

Decisions adopted by the Conference of the Parties to the Convention on Biological Diversity at its sixth meeting

THE HAGUE, THE NETHERLANDS, 7–19 APRIL 2002

DECISION VI/1 | Intergovernmental Committee for the Cartagena Protocol on Biosafety

The Conference of the Parties,

Welcoming the deposit of instruments of ratification, acceptance, approval or accession in respect of the Cartagena Protocol on Biosafety by Parties to the Convention on Biological Diversity and *calling upon* other Parties to the Convention to deposit such instruments as soon as possible,

Calling once again upon States that are not Parties to the Convention to ratify, accept, approve or accede to it, as appropriate, without delay, thereby enabling them also to become Parties to the Protocol,

Recalling the mandate given to the open-ended ad hoc Intergovernmental Committee for the Cartagena Protocol on Biosafety in decision EM-I/3 to undertake, with the support of the Executive Secretary, the preparations necessary for the first meeting of the Conference of the Parties serving as the meeting of the Parties to the Protocol,

Recalling also decision V/1 regarding the work plan for the Intergovernmental Committee for the Cartagena Protocol on Biosafety,

Recognizing the need to implement the provisions and requirements of the Protocol at the time of its entry into force,

Having considered the reports of the two meetings of the Intergovernmental Committee for the Cartagena Protocol on Biosafety, held in Montpellier, France, from 11 to 15 December, 2000, and in Nairobi from 1 to 5 October, 2001, respectively,

1. *Endorses* the decision of the Bureau of the Conference of the Parties regarding the authorization of the convening of a third meeting of the Intergovernmental Committee for the Cartagena Protocol on Biosafety back-to-back with the sixth meeting of the Conference of the Parties;
2. *Welcomes* the kind invitation of the Government of the Netherlands to host the third meeting of the Intergovernmental Committee for the Cartagena Protocol on Biosafety in The Hague from 22 to 26 April 2002;
3. *Requests* the Executive Secretary:
 - (a) In the event that the Protocol enters into force within one year of the sixth meeting of the Conference of the Parties, to convene the first meeting of the Conference of the Parties serving as the meeting of the Parties to the Protocol

in conjunction with an extraordinary meeting of the Conference of the Parties, no later than eight months after the entry into force of the Protocol and taking into account that adequate preparations for the first meeting of the Conference of the Parties serving as the meeting of the Parties to the Protocol may require at least six months;

- (b) In the event that the Protocol enters into force more than one year after the sixth meeting of the Conference of the Parties but before the seventh meeting, to convene the first meeting of the Conference of the Parties serving as the meeting of the Parties to the Protocol in conjunction with the seventh meeting of the Conference of the Parties, pursuant to paragraph 6 of Article 29 of the Protocol, taking into account that adequate preparations for the first meeting of the Conference of the Parties serving as the meeting of the Parties may require at least six months;
4. *Decides* that, in the event that the first meeting of the Conference of the Parties serving as the meeting of the Parties to the Protocol cannot be held in conjunction with an extraordinary meeting of the Conference of the Parties between the sixth and seventh regular meetings of the Conference of the Parties, further meetings of the Intergovernmental Committee for the Cartagena Protocol on Biosafety may be convened for preparations of the first meeting of the Conference of the Parties serving as the meeting of the Parties, and, to this end, *requests* the Executive Secretary, in consultation with the bureaux of the Conference of the Parties and of the Intergovernmental Committee for the Cartagena Protocol on Biosafety, to keep the situation under review and make appropriate arrangements in this regard;
5. *Invites* Parties and States to make contributions for the supplementary budget for biosafety to the Special Voluntary Trust Fund (BE) for Additional Voluntary Contributions in support of any inter-sessional activities and the meetings of the Intergovernmental Committee for the Cartagena Protocol on Biosafety referred to in paragraph 4 above;
6. *Urges* Parties to renew efforts to facilitate agreement on paragraph 1 of rule 40 of the rules of procedure for meetings of the Conference of the Parties to the Convention, in light of potential implications for the effective operation of the Conference of the Parties serving as the meeting of the Parties to the Protocol;
7. *Urges* Parties to designate national focal points and competent national authorities pursuant to the provisions of paragraph 2 of Article 19 of the Cartagena Protocol on Biosafety.

DECISION VI/2 | Biological diversity of inland waters

The Conference of the Parties

1. *Welcomes* the progress made in the implementation of the programme of work on biological diversity of inland water ecosystems, and of the second joint work plan with the Convention on Wetlands (Ramsar, Iran, 1971), including the River Basin Initiative;

2. *Takes note* of the report of the World Commission on Dams, issued in November 2000, in regard to the implementation of the programme of work on biological diversity of inland water ecosystems;
3. *Emphasizes* the importance of review and elaboration of the programme of work on biological diversity of inland water ecosystems, as outlined in the progress report of the Executive Secretary on thematic programmes of work,¹ and of the implementation of activity 11 of programme of work on the Global Taxonomy Initiative;
4. *Recognizing* the importance of the River Basin Initiative for implementation of the programme of work on biological diversity of inland water ecosystems and application of the ecosystem approach, *requests* the Executive Secretary to strengthen collaboration with the Convention on Wetlands (Ramsar, Iran, 1971) on the implementation of the River Basin Initiative;
5. *Requests* the Executive Secretary and Bureau of the Convention on Wetlands (Ramsar, Iran, 1971) to facilitate the implementation of the third work plan with the Convention on Wetlands (Ramsar, Iran, 1971), as endorsed by the Conference of the Parties in its decision VI/20 C, on cooperation with the Convention on Wetlands;
6. *Urges* the Global Environment Facility, other funding institutions, and development agencies to provide financial support for implementation of the programme of work on the biological diversity of inland water ecosystems as well as the River Basin Initiative.

DECISION VI/3 | Marine and coastal biological diversity

The Conference of the Parties

1. *Takes note* of the progress made in the implementation of the programme of work on marine and coastal biological diversity, including the integration of coral reefs into programme element 2 of the programme of work, as endorsed by the Subsidiary Body on Scientific, Technical and Technological Advice in its recommendation VI/2;
2. *Requests* the Executive Secretary to continue facilitating the implementation of the specific work plan on coral bleaching as contained in annex II to recommendation VI/2 of the Subsidiary Body on Scientific, Technical and Technological Advice and the work plan on physical degradation and destruction of coral reefs as contained in annex I thereto, setting priorities as appropriate, with special emphasis on small island developing States and the least developed States, in active collaboration with the International Coral Reef Initiative and its partners, the regional seas programmes of the United Nations Environment Programme, the Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organization, and other relevant organizations;

93 UNEP/CBD/COP/6/11, paragraphs 22–24.

3. *Invites* the Executive Secretary to continue developing further the work plan on physical degradation and destruction of coral reefs as contained in annex I to recommendation VI/2 of the Subsidiary Body on Scientific, Technical and Technological Advice;
4. *Invites* the Executive Secretary to strengthen collaboration with regional seas conventions and action plans;
5. *Recognizes* the need for support through the financial mechanism to developing country Parties, in particular the least developed and small island developing States among them, for country-driven activities aimed at enhancing capabilities to address the impacts of mortality related to coral bleaching and physical degradation and destruction of coral reefs, including developing rapid response capabilities to implement measures to address coral-reef degradation, mortality and subsequent recovery.

