United Nations Environment Programme

Distr.
GENERAL

UNEP/Bio.Div.3/2
5 June 1990

ORIGINAL: ENGLISH

AD HOC WORKING GROUP OF EXPERTS
ON BIOLOGICAL DIVERSITY

Third session
Geneva, 9-13 July 1990

NOTE BY THE EXECUTIVE DIRECTOR

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 and the Executive Director reported the results to the Governing Council at its fifteenth session 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. At that session, the Working Group made significant progress in a number of outstanding issues related to the preparation of a new legal instrument. The Group recommended the preparation of a number of studies as a means of responding to specific issues in the process of developing the new instrument (see UNEP/Bio.Div.2/3, paragraphs 15 and 26).

4. In accordance with these recommendations, the Secretariat commissioned six studies:

(a) Study on cost of global biodiversity conservation needs;

(b) Study on current multilateral, bilateral and national financial support for biological diversity conservation;

(c) Study on possible global financing and financial mechanisms for conservation of biological diversity;

(d) Study on the relationship between intellectual property rights and access to genetic resources and biotechnology;

(e) Study on biotechnology issues for consideration in preparing a framework legal instrument on biological diversity;

(f) Study on relevant existing legal instruments, agreements and action plans on biological diversity.

5. Several of the above-mentioned studies have been initiated with the support of certain developed countries. The reports have been distributed in English (UNEP/Bio.Div.3/Inf.1; UNEP/Bio.Div.3/Inf.2; UNEP/Bio.Div.3/Inf.3; UNEP/Bio.Div.3/Inf.4; UNEP/Bio.Div.3/Inf.5; UNEP/Bio.Div.3/Inf.6) and summaries of their respective contents are available in other languages for the Working Group at its current session as documents UNEP/Bio.Div.3/3, UNEP/Bio.Div.3/4, UNEP/Bio.Div.3/5, UNEP/Bio.Div.3/6, UNEP/Bio.Div.3/7.

6. In addition to the studies mentioned above, and to assist in the preparation of more accurate estimates of the total costs of global biological diversity conservation needs, the Secretariat contacted nine developing and developed countries (Brazil, Germany Federal Republic of, Indonesia, Madagascar, Nepal, Peru, Poland, Uganda, Zaire) with regard to initiating country studies to determine approximate conservation costs and conservation needs that have not been met. The information that will be available will be provided to subsequent meetings.

7. The Ecosystems Conservation Group (FAO, UNESCO, International Union for the Conservation of Nature and Natural Resources and UNEP) has been active and very helpful in assisting the Executive Director. It reviewed the matter of draft elements for consideration in the new legal instrument on biological diversity at a special session in Rome from 23 to 25 April 1990. The draft elements annexed to the present note benefited significantly from these consultations.

8. The present session has been convened in the hope that most of the technical issues will be sufficiently settled for the Executive Director to begin the actual process of negotiation of a framework legal instrument on biological diversity. On the basis of the final report of the Working Group, the Executive Director was authorized by the Governing Council in its decision 15/34, paragraph 6, "to convene, in consultation with Governments and within available resources, an ad hoc working group of legal and technical experts with a mandate to negotiate an international legal instrument for the conservation of the biological diversity of the planet ...".

II. BASIC ISSUES

A. Cost of Global Biodiversity Conservation

9. The solving of global environmental problems will be greatly enhanced if it is based on the principle of global interdependence and a sense of shared responsibility. The cost of conservation of biological diversity should not fall disproportionately on those countries which happen to have significant populations of biological diversity on their territory. Most of the planet's biological diversity is located in developing countries which may not be able to finance investments in its conservation. If they are to assume the responsibility implied in the conservation of biological diversity, considerable funding is required. Those who enjoy the economic benefits of biological diversity conservation should contribute equitably to its conservation and sustainable development.

10. An analysis of the nature, scale and timing of the transfer of resources and the implementation of procedures for financial mechanisms reveals a number of pertinent considerations:

(a) Developing countries face a complex reality in coping with their economic problems as well as the imminent adverse effects of environmental degradation. They need financial assistance to meet incremental costs likely to arise from the conservation of biological diversity and from a delay in their development programmes. Such financial assistance should be perceived in terms of sharing the benefits generated from biological diversity and in terms of responsibility for its conservation. In this context, developing countries faced with a huge array of economic problems are unlikely to accept a diversion of existing funds that are earmarked for development purposes;

(b) Developing countries rich in biological diversity are at present largely unable to obtain either at a significant level, or with a degree of exactitude, the economic and financial benefits that arise from the conservation and management of their biological diversity;

