structure for the negotiating process. Based upon informal consultations, the Chairman summarized the following conclusions:

- (i) No agreement was reached regarding the structure of the bureau, during this session and the question should be left for the next session of the Ad Hoc Working Group to decide;
- (ii) The bureau for the negotiating process would be elected by the negotiating body at its next meeting;
- (iii) The following points were listed in connection with the timing of the future work of the Ad Hoc Working Group:
 - (a) - the next meeting was planned for February 1991;
 - (b) - the duration of the next session would be eight working days;

- (c) - the negotiating body would be left to decide upon its future programme of work;
 - (d) - it was an overall aim to conclude the convention on biological diversity by 1992.
- (iv) With regard to the name of the negotiating body, the meeting that would take place in February 1991 would constitute the second session of Ad Hoc Working Group of Legal and Technical Experts on Biological Diversity, as decided by the UNEP Governing Council.
- (v) The basis for the deliberations of the Ad Hoc Working Group of Legal and Technical Experts would be a request to the Executive Director of UNEP to present to the February 1991 meeting of this Ad Hoc Working Group a draft convention on biological diversity based upon the elements, views and recommendations that had emerged from the three previous sessions of the Ad Hoc Working Group of Technical Experts, the Sub-Working Group on Biotechnology, in addition to this session of the Ad Hoc Working Group of Legal and Technical Experts on Biological Diversity.
- (vi) With regard to draft rules of procedure, the Group should request the Executive Director to present draft rules of procedure based upon normal UNEP practice for similar negotiating processes.
- (vii) The Executive Director of UNEP should be requested to invite donor countries to provide financial contributions to support the participation of developing countries for the whole negotiating process, as well as for the elaboration of country studies.

95. At the time of the adoption of the report, the Chairman made the following statement: "I have also taken good notice of Dr. Tolba's remark of yesterday that he was going to consult with the Committee of Permanent Representatives to UNEP on the outcome of this meeting. I personally feel that it could be useful if the Committee of Permanent Representatives to UNEP could give specific attention to the organizational problems, as opposed to substantive matters (composition of the bureau, organization of work, etc.) before the next meeting of this ad hoc working group and report on its findings both through the usual channels and to the informal meeting of heads of delegations to be held prior to our next meeting." The Chairman asked if the representatives had any comments on his statement. As no comments were made, he concluded that his statement was to be reflected in the report.

96. The Executive Director of UNEP, Dr. Tolba, briefly outlined the procedures he would follow until the next session in February 1991. He explained that he would invite Governments to provide a basis for the structure of the next meeting and that he would indicate the options for the structure and the bureau.

97. Some elements of the rules of procedure, especially the Bureau, would possibly have to be in brackets and left for the next session of the Ad Hoc Working Group to decide. As to the name of the group for the negotiating sessions, the views of Governments in this respect would be solicited.

98. He added that UNEP's secretariat would prepare the draft convention on biological diversity based upon the list of elements presented at this session of the Ad Hoc Working Group of Legal and Technical Experts, as well as the outcome of the previous three sessions of the Ad Hoc Working Group of Technical Experts and the Sub-Working Group on Biotechnology, with all options included but with proper legal language. The secretariat would not try to make any change or show any specific preference for any options presented by different delegations. Dr. Tolba explained that the secretariat would prepare that draft within the next couple of weeks and that five lawyers, one from each region of the world, would be invited to review the draft. They would be invited to a meeting early next year to prepare the final draft. The final draft convention would be distributed in languages to Governments at least one month before the next meeting of the Ad Hoc Working Group.

99. With regard to contributions to provide means for developing countries to participate in the forthcoming sessions, Dr. Tolba stated that he would seek the views of Governments on either of two options:

- (i) a trust fund similar to that created for the IPCC;
- (ii) a counterpart contribution mechanism.

100. Dr. Tolba explained that in the immediate future he would invite the Permanent Representatives to UNEP to discuss these issues and try to find solutions to the pending questions.