SBSTTA RECOMMENDATION VI/2: MARINE AND COASTAL BIOLOGICAL DIVERSITY: PROGRESS REPORT ON THE IMPLEMENTATION OF THE PROGRAMME OF WORK, INCLUDING THE INTEGRATION OF CORAL REEFS

The Subsidiary Body on Scientific, Technical and Technological Advice,

Taking note of the analysis of the effects of the physical degradation and destruction of coral reefs as contained in annex II to the note prepared by the Executive Secretary for the sixth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (UNEP/CBD/SBSTTA/6/4), drawing upon the suggestions in annex I of the present recommendation, for the integration of the issue of physical degradation and destruction of coral reefs into programme element 2 of the programme of work on marine and coastal biological diversity,

1. *Endorses* the following text as operational objective 2.3, for the integration of coral reefs into programme element 2 of the programme of work on marine and coastal biological diversity:

“OPERATIONAL OBJECTIVE 2.3.: To gather and assimilate information on, build capacity to mitigate the effects of, and to promote policy development and implementation strategies to address: (i) the biological and socio-economic consequences of physical degradation and destruction of tropical and cold-water coral-reef ecosystems, including identification and promotion of management practices, methodologies and policies to reduce and mitigate impacts upon marine and coastal biological diversity and to restore and rehabilitate damaged coral reef; and in particular (ii) the impacts of coral bleaching and related mortality on coral-reef ecosystems and the human communities which depend upon coral-reef services, including through financial and technical assistance.”

2. *Invites* the Executive Secretary to promote and facilitate the implementation of the specific work plan on coral bleaching, as contained in annex II to the present recommendation and the work plan on physical degradation and destruction of coral reefs as contained in annex I thereto, setting priorities as appropriate, with

special emphasis on small island developing States and the least developed States, in collaboration with the International Coral Reef Initiative and its partners, the regional seas programmes of the United Nations Environment Programme, the Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organization, and other relevant organizations;

3. *Invites* the Executive Secretary to develop further the work plan on physical degradation and destruction of coral reefs as contained in annex I to the present recommendation;

4. *Recommends* that the Conference of the Parties examine the need for support through the financial mechanism to developing country Parties, in particular the least developed and small island developing States among them, for country-driven activities aimed at enhancing capabilities to address the impacts of mortality related to coral bleaching and physical degradation and destruction of coral reefs, including developing rapid response capabilities to implement measures to address coral-reef degradation, mortality and subsequent recovery.

ANNEX I TO SBSTTA RECOMMENDATION VI/2 ELEMENTS OF A WORK PLAN ON PHYSICAL DEGRADATION AND DESTRUCTION OF CORAL REEFS

Activities

- (a) *Assessments and indicators.* To provide a comprehensive analysis of the status and trends of global coral-reef ecosystems, taking into account the note by the Executive Secretary on progress report on the implementation of the programme of work on marine and coastal biological diversity, including the integration of coral reefs prepared for the sixth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) (UNEP/CBD/SBSTTA/6/4), the including determination of indicators for continued monitoring and the determination of ecological and socio-economic impacts of coral-reef degradation and destruction.
- (b) *Management.* To identify management practices, technologies and policies that promote the conservation and sustainable use of coral-reef ecosystems and their associated marine biological diversity, with a view to addressing recognized threats (i.e., overfishing, coastal development, destructive fishing practices, land-based pollution, marine-based pollution and recreational use) and identifying sustainable management approaches.
- (c) *Capacity-building.* To strengthen the capacities of Parties, regions, local communities and other stakeholders to manage sustainably coral-reef ecosystems and their associated marine biological diversity, so as to maintain their ecosystem benefits and to promote awareness and responsible action to prevent and mitigate physical degradation and destruction of coral reefs and their effects on marine biological diversity.
- (d) *Financing.* To recognize and promote existing programmes and mobilize further mechanisms for financial and technical development assistance to support

implementation of activities addressing the physical degradation and destruction of coral reefs.

- (e) *Education and public awareness.* To educate and inform the public, policy makers and other stakeholders of ecological and socio-economic values of coral-reef ecosystems and the importance of an ecosystem approach towards their conservation and sustainable management.

Ways and means

Activities under this operational objective will be implemented primarily at the national and regional levels under the guidance of the Executive Secretary and SBSTTA, and in collaboration with relevant organizations and agencies, recognizing the value of the capacity established through the International Coral Reef Initiative (ICRI) and its operational units.

ANNEX II TO SBSTTA RECOMMENDATION VI/2 SPECIFIC WORK PLAN ON CORAL BLEACHING

Objective: To gather and assimilate information on, build capacity to mitigate the effects of, and to promote policy development and implementation strategies to address the impacts of coral bleaching and related mortality on coral-reef ecosystems and the human communities which depend upon coral reef-services, including through financial and technical assistance.

Activities

1. INFORMATION GATHERING

- (a) Implement and coordinate targeted research programmes, including predictive modelling, that investigate: (1) the tolerance limits and adaptation capacity of coral-reef species to acute and chronic increases in sea-surface temperature; (2) the relationship among large-scale coral-bleaching events, global warming, and the more localized threats that already place reefs at risk; and (3) the frequency and extent of coral-bleaching and related mortality events, as well as their impacts on ecological, social and economic systems.

Ongoing initiatives

- (i) The Ad Hoc Study Group on Indicators of Coral Bleaching and Subsequent Effects was established in September 2000 under the auspices of the Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organization (IOC/UNESCO) with three major objectives: to develop possible molecular, cellular, physiological, and community indicators of coral bleaching that are reliable in their ability to detect early stress signals; to examine potential mechanisms of reef corals for adaptation/acclimatization to global environmental change; to investigate long-term response of reef corals to large-scale changes in environmental variables. The group will

meet annually for three years and distribute findings through annual reports and a final publication.