(c) Appropriate management of the habitat is the least costly and the only method for conserving large and distinct populations of most species. Ex situ conservation measures alone cannot maintain the full range of biological diversity, but are important supplements to in situ conservation. The primary approach should, therefore, be through the protection of habitats, but within the national framework of land use planning and species protection that safeguards biological diversity to the maximum extent practicable outside as well as within the designated protected areas. However, the designation of specific land areas to conserve biological diversity often conflicts with alternative land uses in developing countries, sometimes leading to considerable economic loss and political controversy and debate. In this situation, compensatory financing could provide a substantial incentive to undertake what could otherwise be politically difficult decisions;

(d) The availability of additional, concessional funds could, when coupled with effective design and development of conservation and utilization programmes, help to focus attention on biological diversity and obtain support for further investment programmes. This will be especially effective if institutional strengthening, the development of the human resources base, and the national capacity for managing conservation strategies in countries rich in biological diversity are kept in focus;

(e) Financial resources are likely to be forthcoming at adequate levels if the early focus is on action-oriented programmes, dealing with biogeographical regions that are of great concern;

(f) There is clearly a need for a pilot approach that will bring to the fore what is actually needed to tackle the problems associated with effective conservation of biological diversity through an international agreement, namely, the provision of more scientific data, a better understanding of the costs and benefits of financial transfers, the incorporation of the maximum amount of biological diversity in protected areas, the ensuring of access to the diverse biological resources and technologies needed to achieve a minimum acceptable standard of living for local populations in a sustainable way, the prevention of further deterioration of the biosphere, and the increased protection of biological diversity by means of broader programmes for land use, water management and ex situ and in situ conservation.

11. The level of financial resources required to meet the needs of global conservation of biological diversity as identified by the Working Group at its second session (see UNEP/Bio.Div.2/3, paragraph 15) is clearly beyond the level of existing multilateral and bilateral assistance provided to developing countries for the purpose of conservation of biological diversity.

12. Uncertainties as to the total cost, together with the fact that the estimates are quite crude and may be no more than an order of magnitude of the global conservation cost and the fact that precise costing of certain conservation measures will never be possible, should not delay or hamper the development of the new legal instrument. More accurate information at the country level is necessary before one can go any further with this kind of analysis. Conservation needs differ considerably among countries, and depend on a country's general economic situation and the status of biological diversity within its jurisdiction.

B. Global Fund Raising and Financial Mechanisms for Conservation of Biological Diversity

13. The intense pressures on the world's biological diversity will go on increasing unless appropriate conservation measures are taken. The rapid destruction of the world's most diverse ecosystems and the unprecedented rate of extinction of species have led most experts to conclude that the state of biological diversity beyond 2050 will depend to a very large extent on our efforts in the immediate future. Long-term conservation of biological diversity will only come about if the common concern of nations is reflected in a transfer of resources on a global scale, in a planned way, and if these resources are used in appropriate ways. This is especially significant, because most of the world's biological diversity is located in countries that lack adequate resources for its conservation. Some steps in this direction have already been taken, but they are inadequate.

14. The establishment of a fund or a funding mechanism to provide assistance to nations in conserving biological diversity is central to the success of a new legal instrument. The main question that needs to be addressed is how a global approach to the conservation of biological diversity should be financed. The incremental costs likely to be incurred by developing countries for conservation of biological diversity need to be identified and agreed upon. The preliminary cost estimates to meet global needs for conservation of

biological diversity identified by the Working Group at its second session (see UNEP/Bio.Div.2/3, paragraph 15) would range from hundreds of millions to billions of dollars per year over the next 20 years. These estimates provide an initial indication of the range of costs involved. Not enough data and information are currently available to determine the magnitude of the costs. Those figures need to be refined. Funds to meet these costs must be raised and channelled through appropriate mechanisms. New sources must be tapped, new modalities for fund-raising devised, and new mechanisms for dealing with such funds established.

15. It is unlikely that the quantity of resources currently available for the conservation of biological diversity could be increased in the near future through higher taxation (not an attractive or even politically feasible position in most donor countries) or increased lending by multilateral financing institutions through the raising of funds for this purpose in the capital market. There is also broad agreement among economists that when there is a planetary threat leading to a harmful impact on a common global element such as biological diversity, investment expenditure for containment or conservation strategies (of which the benefits can only be assessed on an international scale) cannot be carried out by commercial loans or using conventional development assistance. In dealing with global problems, it is necessary to move from the prescription of capital finance to the principles of public finance.