101. One representative, speaking on behalf of African representatives, outlined a proposal for the future structure of negotiations to the Ad Hoc Working Group of Legal and Technical Experts on Biological Diversity. It was recommended to the Ad Hoc Working Group to proceed along the following lines:

- (i) To establish two sub-groups to deal with specific aspects of negotiating the convention as follows:

- (a) Sub-Group I:

- To deal with general issues such as the Fundamental Principles, General Obligations, Measures for in-situ and ex-situ conservation, Relationship with other Legal Instruments, Institutional Arrangements;

- (b) Sub-Group II:

- To deal with the issues of Access to Biodiversity and Related Technologies, including Biotechnology, Technology Transfer, Technical Assistance, Financial Mechanisms and International Co-operation.

- (ii) To establish a legal drafting group.
 - (iii) To elect two co-chairmen, one for each Sub-Group, as follows:
 - one from developing countries for Sub-Group I;
 - one from developed countries for Sub-Group II.

- (iv) To elect three vice-chairmen and one rapporteur (representing different regional groups) for each Sub-Group, as follows:

Sub-Group I

3 vice-chairmen
1 rapporteur

Sub-Group II

3 vice-chairmen
1 rapporteur

- (v) The two Sub-Groups would meet in parallel to speed up the negotiating process. Their reports would be presented for adoption as one report at the plenary session under the chairmanship of one of the co-chairmen, who would chair the plenary meetings in rotation, together with his rapporteur.
- (vi) The plenary meetings would bear overall responsibility for the work of the Group and its Sub-Groups.
- (vii) The Working Group would be entitled the "Intergovernmental Negotiating Group for the Framework Convention on Biological Diversity".

102. Another representative, speaking on behalf of Western Europe and other representatives, emphasized the importance of endorsing the Chairman's seven proposed points. In addition, these representatives recommended that three issues be considered:

- (i) it would be preferable if the new bureau to be elected were to consist of one chairman, three vice-chairmen and one rapporteur;
- (ii) that this meeting would welcome the offer by Spain to host the next session of the Ad Hoc Working Group of Legal and Technical Experts;
- (iii) that the duration of the next session would be eight working days and that it would end on a Friday.

103. Dr. Tolba indicated that UNEP would not be able to service a meeting in Spain in February 1991 due to prior obligations in Nairobi and suggested that the meeting should welcome the offer by Spain to host one meeting of the Ad Hoc Working Group.

104. Another representative supported the proposal by the African Group and suggested that it could be considered with some modifications. The Eastern European Group endorsed the African Group's proposal, as did several other representatives outside this Group.

105. Another representative made a proposal for the organization of forthcoming sessions. It was recommended that the negotiating group proceed along the following lines:

- (i) To establish three working sub-groups to deal with:
- (a) Sub-Group I: Principles and Measures for the Conservation of Biodiversity, Relationship with other Instruments and Institutional Arrangements for the Planned Legal Instrument;

/...

- (b) Sub-Group II: Funding Needs and Financial Mechanisms for the implementation of the Convention, Related Legal Instruments and International Co-operation;
 - (c) Sub-Group III: Access to Technology and the Pertinent Biological Resources, Technology Transfer, Technical Assistance and Aspects of Biotechnology related to Biodiversity;
- (ii) Only two parallel meetings would be held at the same time (plenary and one or two groups).
 - (iii) Elect one chairman (preferably from the Group of 77). This statement was supported by several delegations.
 - (iv) Elect three vice-chairmen and one rapporteur (belonging to different regional groups).
 - (v) Each vice-chairman would be responsible for chairing one of the working sub-groups mentioned in sub-paragraph (i) above.
 - (vi) Each sub-group would elect one rapporteur and one vice-president to help its chairman.
 - (vii) Specific aspects of the negotiation would be carried out in the sub-groups for presentation to the plenary, which would have the power of decision. The co-ordination and integration into a whole would be the responsibility of plenary meetings and frequent bureau meetings, under the chairman.

106. Another representative stressed that further informal consultations in the different groups had to continue before the end of this session in order to reach a conclusion as to which structure to adopt for the future negotiations. This statement was supported by several representatives.

107. One representative, speaking on behalf of Western Europe and other countries, stressed the importance of having relevant meeting documents, including the draft convention, available to the Governments six weeks before each session.