- (ii) The Global Coral Reef Monitoring Network (GCRMN) is a global network of coral-reef scientists, Governments and local communities for monitoring and assessment of coral reefs, in terms of both biophysical and socio-economic parameters needed for management. GCRMN is co-hosted by the Australian Institute of Marine Science and the World Fish Center (ICLARM). ICLARM also hosts ReefBase, the official database of GCRMN, with data of over 8,000 coral reefs around the world. The United Nations Environment Programme (UNEP), together with IOC/UNESCO, is a sponsor of the GCRMN and a member of the GCRMN Management Group and the GCRMN Scientific and Technical Advisory Committee.
- (iii) GCRMN has developed a comprehensive *Status of Coral Reefs of the World* report to be updated every two years, the most recent edition having been published in October 2000.
- (iv) UNEP, through GCRMN, emphasizes the importance of monitoring socio-economic parameters to achieve sustainable use of coral reef ecosystems. A socio-economic manual has recently been developed (October 2000) for monitoring of these parameters for enhanced management capacity.
- (v) Contributing to GCRMN are existing regional projects. Regional coral-reef monitoring networks within GCRMN exist for the Indian Ocean, the Pacific and the Wider Caribbean funded by the World Bank, with the goal of assisting in the conservation of the rich biodiversity of coral reefs and their socio-economic value, and in the sustainable management of their resources, through a monitoring network.
- (vi) Under the International Coral Reef Action Network (ICRAN), the World Conservation Monitoring Centre (WCMC) and ICLARM are exploring the integration and availability of map-based products through the WCMC website and through ReefBase.
- (vii) Some projects within the CORDIO (Coral Reef Degradation in the Indian Ocean) programme in the Indian Ocean region focus on determining the socio-economic impacts of coral mortality and options for mitigating these through management and development of alternative-livelihoods projects investigating methodologies for preventing the introduction of invasive alien species may contribute to the overall health of coral-reef ecosystems, and thus to recovery from bleaching. The GloBallast pilot project of the International Maritime Organization (IMO) is identifying prevention measures to combat introductions from ballast water discharges.

Specific tasks in addition to ongoing initiatives

- (i) Provide scientific information on the survival of reef-building corals, including the potentially differing responses of a variety of

reef systems (such as barrier and patch reefs) and degrees of isolation, under global warming to allow some prediction of the adaptation and survival of the biological diversity of coral reefs in coming decades.

- (ii) Compile information on existing networks, databases and websites which can provide up-to-date information of the status of coral reefs and the threats thereto; and assess the quality of the data they contain and methodologies used for data collection and analysis.
 - (iii) Strengthen networks for data collection and dissemination of information on coral-reef status and interpretation of long-term trends resulting from global climate change and anthropogenic stresses to assist effective management and conservation.
 - (iv) Develop further target research programmes that investigate the impacts of coral bleaching and coral mortality events on social and economic systems.
 - (v) See activity (k) (i) below.
- (b) Implement and coordinate baseline assessments and long-term monitoring to measure the biological and meteorological variables relevant to coral bleaching, mortality and recovery, as well as the socio-economic parameters associated with coral-reef services.

Ongoing initiatives

- (i) The objectives of the Ad Hoc Study Group on Indicators of Coral Bleaching and Subsequent Effects referred to under activity (a) above include the identification of biological indicators that would facilitate long-term monitoring.
- (ii) GCRMN currently serves as a network for coral-reef assessments and monitoring of biological variables relevant to coral bleaching, mortality and recovery, as well as many socio-economic parameters associated with coral-reef services (see activity (a) above).
- (iii) Data repository and dissemination systems such as ReefBase may offer time-line biological data.
- (iv) GCRMN, in coordination with the World Bank, IUCN, the Australian Institute of Marine Science and UNEP regional seas programmes, is targeting existing or planned marine protected areas as the focus of some of their monitoring activities. The sites may offer valuable baseline data and serve for long-term monitoring.
- (v) GCRMN is currently developing a rapid-assessment methodology for socio-economic and biophysical parameters in the Eastern African region, especially for use in developing countries where limited resources do not always allow for regular high-intensive monitoring.
- (vi) The UNEP Division of Environmental Information, Assessment and Early Warning coordinates a variety of information available from remote-sensing technologies and organizations that facilitates dissemination of such information. They are well suited to coor-

dinating assessment of meteorological variables relevant to coral bleaching, mortality and recovery.

- (vii) WCMC and ICLARM are exploring the integration and availability of map-based products through the WCMC website and through ReefBase.

Specific tasks in addition to ongoing initiatives

- (i) Identify pilot projects that establish training programmes and survey protocols and enhance availability of expert advice at a range of scales, including classification of scale data.
 - (ii) Support ongoing assessment and monitoring initiatives, such as those of UNESCO, ICRAN, the regional seas conventions and action plans, GCRMN, UNEP and CORDIO.
- (c) Develop a rapid response capability to document coral bleaching and mortality in developing countries and remote areas including establishment of training programmes, survey protocols, expert advice, and contingency fund or rapid release of special project funding.

Ongoing initiatives

- (i) The objectives of the Ad Hoc Study Group on Indicators of Coral Bleaching and Subsequent Effects referred to under activity (a) above include the identification of physiological early-stress indicators in corals.
- (ii) The Sida-SAREC and World Bank programme on coral-reef degradation in the Indian Ocean was initiated as a response to the 1998 coral-bleaching event (CORDIO).
- (iii) GCRMN is currently developing a rapid assessment methodology for socio-economic and biophysical parameters in the Eastern African region, especially for use in developing countries where limited resources do not always allow for regular high-intensive monitoring (ReefCheck).
- (iv) Within the ICRAN strategic plan, it is intended that these capabilities will be developed and made widely available.
- (v) The UNEP Division of Environmental Information, Assessment and Early Warning coordinates a variety of information available from remote sensing technologies and organizations that facilitates dissemination of such information.

Specific tasks in addition to ongoing initiatives

- (i) Develop standardized training modules and manuals on detection and documentation of coral-bleaching events, mortality or recovery monitoring
- (ii) Organize annual meetings in each region on coral-reef assessment and monitoring methods with particular emphasis on documenting coral bleaching, bleaching related mortality and subsequent recovery. These should be integrated into existing programmes, where possible (regional seas conventions and actions plans may have the best capacity to implement these measures).

- (d) Encourage and support countries in the development and dissemination of status-of-the-reefs reports and case-studies on the occurrence and impacts of coral bleaching and related mortality.

Ongoing initiatives

- (i) GCRMN has developed a comprehensive *Status of Coral Reefs of the World* report to be updated every two years, the most recent edition having been published in October 2000. This report is largely based on national and regional contributions.
- (ii) The Secretariat of the Convention on Biological Diversity, in accordance with decision V/3, paragraph 7, of the Conference of the Parties to the Convention invited Parties to submit case-studies for dissemination through the clearing-house mechanism. The national reporting mechanism of the Convention on Biological Diversity facilitates the collection of information on the status of coral reefs and case-studies on the occurrence and impacts of coral bleaching.
- (iii) The CORDIO Status Report 2000 offers reporting opportunities on the status of the reefs for Indian Ocean countries. The dissemination of this information through the CORDIO newsletter has facilitated further communication and coordination on local impacts.

Specific tasks in addition to ongoing initiatives

- (i) Support and expand existing networks and initiatives at the regional and national level conducting coral-reef status assessments and monitoring.
 - (ii) Strengthen dissemination of existing assessment and monitoring information on status of coral reefs and their threats through existing networks (under the ICRAN strategic plan, this is a core role of GCRMN and ReefBase).
- (e) Extend the use of early-warning systems for coral bleaching by:
- (i) Enhancing current NOAA AVHRR Hot Spot mapping by increasing resolution in targeted areas and carrying out ground-truth validation exercises;
 - (ii) Encouraging space agencies and private entities to maintain deployment of relevant sensors and to initiate design and deployment of specialized technology for shallow-oceans monitoring;
 - (iii) Making the products of remote sensing readily accessible at low cost to coral-reef scientists and managers worldwide, in particular to those scientists and managers that are based in developing countries.