16. Contributions to the fund should come from a multiplicity of previously untapped resources and the funding mechanisms should entail several components:

(a) Voluntary contributions from nations, organizations and individuals;

(b) The establishment of innovative revenue generating systems. Users' fees could be one source, and the introduction of fiscal incentives and subsidies that send proper cost signals for the use of biodiversity to improve or correct market forces is another potential source;

(c) The conversion of areas that are rich in biological diversity into global economic assets in which the international community can invest in conservation, while respecting the sovereign rights of individual nations over their natural resources. Under such an arrangement, habitats rich in biological diversity would have a designated value upon which to generate financial payments by the global community;

(d) Contributions from other funds for relevant international arrangements currently under consideration for financial and technology transfers;

(e) Debt for nature swaps;

(f) Licensing fees and royalties arising from intellectual property rights vested in the fund through an operating unit;

(g) Funds raised by collections and receipts from events organized for the benefit of the fund;

(h) Interest from endowments created specifically for the purpose;

(i) Funds borrowed by the fund;

(j) The tapping of Plant Breeders Rights as sources for biological diversity conservation and the development of other mechanisms, such as the Farmers Rights adopted by the FAO Commission on Plant Genetic Resources;

(k) Other resources authorized by the Contracting Parties;

(l) The adjustment of new and additional aid and development funding systems to increase funding to biological diversity conservation activities.

17. Several other schemes have been put forward on various occasions, including entry fees for national parks; charges for the use of water supplied from protected catchments; imposition of charges on approved development such as hotel facilities and the granting of concessions to individuals and groups who will themselves fund services.

18. It is necessary to pay close attention to users' fees and other charges that help to localize the economic and environmental costs of loss of biological diversity in the operational cost of resource use. They are also probable sources of immediate revenue for the fund. Industrial, commercial and trade enterprises that profit from the business in biological diversity or from other material derived from biological diversity in the past, present or future are thus presented with the full incremental costs of their activities. Users' fees could not only raise considerable funds for the conservation of biological diversity, but could also curb unsustainable use of the resources and provide a more effective and efficient ecological control mechanisms.

19. The financial mechanisms sought to manage the financial transfers could be:

(a) A new fund with a financial and technical secretariat under the control of the Contracting Parties to a legal instrument on biological diversity;

(b) A new facility or "window" in an existing institution;

(c) A co-operative arrangement based on comparative advantage among a number of international organizations (e.g. UNEP, World Bank, FAO, UNDP and others);

(d) A combination of all three of the above.

20. Whatever form the financial mechanism may take:

(a) There is a need for sufficient new and additional funds to achieve the conservation of biological diversity;

(b) There must be a clear understanding of the scale of assessment or of burden sharing among donors. This could be a percentage of GNP, or could be related to industrial or commercial exploitation of genetic resources or trade during the past 5 years;

(c) Payments from the fund will have to be made for the financial and technical secretariat needed to service the fund and to meet basic conservation needs identified by the Working Group;

(d) The financial mechanisms developed must be regarded as a first approximation only. A number of sources of financial transfers and of funding mechanisms must be identified to offer a spectrum of remedial actions;

(e) The new modalities of financing should be administratively feasible, create no severe inequalities in terms of burden-sharing, and raise no insuperable problems of collection.

C. Biotechnology Issues for Consideration in the Preparation of a Framework Legal Instrument on Biological Diversity

21. In its decision 15/34 the Governing Council of UNEP agreed that the full implications of the new biotechnologies and the economic dimension, including, inter alia, the question of adequate machinery for financial transfers from those who benefit from the exploitation of biological diversity, including through the use of genetic resources in biotechnology, to the owners and managers of biological resources and appropriate measures to facilitate the transfer of technical means of utilizing biological diversity for human benefit should be taken into account in any international legal instrument on biological diversity.

22. The emerging techniques in biotechnology offer both prospects and problems for the conservation of global biological diversity. The importance of biodiversity for the future of biotechnology cannot be over-emphasized. As the field of biotechnology develops, the scope of future germplasm needs will be far greater than is currently the case. However:

(a) Developing countries lack the necessary expertise and equipment to exploit genetic variation and, therefore, the development of biotechnology has historically been focused on the needs and priorities of industrialized societies;

(b) New technologies are mostly patented and the increasing dominance of the private sector in biotechnology has implications for the developing countries access to advances in science and technology;

(c) Advances in techniques and ideas for application are proceeding in the absence of appropriate regulatory control;

(d) Like any other technology, biotechnology might not be without negative environmental, health or socio-economic impacts.