108. Spain reiterated, in accordance with Governing Council decision UNEP/GC/SS.II/7, its offer to host the next session of the Ad Hoc Working Group of Legal and Technical Experts on Biological Diversity in Madrid from 27 February - 8 March 1991. This invitation was welcomed by acclamation.

Agenda item 5 - Other Matters

109. One representative presented a proposal for the re-structuring of chapter V under the title "Measures for conservation and sustainable utilization of biological diversity at the national level". The proposal contained all the elements from current chapters V and XI, with the exception of some parts that had been moved to chapters III or IV. In general, the sub-sections would deal with the following: National Action Plans, Institutional Measures, State of Biological Diversity, Measures for Sustainable Utilization, Research, Education, Training and Public Awareness, Presentation and Review and Reporting of Results. A written statement outlining the proposal was made available to the secretariat.

110. A representative from the secretariat of the United Nations Conference on Environment and Development recalled that conservation of biodiversity and environmentally sound management of biotechnology were two of the issues identified for major consideration by the 1992 Conference. He indicated that the Secretary-General of the Conference had to report to the next session of the Preparatory Committee on the status of the negotiations on the proposed convention so as to analyse the results achieved and to make recommendations thereon. The Executive Director of UNEP could submit the report of the next meeting to the Secretary-General of the United Nations Conference on Environment and Development for his comments, which would then be transmitted to the Ad Hoc Group of Legal and Technical Experts. The preparation process of the Conference, however, did not focus on the negotiation of conventions, but rather on the elaboration of strategies, policies and programmes. In the field of biodiversity, the Secretary-General would convene a small working party to help him prepare the necessary documents, possibly followed later by a larger consultative technical group, given the relationship between biodiversity and biotechnology and the broader socio-economic issues of the Conference. He would fully and regularly inform the Preparatory Committee so that it could encourage and assist the negotiation process under way as appropriate.

111. The Chairman made the following proposals for inclusion in the session's final report:

"There was general agreement that the views on individual issues reflected in this report, together with the list of elements to be put forward by the meeting, including the Annex to the report of the Sub-Working Group on Biotechnology, were not exhaustive and did not necessarily represent views common to all delegations. Nevertheless, they are put forward as the basis for future consideration and negotiation."

There were no objections to the inclusion of this paragraph.

112. One representative expressed the view that the document to be prepared by the Executive Director of UNEP would advance as quickly as possible the preparation of a preliminary draft of provisions that could be used for future discussion and that would simply reflect in legal terms the various elements discussed during the preparatory process. He also considered it indispensable that, once prepared, this document be submitted to Governments so that they might comment and make proposals as they deemed necessary. Moreover, he stated, it was extremely important that the Governing Council, at its next session, carefully review the process of preparing a draft convention.

113. Another representative, speaking on behalf of the Parties to the Amazonian Co-operation Treaty, stressed the importance of concluding a legal instrument on the conservation and sustainable utilization of biological diversity for adoption at the United Nations Conference on Environment and Development in 1992. Further, he stated, the planned convention would have little sense unless it contained unequivocal provisions concerning (a) the

establishment of new and innovative mechanisms of international co-operation that could, as appropriate, guarantee to developing countries the conservation, rational use and sustainable development of their biological diversity; (b) joint development of biotechnologies; (c) systematic access to the technologies, as well as to information and scientific, technical and technological knowledge; (d) transfer of technology on preferential and non-commercial terms; and (e) new, adequate and additional financial resources.1/

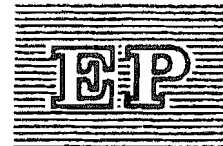
1/ The statements of other representatives submitted to the secretariat in the course of this meeting will be reflected in a forthcoming addendum to this document.