Ongoing initiatives

- (i) The UNEP Division of Environmental Information, Assessment and Early Warning coordinates a variety of information available

from remote sensing technologies and organizations that facilitates dissemination of such information.

- (ii) Under the ICRAN, WCMC and ICLARM are exploring the integration and availability of map-based products through the WCMC website and through ReefBase that include satellite and aerial imagery.

Specific tasks in addition to ongoing initiatives

- (i) Expand the use of existing early warning systems (e.g. NOAA early warning mapping) and support the development of Web-based early warning systems.
- (ii) Develop local community capacity for remote and local level validation exercises.
- (iii) Develop mechanisms to make accessible high-resolution multi-spectrum imagery worldwide.

2. CAPACITY-BUILDING

- (f) Support the training of and career opportunities for marine taxonomists, ecologists, and members of other relevant disciplines, particularly at the national and regional level.

Ongoing initiatives

- (i) Various ongoing training activities not necessarily related to coral bleaching but to coral conservation issues, e.g. the Ramsar Wetlands for the Future training initiative for Latin America and the Caribbean; the regional seas programme for Caribbean protected area managers; various activities supported by aid agencies and global and regional development banks.
- (ii) Many other training activities are carried out as components of wider projects and programmes. GCRMN is building capacity for coral-reef monitoring and assessments through training workshops, especially in developing countries.

Specific tasks in addition to ongoing initiatives

- (i) Further incorporate or support the issue of coral reefs and bleaching in the capacity-building activities of multilateral environmental agreements (e.g. Ramsar Convention, Cartagena Convention) and of their respective contracting parties.
- (ii) Develop standardized training modules and manuals on detection and documentation of coral-bleaching events and subsequent recovery.
- (iii) Organize annual meetings in each region on coral-reef assessment and monitoring methods with particular emphasis on documenting coral bleaching, bleaching-related mortality and subsequent recovery. These should be integrated into existing programmes, where possible.

- (iv) Create scholarship trust funds in each region of the regional seas programmes to provide scholarships at graduate/postgraduate level to at least two people per region to undertake studies on coral-reef ecology and management.
 - (v) Promote exchange programmes between countries and/or regions.
 - (vi) Promote further coordination and collaboration of ongoing regional activities.
 - (vii) Promote the inclusion in national reports under the regional seas conventions, the Convention on Biological Diversity and the United Nations Framework Convention on Climate Change of a section for reporting of ecological and socio-economic impacts of coral-bleaching events.
 - (viii) Add coral bleaching to the national biodiversity strategies and action plans under the Convention on Biological Diversity.
- (g) Encourage and support multidisciplinary approaches to coral-reef research, monitoring, socio-economics and management.

Ongoing initiatives

- (i) ICRI and GCRMN activities are intended to encourage and support multidisciplinary approaches to coral-reef research, monitoring, socio-economics and management.
- (ii) Regional seas programmes through the ICRAN strategic plan and existing programmes like CORDIO, and the UNEP Caribbean Environment Programme are increasing regional capacity towards coral bleaching. The four regions currently active under the ICRAN strategic plans are South-East Asia, Pacific, Caribbean and Eastern Africa.

Specific tasks in addition to ongoing initiatives

- (i) Develop a formal network of agencies in developed and developing countries, which agree to an annual exchange of staff in areas relevant to coral-reef management.
 - (ii) Gather and assimilate information on existing training programmes on integrated coastal area management, best practices and related issues, relating to sustainable management of coral reefs.
 - (iii) Develop and/or expand training opportunities for fishers, protected area managers and related marine resource managers at the national and regional levels, on resource assessment, monitoring, user impact, ecosystem approaches to marine and coastal resource management, surveillance and enforcement, local community integration, and in setting and measuring the achievement of management performance goals and indicators.
 - (iv) See activity (k) (ii) below.
- (h) Build stakeholder partnerships, community participation programmes, and public-education campaigns and information products that address the causes and consequences of coral bleaching.

Ongoing initiatives

- (i) ICRI and the International Tropical Marine Ecosystems Management Symposium (ITMEMS) are building the foundation of new ICRI action.
- (ii) A number of existing education and capacity-building projects within the regional seas programmes serve to raise awareness regarding coral bleaching.
- (iii) IUCN, the Secretariat of the Convention on Biological Diversity, USAID and WWF have produced a publication *Management of Bleached and Severely Damaged Coral Reefs*, to contribute to effective and immediate management action to aid reef protection and regeneration, and to enhance research to develop the necessary tools and measures for long-term success. In addition, the publication is intended to raise awareness of the urgent need to take all possible actions to reduce the impact of climate change on coral reefs.
- (iv) The WWF approach to worldwide coral-reef conservation (Coral-Web): training of resource managers, increasing education, raising awareness, and implementing site-based reef management projects to help groups of stakeholders achieve their goals in reef management and sustainable economic development, including through the development of alternatives to destructive practices.
- (v) The International Coral Reef Information Network (ICRIN) is the primary public awareness mechanism of the ICRI, and thus serves to disseminate public information products that address the causes and consequences of coral bleaching.

Specific tasks in addition to ongoing initiatives

- (i) “Bridge the gap between global and local action through the creation of national and sub-regional coral-reef initiatives” (see ICRI and the International Tropical Marine Ecosystems Management Symposium on Building the Foundation of New ICRI Action).
- (ii) Package relevant information from status-of-reefs reports, *Reefs at Risk*, etc., into effective practical materials for the general public, the media, the private sector and policy makers

3. POLICY DEVELOPMENT/IMPLEMENTATION

- (i) Use existing policy frameworks to implement the multiple conservation measures outlined in the Renewed Call to Action of the International Coral Reef Initiative, and develop and implement comprehensive local-to-national-scale integrated marine and coastal area management plans that supplement marine protected areas.

Ongoing initiatives

As an example, relevant regional activities within the Wider Caribbean are carried out, *inter alia*, in the framework of the:

- Cartagena Convention and its protocols on oil spills, land-based sources of marine pollution and specially protected areas and wildlife
- Regional ICRI Framework for Action
- Association of Caribbean States (ACS)
- Central American Commission on Environment and Development (CCAD)
- CARICOM

Specific tasks in addition to ongoing initiatives

- (i) Assess relevant actions of existing frameworks and how these are directly addressing integrated marine and coastal areas management, in particular coral-reef issues.
 - (ii) Integrate in existing policies at the regional and national levels the priority issues identified by ICRI and the International Tropical Marine Ecosystems Management Symposium (ITMEMS).
 - (iii) Make use of the regional seas programmes and other regional agreement (i.e. shipping, fisheries, trade and land-based sources of marine pollution) as vehicles to develop and implement policies related to coral-reef management and protection.
- (j) Identify and institute additional and alternative measures for securing the livelihoods of people who directly depend on coral-reef services.

Ongoing initiatives

Some projects within the CORDIO programme in the Indian Ocean region focus on determining the socio-economic impacts of coral mortality and options for mitigating these through management and development of alternative livelihoods. Development is needed of further target research projects that investigate the impacts of coral bleaching and mortality events on social and economic systems in other regions.