23. To maximize the benefits and minimize the risks associated with biotechnology application, the international community is challenged to devise innovative mechanisms to:

(a) Ensure the development, transfer of, and favourable access to scientific information, patents, know-how and biotechnology for the sustainable utilization of biological diversity, also on a concessional, low-profit or non-profit basis;

(b) Facilitate access to genetic resources;

(c) Facilitate the development of modern biotechnology and its application to the problems of particular concern to developing countries;

(d) Allow developing countries to obtain a portion of the economic and social returns generated from the use of their genetic diversity as one means of achieving equity and as an incentive for conserving biological diversity;

(e) Establish effective co-operation with reciprocal benefits between biotechnology-rich developed countries and gene-rich developing countries;

(f) Guarantee preferential treatment for owners of genetic resources with regard to access to biotechnologically manipulated resources;

(g) Anticipate the possible negative effects of biotechnology and develop appropriate national and international regulatory measures.

24. Success in transferring technology will depend upon finding new approaches and modalities to ensure the flow of additional financial resources necessary for sharing the available technologies. The problems of patents, royalty payments, and property rights that are in the hands of the private sector will have to be solved, taking into account the investments made by this sector in developing the technologies, as well as their desire to receive equitable returns on their investments. The transfer of technology does include developing countries development of their own technology.

D. Relationship Between Intellectual Property Rights and Access to Genetic Resources and Biotechnology

25. The issues relating to access to biological diversity and biotechnology are important and complex. The relationship between biotechnology and biological diversity is mutually dependent. Access to genetic resources and to biotechnology and technical information on how to use them must therefore be based on mutually beneficial arrangements. The various forms of intellectual property and their potential impact on the conservation of biological diversity and on the transfer of biotechnology must be analyzed. It is necessary to assess their potential to facilitate or hamper the long-term conservation of biological diversity and the transfer of biotechnology. Ultimately, the terms of an equitable exchange between the technology-rich North and the gene-rich South must be defined.

E. Relationship Between the Planned Legal Instrument and Existing Conventions, Agreements and Action Plans on Biological Diversity

26. It needs to be stressed that the planned legal instrument is not intended to replace or incorporate existing conventions, agreements and action plans relating to the conservation of biological diversity, which already play a very important role in the field. The planned legal instrument could aim mainly at filling existing gaps, as well as serving as a forum for co-ordination of activities and exchange of information, if so requested by the Governments in the preparatory process, by existing secretariats and by the international organizations concerned. The fact that the various existing legal instruments have different contracting parties needs to be considered in this context. The relationship and institutional links between existing conventions, agreements, action plans and the planned legal instrument should be further developed.

III. RECOMMENDATIONS

27. On the basis of the above-mentioned analysis and the ideas and conclusions that emerged during the two previous sessions of the Working Group on major policy issues, the Executive Director would like to present the following recommendations for consideration at this session of the Working Group.

A. Nature of a New Global Legal Instrument on Biological Diversity

28. A new international legal instrument on biological diversity, possibly in the form of a framework convention, should be comprehensive in scope, covering the full range of biological diversity at the intra-species, inter-species and ecosystems levels and addressing both in situ and ex situ conservation and protection of biological diversity from all significant damaging impacts. It should be in harmony with, co-ordinate, catalyse and supplement the efforts of Governments and other agencies under agreements in this field. As much technical, financial and administrative content as possible, with a commitment for implementation, should be included in the new framework international legal instrument. However, certain issues may need to be considered in separate, legally-binding protocols. As far as is feasible, these should be concluded and signed concurrently with the framework convention.

B. The Funding Mechanism

29. It is evident that a political commitment to establish a new financial mechanism or a fund is essential for the success of the planned legal instrument and the global co-operation needed to conserve the biological diversity of the planet. It should realistically provide for the transfer of resources to allow for the implementation of the convention by the poorer countries, which are also the custodians of much of the biological heritage of the Earth.

1. Sources of funding

30. All existing sources of funding should be utilized. As all countries have a common interest and joint responsibility in conserving biological diversity, the funding mechanisms should be universal in nature. One way of doing this is to operate with contributions on an assessed basis.

31. As those who most enjoy the economic benefits of biological diversity should contribute equitably to its conservation and sustainable management, the revenue that could be generated from users' fees should be explored as an attractive option to the international fund. Contributions will in this case be based on actual benefits.

32. There could be merit in agreeing that, during the first few years, contributions to the funding should be made voluntary, in order to signify good will before agreement is reached on the concrete scale of assessment or users' fees. Such contributions, however, must be adequate and not merely symbolic.

2. The use of the fund

33. Inability to ensure the collection of complete information on the likely total cost of the needs of the global conservation of biological diversity should not delay the creation of a financial mechanism or become an obstacle to reaching a decision on a financial mechanism. To allow for a decision on a funding mechanism, it should be sufficient to agree upon the order of magnitude of the cost for priority conservation needs. The range of the total cost should, however, be narrowed down. The results from the country-specific case studies should help in determining this range. The Working Group may wish to agree at this meeting on:

(a) The approximate range of the expected total cost to allow Governments to consider relevant decisions;

(b) Requesting a consultant to refine his studies further, in order to narrow the gap between the highest and the lowest estimates as much as possible using the results of the country studies.