Appendix

FINAL REPORT OF THE SUB-WORKING GROUP ON BIOTECHNOLOGY



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Sub-Working Group on Biotechnology
Nairobi, 14-17 November 1990

FINAL REPORT OF THE SUB-WORKING GROUP ON BIOTECHNOLOGY

I. INTRODUCTION

1. The Ad Hoc Working Group of Experts on Biological Diversity made considerable progress on a number of substantive issues and was able to agree on a large number of elements for consideration in the future progress of work towards a framework convention on biological diversity (see documents UNEP/Bio.Div.2/3 and 3/12). However, at its third session, it felt that the nature of biotechnology elements for possible inclusion in the convention, including the issues involved in biotechnology transfer, required further expert examination, assisted by a Sub-Working Group on Biotechnology, before the set of elements covering the issues could be agreed. The Sub-Working Group on Biotechnology met at UNEP Headquarters, Nairobi, from 14 to 17 November 1990, pursuant to the recommendation made by the Ad Hoc Working Group of Experts on Biological Diversity at its third session, held in Geneva from 9 to 13 July 1990.

II. ORGANIZATIONAL MATTERS

A. Opening of the meeting

2. The meeting was opened by Mr. R. Olembo, Deputy Assistant Executive Director of UNEP, on behalf of Dr. M.K. Tolba, Executive Director of UNEP. In his opening statement, Mr. Olembo highlighted the objective of the Sub-Working Group's meeting, namely, to focus on the biotechnological aspects within the context of negotiations on the proposed convention. He drew attention to the close link between the conservation of biological diversity and the development of environmentally sound biotechnologies. The application of biotechnology to biological diversity held tremendous potential and could make a valuable contribution to resource conservation and sustainable development. Biotechnology was a tool that could be used equitably or unequitably and it involved political issues that would have to be addressed in the proposed convention. He underlined the need for a precautionary approach in view of

biotechnology's potential for ecological disturbance. One of the main objectives of the proposed convention was to give countries rich in genetic resources a stronger voice in the development and application of biotechnology, therefore, one of the most important issues to be resolved was that of the transfer of biotechnology. After reviewing the main issues facing the Sub-Working Group, Mr. Olembo urged participants to concentrate on common ground so that they would be better prepared to face the challenges and opportunities ahead.

B. Attendance

3. The meeting was attended by delegates (experts) from the following 51 countries: Argentina, Australia, Bahamas, Brazil, Burkina Faso, Burundi, Canada, Chad, China, Colombia, Denmark, Egypt, France, Germany, Ghana, Greece, Guatemala, Guinea, India, Indonesia, Iraq, Japan, Kenya, Korea (Republic of), Lesotho, Malawi, Malaysia, Maldives, Mexico, Myanmar, Netherlands, Nigeria, Norway, Peru, Philippines, Portugal, Sao Tome and Principe, Senegal, Spain, Sweden, Syria, Tanzania, Thailand, Uganda, Union of Soviet Socialist Republics, United Kingdom, United States of America, Uruguay, Venezuela, Zambia and Zimbabwe.

4. Observers from the following United Nations bodies and specialized agencies were also present: Food and Agriculture Organization of the United Nations (FAO), United Nations Educational, Scientific and Cultural Organization (Unesco), United Nations Industrial Development Organization (UNIDO) and the World Intellectual Property Organization (WIPO).

5. In addition, the following non-governmental organizations sent delegations: International Board for Plant Genetic Resources (IBPGR), and Genetic Resources Action International (GRAIN).

6. The Kenya Agricultural Research Institute (KARI) was also represented.

C. Adoption of the agenda and organization of work

7. The meeting adopted the following agenda:

1. Opening of the meeting.

2. Organizational matters:

Adoption of the agenda;

Organization of work.

3. Consideration of biotechnology issues relevant to conservation and utilization of biological diversity.

4. Other matters.

5. Adoption of the report.

6. Closure of the meeting.

8. In accordance with the conclusions reached by the Ad Hoc Working Group of Experts on Biological Diversity at its third session held in Geneva from 9 to 13 July 1990, the meeting was chaired by Mr. P. Chabeda (Kenya).