Specific tasks in addition to ongoing initiatives

- (i) Compile information on the socio-economic impacts of coral bleaching on communities dependent on coral reefs.
 - (ii) Support and expand existing projects that assess the impacts of coral bleaching on communities dependent on coral reefs, such as the CORDIO project in the Indian Ocean.
 - (iii) Develop pilot projects for transitioning dependent communities to alternative and sustainable livelihoods.
- (k) Initiate efforts to develop joint actions among the Convention on Biological Diversity, the United Nations Framework Convention on Climate Change, and the Ramsar Convention on Wetlands of International Importance especially as Waterfowl Habitat to:
- (i) Develop approaches for assessing the vulnerability of coral-reef species to global warming;
 - (ii) Build capacity for predicting and monitoring the impacts of coral bleaching and related mortality;

- (iii) Identify approaches for developing response measures to coral bleaching;
- (iv) Implement measures to address coral bleaching and related mortality;
- (v) Provide guidance to financial institutions, including the Global Environment Facility (GEF), to support these activities.

Ongoing initiatives

- (i) The Executive Secretary has transmitted the view to the United Nations Framework Convention on Climate Change (UNFCCC) that there is significant evidence that climate change is a primary cause of the recent and severe extensive coral bleaching, and that this evidence is sufficient to warrant remedial measures being taken in line with the precautionary approach. In this regard, the Secretariat of the Convention on Biological Diversity, the Secretariat of the UNFCCC, and the Intergovernmental Panel on Climate Change (IPCC) have initiated dialogue to explore the integration of biological diversity concerns into the implementation of the UNFCCC and its Kyoto Protocol.
- (ii) GEF Caribbean project on climate change adaptation (CPACC project).

Specific tasks in addition to ongoing initiatives

- (i) Promote and implement joint work plans with other relevant agreements, organizations and initiatives, including the Commission on Sustainable Development, FAO, regional seas conventions and action plans, regional trade and economic organizations, the Global Programme of Action (GPA) for the Protection of the Marine Environment from Land-based Activities, ICRI and the Man and Biosphere Programme. In particular, assess and coordinate activities that have been agreed within multilateral environmental agreements about coral reefs.
 - (ii) Gather the outputs of the Caribbean GEF project on climate change adaptation (CPACC project) as a contribution to activities (k) (i)-(iv) above, and disseminate relevant findings through the clearing-house mechanism and other mechanisms.
 - (iii) Further development of response measures to coral bleaching and potential guidance to financial institutions, including the GEF may be needed.
- (l) Encourage FAO and regional fisheries organizations to develop and implement measures to assess and mitigate the impacts of sea-surface temperature rise on fisheries.

Specific tasks

- (i) Investigate potentially deleterious effects of changes in oceanographic patterns and resulting impacts on target fish stocks resulting from sea-surface temperature rise.

- (ii) Establish no-fishing zones and limitations on fishing gear to protect breeding grounds and provide fish with a refuge.
 - (iii) Enforce legislation prohibiting destructive fishing practices that further damage coral-reef ecosystems.
 - (iv) Investigate strategies for management of coral-reef fisheries that are demonstrably sustainable with respect to fished stocks and the ecosystems that produce them (in collaboration with FAO).
- (m) Emphasize that coral bleaching can be monitored as an early warning of the impacts of global warming on marine ecosystems and that the collapse of coral-reef ecosystems could impact ecological processes of the larger marine system of which coral reefs are a part.

Specific tasks

- (i) Recognizing that coral bleaching is a cumulative stress response (i.e., global warming is the most widespread stressor, but known human induced stresses exacerbate events), develop education programmes addressing an ecosystem approach to coral-reef management and the relation between ecological parameters of coral reefs, sea-surface temperature rise and other human-induced stresses.
 - (ii) Investigate the relationship between coral-bleaching events and long-term meteorological data.
 - (iii) Develop educational programmes on the relationship between coral reefs and larger marine systems (e.g., impacts of coral-reef loss on fisheries, local communities etc).
- (n) Emphasize the interdependencies and uncertainties in the relationships among marine, terrestrial and climatic systems.

4. FINANCING

- (o) Mobilize international programmes and mechanisms for financial and technical development assistance, as well as national and private sources to support implementation.

Specific tasks

- (i) Promote programmes that identify the relationships among financial and technical development assistance and environmental project funding.
- (ii) Identify financial and technical assistance mechanisms of national and private sources to assist communities impacted by coral bleaching.

Ways and means: Activities under this operational objective will be implemented primarily at the national and regional levels under the guidance of the Executive Secretary and SBSTTA, and in collaboration with relevant organizations and agencies, recognizing the value of the capacity established through ICRI and its operational units. The additional specific tasks will be prioritized

as appropriate. The role of the Convention on Biological Diversity will be to act primarily as a facilitator of these activities.

Timing of expected outputs: 2000 onwards (minimum three-year time schedule)

DECISION VI/4 | Biological diversity of dry and sub-humid lands

The Conference of the Parties

1. *Takes note* of the progress reports on the implementation of the programme of work on the biodiversity of dry and sub-humid lands prepared by the Executive Secretary and the report of the Ad Hoc Technical Expert Group on the Biodiversity of Dry and Sub-Humid Lands;²
2. *Recognizing* the interlinkages between biodiversity, desertification/land degradation and climate change, *requests* the Executive Secretary, in collaboration with the secretariats of relevant conventions, to prepare a proposal for the development of a mechanism to coordinate activities in these areas, and for linking and ensuring integration of the national biodiversity strategies and action plans under the Convention on Biological Diversity and the national action programmes under the Convention to Combat Desertification;
3. *Recognizing* the horizontal nature of this programme of work on dry and sub-humid lands, *recommends* that the Executive Secretary and Parties enhance synergies in the implementation of this and other thematic programmes of work of the Convention.

DECISION VI/5 | Agricultural biological diversity

The Conference of the Parties

Implementation of the programme of work

1. *Notes* the progress made in the implementation of the programme of work and the need for emphasis and further action, within the context of the programme of work, on:
 - (a) The wider understanding of the functions of biodiversity in agro-ecosystems, and the interactions between its various components, at different spatial scales;
 - (b) The promotion of methods of sustainable agriculture that employ management practices, technologies and policies that promote the positive and prevent or mitigate the negative impacts of agriculture on biodiversity, focusing on the needs of farmers and indigenous and local communities, to participate efficiently in the process of meetings those particular goals;

² UNEP/CBD/COP/6/INF/39.