3. The functions of the fund

34. Under the supervision of the contracting parties, the functions to be exercised by the fund should combine funding and clearing-house mechanisms, including the co-ordination, design and promotion of biological diversity conservation and assistance in technology transfer.

4. Institutional arrangements

35. Rather than create a new organization or merely expand the role of one of the existing organizations, a joint or co-operative venture of a number of lead agencies to which other institutions could be attached seems to be a feasible option. A common programme, approved by the contracting parties, would form the basis for the division of responsibilities and the allocation of funds among the participating agencies. A unit, however, would have to be attached to the secretariat, which would organize the co-operation between the agencies and prepare scientific proposals for submission to the parties. The Working Group may wish to consider the different options on how to administer such a mechanism or fund, and which organization to entrust with the lead role.

C. Access to Genetic Resources and Biotechnology

36. Genetic diversity is essential for sustainable development. The potential of biological diversity can best be exploited when it remains freely accessible to all users and if the information and technology on how to use it is transferable to all. Having a particular valuable genetic resource or the technical capability for its development must not give exclusive rights to ownership or profit. In this regard, free access does not mean free of charge.

37. Mechanisms are required to facilitate access to genetic resources and relevant biotechnology techniques, processes and products, while protecting the sovereign rights of states concerning their natural resources and the legitimate interests of biotechnology inventors. These mechanisms need thorough consideration by the Working Group. These mechanisms should, inter alia:

(a) Regulate access to and the supply of public sector germplasm and information thereon to private companies;

(b) Identify opportunities and constraints for technology transfer in developing countries and develop strategies for international investment in new technologies;

(c) Provide necessary common services to developing countries for exploring the acquisition of biotechnology and to the private sector to explore potential markets for biotechnology application;

(d) Facilitate the negotiation of agreements, that could be fair and acceptable to all parties, on the establishment of joint ventures in this area between developed and developing countries;

(e) Provide support for biotechnology research and development at public sector institutions in developing countries, including support for training and for collaborative research with public and private sector laboratories in industrialized countries, to enhance the developing countries' capability to adapt, develop and apply such technologies to their needs;

(f) Assist member countries in the preparation of national biotechnology strategies and plans for activities with clear priorities, to enable the most efficient use of local and external resources;

(g) Patent discoveries in biodiversity and, as appropriate, license them for use. This could also facilitate negotiations on access to germplasm and new technologies;

(h) Act as a source of advice and information for individual countries on relevant issues such as patents and environmental releases of genetically modified organisms.

38. These new partnerships could improve access to genetic resources and facilitate the development and/or transfer of new technologies and the systems necessary for their delivery and their application to the needs of developing countries.

39. To facilitate access to genetic resources and biotechnology, there is also a need to consider the problem of intellectual property rights in access to resources and biotechnology. This question needs to be further developed in the planned legal instrument.

D. Elements for Possible Inclusion in a Global Framework Legal Instrument on Biological Diversity

40. Taking into consideration the above analysis and recommendations, the Executive Director would like to present the elements contained in the Annex to the present note for consideration by the Working Group at its current session for inclusion in the planned global framework legal instrument on biological diversity.

E. Relationship with existing Conventions, Agreements and Action Plans

41. It is essential that the planned legal instrument provide a link with existing conventions, agreements and action plans relating to the conservation of biological diversity, to benefit from the experience which has been gained by existing bodies. The Working Group may wish to consider, for this purpose, the possibility of establishing a mechanism with the following tasks:

(a) Enhancement of communication through organization of annual meetings of secretariats and other relevant bodies to consider co-ordination of activities, rationalization of resources, examination of problems of mutual concern and establishment of priorities for action in areas where the basic objectives and/or activities of existing instruments are similar or closely linked;

(b) Exchange of information and documentation between secretariats and other relevant bodies. The mechanism could serve as a data-bank for this purpose;

(c) Co-operation with secretariats and other relevant bodies to standardize formats for reporting to and from contracting parties;

(e) Preparation on a regular basis of an overview report of activities of existing conventions, agreements and action plans.