III. SUBSTANTIVE MATTERS

9. Mr. L. Val Giddings introduced the report on Biotechnology and Biodiversity (UNEP/Bio.Div/SWGB.1/3). He outlined the following: (i) the potential contributions of biotechnology to both ex-situ and in-situ conservation of biological diversity. Although the importance of the former could not be denied, in-situ techniques represented the most effective method of conserving biodiversity; (ii) biotechnologies for sustainable utilization of biodiversity and the sustainable contribution of biodiversity to advances in crop production, forestry, livestock production and aquaculture; (iii) the socio-economic perspectives; (iv) possible mechanisms for co-operative development; (v) risks likely to be posed by biotechnology; and (vi) intellectual property rights and farmers' rights. With regard to intellectual property rights and biological safety, which were two important and potentially contentious aspects, in his view they did not present unsurmountable problems.

10. An in-depth discussion was held regarding the terms of reference of the Sub-Working Group and the relevance of certain parts of the Note by the Executive Director (UNEP/Bio.Div/SWGB.1/2, Annex II) and the consultants, report (UNEP/Bio.Div/SWGB.1/3) thereto, taking into consideration the reports of the Ad Hoc Working Group of Experts on Biological Diversity (UNEP/Bio.Div.1/3, 2/3 and 3/12).

11. There was general agreement that the consultants' report and the Note by the Executive Director should be used by the Sub-Working Group in addressing its terms of reference and they were subsequently used as background material for consideration of the different issues for possible elements additional to those reflected in the Working Group reports which could be formulated for a biotechnology component of the global framework convention on biological diversity. Some delegations stressed that they did not agree with the description of risks, which they felt was inaccurate. This criticism also applies to the conclusions.

12. With regard to the question of a description of biotechnology applicable to the conservation of biodiversity, most delegations advocated utilizing the definitions of biotechnology given in paragraph 1 of the consultants' report as a basis for work, although other delegations preferred a definition more closely related to modern biotechnology. Several delegations stressed the importance of traditional and conventional technologies for conserving, developing and sustainable utilization of biological diversity. Other delegations favoured a definition for the purpose of the convention that focused on the scope of biotechnologies applicable to conservation and sustainable utilization and development of biological diversity. One delegation emphasized that biotechnology to be addressed by the convention should be limited to those technologies that substantially contribute towards the conservation of biodiversity.

13. A number of delegations wished emphasis to be laid on in-situ conservation, while other delegates considered that both ex-situ and in-situ conservation measures should be given equal importance.
14. Some delegations emphasized the importance of biotechnological policy, which should be an integral part of a country's national development strategy.
15. With regard to training in basic biological sciences, one delegation expressed the view that additional burdens should not be laid on developing countries by giving priority to the establishment of training facilities that already existed in other countries. Another delegation, however, emphasized the importance of training in disciplines related to biological diversity, such as genetics, taxonomy and ecology in developing countries, pointing out that it could be given within the framework of existing programmes.
16. In reply to questions raised concerning the gaps in biotechnological expertise, both within international organizations and individual countries, Mr. Val Giddings drew attention to paragraph 83 of the consultants' report, which showed that many bodies were already making efforts to fill the gaps. As far as international organizations were concerned, strengthening and co-ordinating expertise would be a major topic at the 1992 United Nations Conference on Environment and Development. A number of delegations drew attention to the need to reinforce technical co-operation not only between North and South, but also among developing countries in the biotechnological field. Several delegations stressed the importance of including a satisfactory technical assistance component and additional financial provisions in the proposed convention for biotechnology issues. A number of delegations stressed the concept of regional co-operation.
17. Representatives of IBPGR, FAO and UNIDO explained the work being done by their organizations in the area of biotechnology. The representative of FAO indicated that the FAO Commission on Plant Genetic Resources had requested its Secretariat to draft a code of conduct for biotechnology as it affected conservation and use of plant genetic resources. Many delegations underlined the importance of using existing organizations, structures and expertise and avoiding duplication of work, although one delegation considered that new innovative mechanisms might be required. Another delegation said that it would have been useful to have received written presentations from those agencies already involved in such work that had not yet submitted documents.
18. A number of comments were made concerning the need for environmental impact assessments on biotechnological applications. It was considered that national impact assessments should be selective, related in particular to biotechnological risks. A few delegations stressed the need for risk assessments prior to the planned release of genetically engineered organisms into the environment in developing countries. One delegation suggested that field trials in developing countries should be subject to surveillance of the release of genetically engineered organisms. The same delegation emphasized the need to monitor the effects of new genes in new environments in order to study the long-term effects of such release.
19. Many delegations stressed the need for development of institutional and human resources, in order to take care of the special needs of developing countries in addressing their priorities and developing relevant technologies.