- (c) Capacity-building in institutions, human resource development, training, communication, education and public awareness. Moreover, funding for the implementation of the programme of work should be reviewed, in the context of decision V/5 of the Conference of the Parties; and
 - (d) Mainstreaming;
2. *Adopts* the steps for the further implementation of the programme of work by the Executive Secretary and partner organizations and the reporting schedule contained in annex I to the present decision;
 3. *Invites* Parties, other Governments, and relevant organizations to submit case-studies on their experiences with mainstreaming matters related to agricultural biodiversity in their plans, programmes and strategies, to be made available through the clearing-house mechanism;
 4. *Invites* Parties and Governments to provide, thematic reports on the implementation of the programme of work on agricultural biodiversity, as part of the third national reports, prior to the eighth meeting of the Conference of the Parties;
 5. *Requests* the Executive Secretary to prepare a draft format for the thematic report on agricultural biodiversity, for consideration by the Conference of the Parties at its seventh session;
 6. *Requests* the Executive Secretary, in collaboration with the Food and Agriculture Organization of the United Nations, to prepare, in time for consideration by the Conference of the Parties at its the eighth meeting, syntheses of relevant studies and an analysis of gaps and opportunities in the implementation of the programme of work, drawing upon the national thematic reports referred to in paragraph 4 above, as well as information provided by relevant organizations;
 7. *Continues* to encourage Parties and Governments to support the application of the Executive Secretary of the Convention on Biological Diversity for observer status in the Committee on Agriculture of the World Trade Organization, in line with paragraph 9 of decision IV/6 and paragraph 14 of decision V/5, of the Conference of Parties.

The International Pollinators Initiative

8. *Adopts*, and *decides* to periodically review, as appropriate, the plan of action for the International Initiative for the Conservation and Sustainable Use of Pollinators on the basis of annex II to the present recommendation;
9. *Welcomes* the leading role played by the Food and Agriculture Organization of the United Nations in facilitating and coordinating this Initiative;
10. *Welcomes* efforts to establish the African Pollinators Initiative, in the framework of the International Pollinators Initiative;
11. *Invites* Parties and other Governments, and relevant organizations to contribute to the implementation of the International Pollinators Initiative;
12. *Invites* Parties, other Governments, the financial mechanism and funding organizations to provide adequate and timely support to the implementation of the

Plan of Action, especially by developing country Parties and Parties with economies in transition, and in particular least developed countries and small island developing States.

Soil biodiversity

13. *Decides* to establish an International Initiative for the Conservation and Sustainable Use of Soil Biodiversity as a cross-cutting initiative within the programme of work on agricultural biodiversity, and *invites* the Food and Agriculture Organization of the United Nations, and other relevant organizations, to facilitate and coordinate this initiative.

Animal genetic resources

14. *Welcomes* the process initiated by the Food and Agriculture Organization of the United Nations for the preparation of the first Report on the State of World's Animal Genetic Resources, as a contribution to the Convention's programme of work on agricultural biodiversity, as adopted by decision V/5;

15. *Encourages* Parties to participate in the development of the first Report on the State of World's Animal Genetic Resources, in particular through the preparation of country reports;

16. *Invites* Parties, other Governments, the financial mechanism and funding organizations to provide adequate and timely support to enable countries, especially developing country Parties and Parties with economies in transition, and in particular least developed countries and small island developing States, to participate fully in the preparatory process for the first Report on the State of World's Animal Genetic Resources, and implement follow-up actions identified through the process that will contribute to conservation sustainable use, access and benefit-sharing of animal genetic resources for food and agriculture.

Impacts of trade liberalization

17. *Requests* the Executive Secretary to study further the impacts of trade liberalization on agricultural biodiversity, in cooperation with the United Nations Environment Programme, the Food and Agriculture Organization of the United Nations, the World Trade Organization and other relevant organizations.

Impacts of the application of genetic use restriction technologies on small-holder farmers, indigenous and local communities and Farmers' Rights

Recalling decision V/5 and, in particular, its paragraphs 23, 24 and 27,

Reaffirming decision V/5, paragraph 23,

18. *Encourages* Parties and other Governments to address generic concerns regarding such technologies as genetic use restriction technologies under international and national approaches to the safe and sustainable use of germplasm;

19. *Urges* Parties and other Governments to assess whether there is a need to develop, and how to ensure the application of, effective regulations at national level which take into account, *inter alia*, the specific nature of variety-specific and trait-specific genetic use restriction technologies, in order to ensure the safety of human health, the environment, food security and the conservation and sustainable use of biological diversity;

20. *Acknowledges* the need for additional research regarding the potential risks of specific genetic use restriction technologies;

21. *Decides* to establish an ad hoc technical expert group on genetic use restriction technologies to further analyse the potential impacts of genetic use restriction technologies on smallholder farmers, indigenous and local communities and on Farmers' Rights, taking into account relevant ongoing work, and, as far as possible, the outcome of the work described in paragraphs 23 and 24 below, as well as comments from Parties, international organizations, and smallholder farmers, indigenous and local communities in order to prepare advice for consideration at its seventh meeting. The ad hoc technical expert group will include experts from smallholder farmers and indigenous and local communities, and will report to both to the Ad Hoc Open-ended Working Group on Article 8(j) and Related Provisions and the Subsidiary Body on Scientific, Technical and Technological Advice prior to the seventh meeting of the Conference of the Parties;

22. *Invites* Parties, other Governments and relevant organizations to protect native species and associated traditional knowledge by paying a particular attention to smallholder farmers, indigenous and local communities and Farmers' Rights in their implementation of the programme of work on agricultural biological diversity and the Global Strategy for Plant Conservation, in order to promote the sustainable use and *in situ* development of genetic resources;

23. *Also invites* the Food and Agriculture Organization of the United Nations to study the potential impacts of the applications of genetic use restriction technologies in the framework of the International Treaty on Plant Genetic Resources for Food and Agriculture, and to consider genetic use restriction technologies in the further development of the Code of Conduct on Biotechnology as it relates to genetic resources for food and agriculture;

24. *Invites* the International Union for the Protection of New Varieties of Plants (UPOV), the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore of the World Intellectual Property Organization (WIPO) and other relevant organizations to examine, in the context of their work, the specific intellectual property implications of genetic use restriction technologies, particularly in respect of indigenous and local communities;

25. *Requests* the Executive Secretary:

- (a) To integrate the issues related to the impacts of genetic use restriction technologies on smallholder farmers, indigenous and local communities and on Farmers' Rights in the work under the Convention regarding Article 8(j) and related provisions and Article 14, paragraph 2, on liability and redress;

- (b) To invite the Food and Agriculture Organization of the United Nations, in collaboration with other organizations to investigate the potential impacts of the applications of genetic use restriction technologies in forestry, livestock, aquatic and other ecosystems, and to take into account the findings of the these organizations in the development of the relevant programmes of work; and
- (b) Given the distinct nature of genetic use restriction technologies and their potential impacts on indigenous and local communities, to invite relevant organizations to examine the applicability of existing, and to explore the need to develop new, legal mechanisms to address the application of genetic use restriction technologies.