ANNEX

ELEMENTS FOR POSSIBLE INCLUSION IN A GLOBAL FRAMEWORK LEGAL INSTRUMENT ON BIOLOGICAL DIVERSITY

I. PREAMBLE

1. A short but precise preamble is needed based on the following elements:

(a) Description of the aims of the Convention - the duty of humankind to conserve biological diversity for the benefit of present and future generations;

(b) Recognition of mankind's co-existence on Earth with a wide range of other living organisms, which exist independently from the benefits they may provide to humanity;

(c) Description of the problems - impoverishment of global biological resources, increasing rate of loss of biological diversity due to, among other things, degradation of habitats and pollution of the environment;

(d) Deterioration of the quality of life on earth as a result of unsound management and use of natural resources;

(e) Recognition that the States, as the stewards of biological diversity under their jurisdiction, over which they have sovereign rights, have a responsibility to conserve, develop and benefit from biological diversity;

(f) Conservation and sustainable use of biological diversity as a common responsibility of all mankind;

(g) Obligation of states to share in any increased knowledge as well as other benefits of the potential of biological diversity;

(h) Close dependence of rural and indigenous people on the potential of biological diversity, their profound knowledge of this biological diversity, and their vested interest in its sustainable use;

(i) In-situ conservation of biological diversity to secure intra-species genetic diversity, the evolutionary potential of species and the interactions between species as a primary responsibility of the planned legal instrument;

(j) Duty of intergovernmental and non-governmental organizations to assist in promoting the conservation and sustainable utilization of biological diversity on a global scale;

(k) Continuing demonstration of the cultural, ethical, scientific and economic value of biological diversity to mankind as an important incentive for its conservation;

(l) Contribution of the planned legal instrument on biological diversity conservation and sustainable utilization to the strengthening of peace, security, co-operation and friendly relations between states;

(m) Conservation of biological diversity has frequently provided the most benefits to countries which have the technical and economic capability to take advantage of it. The cost of conservation without commensurate use could be a burden, especially for developing countries.

II. DEFINITIONS AND INTERPRETATION

2. The following, as well as additional terms, will have to be defined to the extent that terms are used in the text of or annexes to the new legal instrument on biological diversity. The list of definitions is to be kept as brief as possible:

- Biological diversity;
- Conservation;
- Sustainable development;
- Sustainable use;
- In-situ conservation;
- Ex-situ conservation;
- Species;
- Wild species;
- Indigenous species;
- Endemic species;
- Species threatened with extinction at world level;
- Alien species;
- Specimen;
- Biomaterial;
- Viable population;
- Party and State parties;
- Territory;
- Conference;
- Advisory Committee;
- Fund;
- Secretariat;
- Global list;
- Protocol.

III. FUNDAMENTAL PRINCIPLES

3. The following concepts should be considered for incorporation in the legal instrument:

- Biological diversity as a heritage of mankind;

- Sovereignty of States over biological diversity under their jurisdiction and the duty of stewardship, in time and space;

- Interrelation between conservation and sustainable use of biological diversity;

- The need for conservation and sustainable utilization of biological diversity for the benefit of present and future generations;

- Equitable sharing of benefits and conservation costs of biological diversity;

- Free access does not mean free of charge.

IV. GENERAL OBLIGATIONS

4. The following elements should be considered:

(a) Joint and individual obligation to take appropriate measures to maintain and restore biological diversity at national and international levels, including the duty to co-operate with other states;

(b) Co-operation in the formulation and adoption of agreed measures, procedures and standards, and of protocols and annexes to facilitate the development and implementation of the legal instrument;

(c) Mutual assistance to achieve the goals of the legal instrument;

(d) Promotion of public awareness through formal education and community awareness programmes on the subject of the needs for and measures to conserve biological diversity at national and international levels by individual state action and/or by multilateral and bilateral co-operation;

(e) Adoption and implementation of policies to maintain and use components of biological diversity for sustainable development;

(f) Duty to ensure conservation of biological diversity within a State's territory;

(g) Duty to refrain from actions harmful to biological diversity in territories of other states as well as in areas beyond the limits of national jurisdiction.

V. MEASURES FOR CONSERVATION AND SUSTAINABLE UTILIZATION OF BIOLOGICAL DIVERSITY

5. Elements to be considered should include:

A. Measures for in-situ conservation of biological diversity

(a) Obligation to carry out initial and periodic surveys, gathering of information, drawing up of inventories and monitoring of biological diversity, within jurisdiction;

(b) Identification of biogeographic areas of particular importance for conservation of biological diversity, to be included in a Global List;

(c) Obligation to develop guidelines that establish criteria for the selection, establishment and management of specially protected areas, included in the Global List;

(d) Obligation to create networks of specially protected areas in territories within national jurisdiction;

(e) Adoption, at national and international levels, of management strategies, plans, co-ordination schemes and networking for the in-situ conservation and sustainable use of biological diversity;

(f) Adoption of plans for the recovery and rehabilitation of species, habitats and ecosystems;

(g) Reduction and control of pollution and other forms of environmental degradation which could adversely affect biological diversity;

(h) Use of wild resources on a sustainable basis;

(i) Regulation and control of the introduction of man-made and genetically modified organisms;

(j) Regulation of the introduction of alien species;

(k) In relation to biological diversity, adoption and implementation of policies promoting sustainable development;

(l) Support for land uses and activities compatible with the maintenance of biological diversity;

(m) Maintenance of local knowledge about biological diversity.