20. The representative of WIPO described his organization's activities in the field of biotechnology. There was general agreement that the question of intellectual property rights should be reflected in the convention, taking into consideration the problems of developing countries. Some delegations stressed that resolution of the issues should be left to those forums already dealing with the matter. Some delegations stressed that GATT should be requested not to terminate its work on intellectual property rights until inter alia environmental and socio-economic aspects related to biotechnology, indigenous knowledge and traditional innovation had been thoroughly examined. One delegation stated that it did not find socio-economic aspects to be relevant in this connection. It was reiterated that the convention should have an important role to play in the transfer of environmentally sound technologies to developing countries on a co-operative and fair basis, including the possibility of most favourable and concessional terms. One delegation considered that it would be useful to draw up a list of the major organizations already studying intellectual property rights related to biotechnology at the international level.

21. Some delegations stressed that the issue of biotechnology, specifically the aspects of transfer of such technology among countries, must form a crucial element in the proposed convention, not only because it is an issue of great importance in itself, but also because it is very closely linked to the crucial subject of access to biomaterial, and sharing of the benefits which accrue from the use of this biomaterial through biotechnology.

22. Turning to the question of risks associated with biotechnology, the Sub-Working Group noted that other bodies were already dealing with this issue. Some delegations were of the opinion that the question of risks should be reflected in the convention, while other delegations felt that the possibility of linking the results of the work carried out by other bodies (e.g. UNIDO/WHO/UNEP Working Group on Biotechnology Safety, OECD and UNCED) to the convention at some future stage should be left open. In this context, some delegations proposed the elaboration of a code of conduct for the safe use of biotechnology. Some delegations felt that irresponsible use of biotechnology should be repaired by compensation to those parties affected, as well as by the carrying out of corrective measures.

23. The meeting agreed that the matter of whether or not biotechnology issues should be reflected in the proposed convention should not have been within its terms of reference, since inclusion of biotechnology had already been decided in decisions adopted by the Governing Council, as well as in a recommendation by the Ad Hoc Working Group of Experts on Biological Diversity.

24. In conclusion, in considering the list of possible additional elements annexed to this report, it was noted that the list was not exhaustive, nor did it necessarily represent views common to all delegations. As the Sub-Working Group was not a negotiating group, possible elements put forward by delegations have been included with no attempt to reconcile different views, nor to reflect priorities to be accorded to various elements.

IV. ADOPTION OF THE REPORT AND CLOSURE OF THE MEETING

A. Adoption of the Report

25. The Sub-Working Group adopted its report at its last meeting held on 17 November 1990.

B. Closure of the session

26. The Chairman thanked participants for their hard work and expressed gratitude to the secretariat for its tireless co-operation.

ANNEX

Possible Additional Elements for a Biotechnology
Component in a Global Framework Legal Instrument
on Biological Diversity

I. General Issues

1. Recognition of the link and reinforcing relationship between conservation of biological diversity, biotechnology and rational utilization of biodiversity.
2. Recognition that States shall co-operate with each other in the development and transfer of biotechnology relevant to conservation and sustainable utilization of biodiversity, including exchange of knowledge, equitable sharing of the benefits of biotechnology development and transfer.
3. Recognition of the role of biotechnologies, including traditional ones, in conservation and sustainable utilization of biodiversity.
4. Contribution of biotechnologies to agriculture, forestry, health, food security, industry and other areas, and their impact on conservation and utilization of biodiversity.
5. Need for the maintenance of a wide genetic base for the future of biotechnology and sustainable development.
6. Recognition that it is in the interests of all nations to monitor current trends in biotechnology and the use of genetic resources with due respect for the sovereign rights of States.
7. Recognition of the need to direct the development of biotechnology and biological diversity conservation and utilization to the problems of developing countries.
8. Need for mechanisms to secure equitable socio-economic benefits from biotechnology and the need for assessment and financial adjustment to balance the international displacement of some crops currently grown by the developing countries.
9. Recognition by States of the importance of access to, as well as the need to reward and sustain, information and informal innovation in the field of biotechnology by local people; recognition of the importance of continuing such innovation and that it is a part of the socio-economic framework of States.
10. Equitable sharing of the economic benefits derived from biotechnology with the country of origin of the biomaterials used.