ANNEX I
TABLE 1: STEPS FOR THE FURTHER IMPLEMENTATION OF THE PROGRAMME OF WORK BY THE EXECUTIVE SECRETARY AND PARTNER ORGANIZATIONS

PROGRAMME ELEMENT & ACTIVITY	EXPECTED OUTPUTS	ACTORS & PARTNERS	STATUS	MILESTONES
1 Assessments				
1	Comprehensive assessment of the status and trends of the agricultural biodiversity	2007 SCBD, FAO, MA	Planned	Preliminary assessment 2003 Draft full assessment 2005
1.1 Planned assessments	State of the world's plant genetic resources II	2007 FAO (CGRFA)	Planned	Thematic supplements 2003 Country inputs 2004 Full draft report 2006
	State of the world's animal genetic resources	2005 FAO (CGRFA)	In progress	Country reports 2003 Strategic priorities report 2003
1.2 Specific assessments	Status and trends of pollinator diversity	2003	Planned	
1.3 Knowledge, innovations & practices of farmers, indigenous & local communities on biodiversity	State of the world's traditional knowledge on biodiversity	2003 CBD–Article 8(j) process	Planned	Outline of report 2002
1.4 Interactions between agriculture and biodiversity	Component of the Millennium Assessment	2005 Millennium Assessment	In progress	PAGE: Agro-ecosystems 2000
1.5 Methods: Indicators	Agri-environmental indicators	2004 OECD	In progress	First report 2001 Workshop: habitat matrices 2001
	Genetic diversity/erosion	2004 FAO (CGRFA)	Planned	Draft indicators 2002 Field tested indicators 2004
	Agricultural biodiversity	2004 FAO, MA	Planned	Technical workshop 2002
	Agreed terminology and classification for production environments	2004 FAO, MA	Planned	Compilation of existing 2002 Classification for MA 2003
2 Adaptive management				
2.1 Case-studies	Plant genetic resources, animal genetic resources, soil, pollinators	2001 Various	In progress	
	Other aspects	2002 Various	Planned	
2.2 Analysis	Information on cost effective practices and technologies	2003 SCBD, FAO	In progress	
	Study on trade liberalization marketing and trade policies	2002 SCBD, FAO, WTO	In progress	
	Study on GURTS	2003 FAO, SCBD	In progress	

PROGRAMME ELEMENT & ACTIVITY	EXPECTED OUTPUTS	ACTORS & PARTNERS	STATUS	MILESTONES
2.3 Promotion	Lessons learned from the case-studies	2004 Various	Planned	
3 Capacity-building				
3.1 Partnerships and forums	Documentation of successful cases	2002 SCBD, FAO, etc	Planned	
3.2 Enhanced capacity	Pilot projects for the application of lessons learned from programme element 2	2005 Various, including Parties, civil-society organizations, funding agencies	Proposed	
3.3 Participation of farmers, indigenous and local communities in national strategies	In-country multi-stakeholder workshops	2005 Parties, SCBD	Proposed	
3.4 Policy change, benefit-sharing and incentive measures	Identification of lessons learned from programme element 2	2003 Parties, SCBD	Proposed	
3.5 Awareness amongst producer organizations and consumers	Dialogue workshops with producer and consumer organizations	2005 Parties, SCBD	Proposed	
3.6 Networks	Five regional workshops	2003 Parties, SCBD	Proposed	
4 Mainstreaming				
4.1 Institutional framework	Best practice guidelines Analysis of case-studies on mainstreaming	2001 BSBP 2003 SCBD	Completed Planned	
4.2 Information systems	Development of the clearing-house mechanism	SCBD, Parties	Ongoing	
4.3 Public awareness	UNESCO-CBD programme	UNESCO-CBD	Ongoing	
4.4 Conservation of genetic resources	Global Plan of Action for the Conservation and Sustainable Use of Plant Genetic Resources for Food and Agriculture	FAO	Ongoing	2002 2004 2006

**ANNEX II
PLAN OF ACTION FOR THE INTERNATIONAL INITIATIVE FOR THE
CONSERVATION AND SUSTAINABLE USE OF POLLINATORS**

YEAR	MEETING	CONSIDERATION OF ASSESSMENT RESULTS, STUDIES AND RECOMMENDATIONS	REVIEW OF IMPLEMENTATION BY PARTIES
2002	COP 6	<ul style="list-style-type: none"> • Study on trade liberalization • Study on GURTs 	Considers second national reports
2003	SBSTTA 8/9	<ul style="list-style-type: none"> • Analysis of lessons learned from case-studies • Preliminary assessment of status and trends of agricultural biodiversity 	
2004	COP 7	<ul style="list-style-type: none"> • Recommendations from SBSTTA on capacity-building and policy 	
2005	SBSTTA 10/11	<ul style="list-style-type: none"> • Draft comprehensive assessment of status and trends of agricultural biodiversity 	(Third national reports due)
2006	COP 8	<ul style="list-style-type: none"> • Analysis of gaps and opportunities in the implementation of the programme of work 	Considers third national reports

I. Context

1. Pollination is an essential ecosystem service that depends to a large extent on symbiosis between species, the pollinated and the pollinator. In many cases, it is the result of intricate relationships between plant and animal, and the reduction and loss of either will affect the survival of both parties. Not all plants depend on animals for pollination. Many plants are wind pollinated, like grasses which form the predominant ground-cover of many ecosystems. Similarly, in agriculture most staple foods are wind pollinated. However, at least one-third of the world’s agricultural crops depends upon pollination provided by insects and other animals. Diversity among species, including agricultural crops, depends on animal pollination. Therefore pollinators are essential for diversity in diet and for the maintenance of natural resources. The assumption that pollination is a “free ecological service” is erroneous. It requires resources, such as refuges of natural vegetation. Where these are reduced or lost they become limiting and adaptive management practices are required to sustain livelihoods.

2. In fact, throughout the world, agricultural production and agro-ecosystem diversity are threatened by declining populations of pollinators. The major contributors to this decline in pollinator populations are, *inter alia*, habitat fragmentation, agricultural and industrial chemicals, parasites and diseases, and the introduction of alien species.

3. There are over 25,000 different species of bees, which differ tremendously in size, and a diverse range of plants that they visit and pollinate. Both the diversity of wild plants and the variability of food crops depend on this diversity. Though bees form the most important group of pollinators, other insects such as, butterflies and moths, flies and beetles, and vertebrates such as bats, squirrels, birds and

some primates, also contribute. Some plants are visited by many different pollinators, while others have specific requirements. The same applies to the pollinators, some being generalists and others specialists. Therefore, pollination as a science requires detailed investigation, and the technological application of management practices is intricate. In most cases, there is a lack of knowledge about the exact relations between individual plant species and their pollinators, but studies in this field demonstrate that they are often quite specific.

4. In order to secure sustained pollinator services associated with agricultural ecosystems, far more understanding is needed of the multiple goods and services provided by pollinator diversity and the factors that influence their decline and activity. It is necessary to identify adaptive management practices that minimise negative impacts by humans on pollinators, promote the conservation and diversity of native pollinators, and conserve and restore natural areas necessary to optimize pollinator services in agricultural and other terrestrial ecosystems.

5. Considering the urgent need to address the issue of worldwide decline of pollinator diversity, the Conference of the Parties to the Convention Biological Diversity established an International Initiative for the Conservation and Sustainable Use of Pollinators in 2000 (decision V/5, section II) and requested the development of a plan of action. The following proposal for a plan of action was prepared by the Food and Agriculture Organization of the United Nations (FAO), consistent with paragraph 16 of decision V/15.