B. Measures for ex-situ conservation of biological diversity

(a) Obligation to carry out initial and periodic surveys, inventories, gathering of information and monitoring;

(b) Adoption, at national and international levels, of management strategies, plans, co-ordination schemes and networking for the conservation of biological diversity ex-situ;

(c) Adoption of plans for the recovery and rehabilitation of species through ex-situ conservation when necessary;

(d) Obligation to establish, at national and international levels, centres for ex-situ conservation and in particular for species threatened with extinction;

(e) Adoption of plans and strategies for the re-introduction of species conserved ex-situ into their natural habitats.

C. Measures for sustainable utilization of biological diversity

(a) The obligation to integrate conservation of biological diversity and its utilization into national development plans and policies by means of national conservation strategies and other suitable instruments;

(b) The obligation to ensure that utilization of biological diversity does not have adverse impacts on the rest of the environment can be met through the adoption of common standards by the Parties that respect the exploitation of certain resources, especially resources in the wild.

D. Research and training

(a) Inventories and taxonomy;

(b) Training of taxonomists, technicians and experts for field identification;

(c) Training of ethnobotanists and other specialists to contribute to the understanding of traditional knowledge in the field of biological diversity and natural resource management;

(d) Research on and development of technologies;

(e) Research on and training in the management of protected areas;

(f) Research by and training of specialists in the use of biological diversity in sustainable agriculture;

(g) Improved understanding of the ecosystem function of biological diversity and its management requirements;

E. Education and public awareness

(a) Formal training, through schools, universities and other fora;

(b) Non-formal training, including training for the general public and other groups;

(c) Education for local populations in areas of special interest for the conservation of biological diversity.

F. Environmental impact assessments

(a) Obligation of States to assess the environmental impact of projects and activities which may adversely affect biological diversity, in particular those involving the introduction of alien species, genetically modified organisms and the re-introduction of species into their natural habitats;

(b) Development of guidelines that set standards for making environmental impact assessments.

VI. AVAILABILITY TECHNOLOGY AND ACCESS TO BIOLOGICAL DIVERSITY, AND INFORMATION THEREON

A. Availability of and access to biological diversity

(a) Availability of and access to genetic material conserved in-situ and ex-situ for purposes of scientific research, training, surveying, monitoring;

(b) Availability of and access to genetic material for uses other than scientific research, training, surveying, and monitoring;

(c) Preferential treatment for countries of origin of germplasm with regard to access to genetic material and varieties derived therefrom.

B. Availability of and access to relevant technology and information

(a) Patents and proprietary rights derived from genetic diversity under national jurisdiction and control;

(b) Patents and proprietary rights derived from genetic diversity beyond national jurisdiction and control;

(c) Access to scientific research, training and surveying;

(d) Access to know-how;

(e) Access to information, including traditional knowledge;

(f) Role of the public and private sectors.

VII. TRANSFER OF TECHNOLOGY FOR THE CONSERVATION AND UTILIZATION OF BIOLOGICAL DIVERSITY

(a) Obligation for developed countries to tranfer technology to the gene-rich but technology-poor developing states on a non-commercial and preferential basis;

(b) Undertaking by the parties, through national policy and legislation, to ensure that private enterprises within their jurisdiction transfer technology to the poorer developing countries, while protecting the interest of the private sector. Parties to report on measures undertaken pursuant to this undertaking;

(c) Improvement of access to know-how through exchange of information via the institutions established by the planned legal instrument (especially the secretariat);

(d) Mutual co-operation in training of experts in the field of both conservation and utilization of biological diversity;

(e) Joint ventures between the technology-rich states and the gene-rich states in the field of biotechnology and conservation;

(f) Co-operation in relevant scientific research;

(g) Establishment of a mechanism to ensure the acquisition of technology from the technology-rich developed states to the gene-rich developing countries by providing funds to facilitate the necessary access to patents.

VIII. TECHNICAL ASSISTANCE TO DEVELOPING COUNTRIES

(a) Obligation of the institutions set up under the planned legal instrument to provide technical assistance to developing countries in the conservation and utilization of biological diversity;

(b) Commitment of the developed states to provide, outside their contributions to the institutions set up under the planned legal instrument, technical assistance to developing states on a multilateral and bilateral basis, subject to mutual agreement;

(c) Establishment of a "clearing-house" mechanism within the institutions set up by the planned legal instrument to facilitate the provision of technical assistance from the developed states to the developing states.