11. The possibility of access to biological diversity should be based on agreements among the interested parties in conformity with the sovereign right of States over the natural resources under their jurisdiction. Access to the best available environmentally sound biotechnologies for developing countries should be guaranteed. They should be transferred expeditiously and on a fair and most favourable basis.* 1/
12. Access to genetic resources and to biotechnology know-how will not necessarily be free-of-charge and availability should be based on mutual agreement.*
13. Recognition of the unlimited potential of biological diversity for the development and application of biotechnologies in areas such as health, agriculture and industry.*
14. Recognition of the need to facilitate the development of biotechnology for the conservation and rational utilization of biodiversity in helping to solve the relevant problems of developing countries.*
15. Recognition of the important role of biotechnology in restoration of environmental quality, development of bio-sensors, waste recovery and treatment and the substitution of non-renewable resource bases by renewable resource bases.*
16. Recognition of the primary importance of in-situ conservation of biological diversity. Recognition that the following technologies for conserving biodiversity are non-limitative.*

II. Biotechnologies for the conservation of biological diversity

1. Recognition of the current and potential contribution of new and traditional biotechnology to both in-situ and ex-situ conservation of biological diversity.
2. Recognition of the fact that the scope of future germplasm needs will increase with time.
3. Urgent need to increase the numbers of botanical gardens, seed banks and other ex-situ conservation facilities in various areas throughout the world, particularly in tropical areas, and to broaden the coverage of existing ones.
4. Recognition of the urgent need for nationally conducted systematic surveys of plants, animals and microbes, especially those found in threatened ecosystems, as a requisite for biodiversity conservation.
5. Recognition that potential application of genetic mapping such as RFLP and application of agricultural diagnostics could enhance conservation of biological diversity.

1/ Any asterisk denotes new elements proposed by representatives during the meeting.

III. Biotechnologies for sustainable utilization
and development of biodiversity

1. Role of biotechnology applications in reducing pressures on ecosystems rich in biological diversity.
2. Role of biotechnology in speeding up the development and use of genetic resources.
3. Recognition of the role of biotechnology in crop production through development of new plant varieties and that biotechnology could have a substantial positive impact in areas such as forestry, livestock and aquaculture.
4. Need to promote development of genetically engineered crop varieties that are major food crops of the tropical countries.
5. For the purpose of sustainable use of biodiversity, modalities for access to biodiversity and associated technologies such as biotechnology should be developed without prejudice to owners, users and developers.
6. Recognition of the important role of biotechnology in restoring environmental quality, developing bioresources, waste recovery and treatment and the substitution of non-renewable resource bases by renewable resource bases.
7. Recognition of the responsibility of industrialized countries in guaranteeing the transfer of technology to developing countries.*
8. Recognition that traditional technology that meets the social, cultural and nutritional needs of local communities and often simultaneously contributes to in-situ conservation of biodiversity should not necessarily be replaced by new biotechnology.*
9. Recognition that some new plant varieties, for example, herbicide resistant plants, may conflict with the sustainable use of biotechnology.*

IV. Risk assessment and management

1. Recognition that the application of biotechnology may involve risks to human health and environment and that reference to these risks, including the possibilities of a code of conduct, guidelines and appropriate national and international regulatory measures that anticipate and deal with possible negative impacts of biotechnology need to be reflected in the convention, noting that these extremely complex issues are dealt with by other competent organizations and frameworks.
2. Need to ensure that field testing of genetically modified organisms takes place with the full knowledge and approval of Governments.
3. Recognition of the desirability of mechanisms to cater for socio-economic impacts of biotechnologies, including questions of safety for environmental and agricultural applications.

4. A practical system of monitoring release of genetically modified organisms should be developed and made available to public sector institutions in developing countries.*
5. Recognition that the world community still knows little about the long-term consequences of using genetically engineered organisms.*
6. Recognition that the environmental risks may be both direct and indirect in their consequences.*
7. Recognition of the need to harmonize laws and regulations on biotechnology within a country and among countries.*
8. Need for a system of surveillance of the release of genetically modified organisms, to which field trials of herbicide resistance crops by multinational corporations must be subject.*
9. Recognition of the need for risk assessments, which include genetic and environmental assessments, before planned release of genetically engineered organisms into the environment in developing countries.*
10. Need for post-release monitoring of effects of new genes in new environments in order to study the long-term effects of such release.*
11. Need to share biotechnology information necessary for risk analysis and management between multinational corporations and environment agencies of developing countries.*

V. Mechanisms for co-operation

1. Recognition of the role of local communities in promoting biotechnology development and the need for mechanisms incorporating such knowledge in promoting rational and sustainable use of genetic resources.
2. Recognition of the role of the private sector in biotechnology development and transfer.
3. Recognition of the need to co-ordinate and strengthen co-operation, exchange of information in respect of activities of governmental and non-governmental organizations relevant to biotechnology development, and to create new institutions, as appropriate.
4. Acknowledgement that special provisions are required to meet the needs of developing countries, including the provision of new and additional financial resources.
5. Acknowledgement that special provisions are required to meet the needs of private and public sectors in developing countries.
6. Need of developing countries to develop their own capabilities to address their special needs, including policies on biotechnology development.
7. Concept of the need to promote regional co-operation.

8. Need to support preparation of national biotechnology policies, plans and strategies.
9. Encouragement and development of methods for co-operation in the development and use of biotechnologies that will aid conservation and rational use of biodiversity through co-operative agreements, information flow, technical training and other arrangements.
10. Importance of training in conservation techniques and use of biodiversity, together with well-planned programmes related to the needs with the aim of achieving technological co-operation.
11. Recognition of the need for equitable sharing of benefits between owners and developers of biological diversity.
12. Recognition of the fact that developing countries require sustained public sector investments by national Governments, bilateral donors and international organizations in order to benefit from biotechnology and to mitigate its negative impact.
13. Recognition of the need for favourable access to scientific information, know-how, patents and biotechnology by developing countries for the sustainable utilization of biological diversity on a concessional, low-profit or non-profit basis.
14. Need for the establishment of a clearing-house as a source of impartial advice, information and know-how for individual countries.
15. Provision of necessary services to developing countries to explore the acquisition of biotechnology and to the private sector to explore potential markets for biotechnology applications.
16. Need for innovative mechanism(s) of co-operation that will lead to the establishment of joint ventures for biotechnology development.
17. Need to use part of the fund under the convention on biodiversity to facilitate transfer of biotechnology to developing countries.
18. Desirability of developed countries with large biotechnology sectors providing greater financial resources for the proposed fund under the convention on biodiversity.
19. Recognition of the responsibility of industrialized countries to guarantee the transfer of biotechnology to developing countries.
20. Need for increased participation by multinational corporations in transferring biotechnology and information to their local staff at branch offices in developing countries.*
21. Need to support training of personnel in developing countries in the fields of research, regulation and monitoring.*
22. Need to support the establishment of gene banks in selected developing countries whose biodiversity-rich areas are under threat of habitat destruction.*

23. Need for effective co-operation at the regional and international levels in training, sharing of skills and techniques.*

VI. Intellectual Property Rights

1. Need for and recognition of the importance of facilitating negotiations on access to germplasm and new technologies in relation to patents for discoveries resulting therefrom.
2. Reflection of the concerns and the need to remove constraints limiting flow of information on biotechnology due to proprietary considerations.
3. Need to recognize and reward innovation and traditional knowledge on biological diversity by local people.
4. Recognition that the patent systems conserving genes and living organisms may have unwanted socio-economic effects both for the developing countries in general and for small farmers throughout the world.*
5. Recognition that there are more appropriate forums to deal with the question of intellectual property rights, including GATT and WIPO.*
6. Promotion of the development of strong national intellectual property regimes to assist in the flow and development of technology.*