IX. FINANCIAL MECHANISMS

A. Financial needs of the legal instrument

(a) Overall level of financial resources requires;

(b) Obligation of all countries, in particular the industrialized countries, to provide genuine additional resources to cover the financial needs to operate the legal instrument, and for the conservation and sustainable use of biological diversity at the national and international levels;

(c) Obligation of industrialized countries to provide the necessary funding and other mechanisms for technology transfer;

(d) Multilateral and bilateral assistance for the conservation of biological diversity and technology transfer;

B. Financial mechanisms for the legal instrument

6. Taking account of the totality of financial resource necessary, it will be worthwhile to examine the need for a fund or funding mechanism that should be established, to facilitate the financial transfer. This may well require (i) co-operative arrangements with existing multilateral and bilateral sources of funding; or (ii) the consideration of a special fund; or (iii) both.

X. RELATIONSHIP BETWEEN THE PLANNED LEGAL INSTRUMENT AND EXISTING INSTRUMENTS, AGREEMENTS, PROGRAMMES AND ACTION PLANS ON BIOLOGICAL DIVERSITY

(a) The legal instrument is not intended to replace existing instruments related to the conservation of biological diversity. Such instruments may be re-negotiated as protocols to the planned legal instrument;

(b) Co-ordination of programmes and plans under relevant legal instruments and exchange of information on activities;

(c) Options for secretariats which have an international character to become parties to the planned legal instrument;

(d) Provision of financial assistance to existing secretariat and programmes;

(e) Eligibility of existing agreements, action plans, programmes to become protocols;

(f) Efficient use of limited budgetary resources.

XI. INSTITUTIONAL MEASURES AT NATIONAL LEVEL

(a) Establishment of national bodies, including advisory boards, to pursue the aims and goals of the legal instrument and to co-ordinate activities related to the conservation and sustainable use of biological diversity;

(b) Obligation to take legislative action to ensure the conservation and sustainable use of biological diversity;

(c) States may adopt stricter measures than those contained in the legal instrument.

XII. INTERNATIONAL CO-OPERATION

(a) Status of co-operation and co-ordination of international activities in conservation, evaluation, documentation, utilization and exchange of genetic material and information;

(b) Intensified activities and support for countries;

(c) Support for international organizations active in the field of biological diversity;

(d) Development of a Global List of areas for the conservation of biological diversity;

(e) Technical assistance;

(f) Development of a mechanism to determine priority actions under the legal instrument.

XIII. INSTITUTIONAL ARRANGEMENTS FOR THE PLANNED LEGAL INSTRUMENT

7. A series of different options, approaches and alternatives should be considered in dealing with the institutional arrangements. The following elements, together with additional elements, should be considered as appropriate:

- Conference of the Parties;
- Secretariat;
- Scientific advisory panel or committee;
- Reporting system;
- International funding mechanism to handle operational costs for the planned legal instrument, financial needs for conservation and sustainable use of biological diversity and financial resources for technology transfer;
- Mechanisms to handle transfer of technology and technical assistance;
- A "clearing-house" mechanism.

XIV. SETTLEMENT OF DISPUTES

(a) A provision similar to that found under the Vienna Convention for the Protection of the Ozone Layer could be considered;

(b) Mediation;

(c) Good offices.

XV. OTHER PROVISIONS

- Procedure for adoption and amendment of annexes;
- Procedure for adoption, entry into force, and amendment of protocols;
- Procedure for amendment of the legal instrument;
- Relationship between the legal instrument, its protocols and annexes.

XVI. FINAL CLAUSES

- Signature;
- Ratification, acceptance, approval;
- Accession;
- Entry into force;
- Reservations;

- Withdrawals;

- Depository;

- Authentic texts.

XVII. ANNEXES

(a) Annexes to the Convention are an integral part of the Convention. While some of the matters listed below may be provided for in the Convention, it may be necessary to make detailed and more elaborate provisions with respect to them in the annexes. The advantage is that the amendment procedure for the annexes could be simpler than that for the Convention, hence they can be adapted to changed circumstances.

- Global list of protected areas;

- Guidelines for environmental impact assessment;

- Machinery for arbitration procedure;

- Guidelines for introduction of genetically modified and alien species;

- Any elements that the parties might consider need amendment, as scientific evidence or needs arise.

XVIII. PROTOCOLS

8. Existing instruments, agreements, action plans, and programmes might be re-negotiated as protocols, as the parties to these may decide.

9. Any area that the Parties may decide is appropriate for protocols may be developed simultaneously with the convention or at a later stage.