II. Objectives and approach

6. The aim of the International Initiative for the Conservation and Sustainable Use of Pollinators is to promote coordinated action worldwide to:

- (a) Monitor pollinator decline, its causes and its impact on pollination services;
- (b) Address the lack of taxonomic information on pollinators;
- (c) Assess the economic value of pollination and the economic impact of the decline of pollination services; and
- (d) Promote the conservation and the restoration and sustainable use of pollinator diversity in agriculture and related ecosystems.

7. The Initiative is to be implemented as a cross-cutting initiative within the programme of work on agricultural biodiversity, with appropriate links to other thematic programmes of work, particularly those on forest biological diversity and the biodiversity of dry and sub-humid lands, and with relevant cross-cutting issues, particularly the Global Taxonomy Initiative and work on invasive alien species. The Initiative provides an opportunity to apply the ecosystem approach.

III. Elements of the Plan

ELEMENT 1: ASSESSMENT

Operational objective

To provide a comprehensive analysis of status and trends of the world's pollinator diversity and of their underlying causes of its decline (including a focus on the goods and services provided by pollinator diversity), as well of local knowledge of its management. The result of the assessments will determine the further activities that are required.

Rationale

A number of scientific studies and various separate records strongly suggest that the numbers of crop pollinators are declining in many parts of the world. The yields of some crops are diminishing as a result of insufficient pollinators and many specialists, agronomists and fruit growers are concerned about the sharp declines in the numbers of bees in recent years. However, the scarcity of sound data hampers the elaboration of a comprehensive assessment of the status and trends of pollinator diversity, which is needed in order to inform policy change.

Similarly, a realistic evaluation of the economic value of animal-effected pollination is essential for the efficient planning of the world's agriculture. Existing estimates are contentious. The description and evaluation, in economic terms, of pollinator contributions to agriculture and environmental diversity will improve informed decision making at farm, regional, national and international levels.

In addition to the "taxonomic impediment" (see element 3), there is also a global "taxonomic deficit," that is, the unacceptably high numbers of bee genera for which identification keys are not available.

Activities

1.1 Monitor the status and trends of pollinators, through:

- (a) The establishment of a global network of cooperators to monitor changes in the diversity, population levels and frequency of pollinators through time in selected areas of the world. The network would share findings and discuss local and global trends in pollinators;
- (b) The implementation of a pilot global monitoring programme in selected areas worldwide;
- (c) The development, assessment and compilation of methods for monitoring pollinators, their diversity and efficiency;
- (d) The progressive development and implementation of a global programme for monitoring pollinator diversity, building upon activities (a), (b) and (c) above.

1.2 Assess the economic value of pollinators, including evaluation, in economic terms, of different crop-pollinator-pollination systems for optimal use of pollinators in sustainable agricultural systems, through economic analysis of data from various crop-pollinator-pollination systems, including those provided through case-studies under element 2.

1.3 Assess the state of scientific and indigenous knowledge on pollinator conservation, in order to identify gaps in knowledge and opportunities for application of knowledge; including:

- (a) Taxonomic knowledge; and
- (b) The knowledge, innovations and practices of farmers and indigenous and local communities in sustaining pollinator diversity and agro-ecosystem services for and in support of food production and food security.

1.4 Promote the development of identification keys for bee genera.

Ways and means

Exchange and use of experiences, information and findings from the assessments shall be facilitated by Parties, Governments and networks with consultation between countries and institutions, including the use of existing networks. Capacity-building activities from programme element 3 will assist countries in contributing to the assessment process. Case-studies, carried out under programme element 2, will also assist the assessment process by highlighting and examining important issues in pollinator conservation and sustainable use and in some cases providing data.

The global monitoring programme of pollinators could be carried out in two stages. A first stage would include activities 1.1(a), (b), and (c), and 1.4. A second stage would apply the findings of the first stage at a larger and representative number of field sites throughout the world in order to collect the data needed to detect changes in diversity and frequency of pollinators, especially of bee species. The project cannot be contemplated without the active participation of many nations, institutions and co-operators. Substantial additional financial resources would be required, especially for the second stage. Mechanisms will need to be put in place to ensure the continuity and sustainability of monitoring over the long term.

Timing of expected outputs

The first stage of the global programme for monitoring of pollinator diversity should be completed by 2005. The second stage would be conducted for an initial period of five years (2006–2010) and then, depending on the progress made, renewed for a further five years at a time thereafter. Important and significant trends are likely to emerge only after several years (5–10) of monitoring.

A preliminary report on the state of the world's pollinators would be prepared by 2004 based on existing data, and early results from elements 1 and 2. A first comprehensive report would be prepared by 2010, drawing upon, *inter alia*, the results of the monitoring programme, and the economic analyses.

ELEMENT 2: ADAPTIVE MANAGEMENT

Operational objective

To identify management practices, technologies and policies that promote the positive and mitigate the negative impacts of agriculture on pollinator diversity and activity, in order to enhance productivity and the capacity to sustain livelihoods, by expanding knowledge, understanding and awareness of the multiple goods and services provided by pollinators.

Rationale

In order to secure sustained pollinator services in agricultural and other ecosystems, far more understanding is needed of the multiple goods and services provided by pollinator diversity and the factors that influence their decline. In particular, it is necessary to identify the various interactions between dimensions of agricultural biodiversity at different spatial scales that support effective pollinator functioning. In addition, it is necessary to identify adaptive management practices that minimise negative impacts by humans on pollinators, promote the conservation and diversity of native pollinators, and conserve and restore natural areas necessary to optimise pollinator services in agricultural and other ecosystems.

Activities

2.1. Carry out a series of case-studies, in a range of environments and production systems, and in each region:

- (a) To identify key goods and services provided by pollinator diversity, the role of components of biological diversity in agricultural and other ecosystems in supporting such diversity, and threats to such diversity including, for example, use of pesticides, habitat change and the introduction of exotic pollinators;
- (b) To identify best management practices; and
- (c) To monitor and assess the actual and potential impacts of existing and new agricultural technologies.

This activity would address the multiple goods and services provided by pollinator diversity and the interaction between its various components, for example:

- (i) The impacts of introduction of pollinators;
- (ii) The impacts of alien invasive species on pollinators;
- (iii) The impacts of fragmentation and habitat loss on pollinators diversity, and the ecosystems that support them;
- (iv) The impact of pesticides on pollinators diversity and abundance, including pest control programmes;
- (v) Sustainable management of pollinators;
- (vi) Decline of Honeybees, other bees and other pollinators;
- (vii) The dynamics of pollinators diversity decline;
- (viii) The interactions between pollination and genetically-modified crops;
- (ix) Conservation and restoration of pollinators diversity;
- (x) Mainstreaming and stakeholder engagement;
- (xi) Economics of pollination.

2.2. Identify and promote the dissemination of information on cost-effective practices and technologies, and related policy and incentive measures that enhance the positive and mitigate the negative impacts of agriculture on pollinator diversity, productivity and capacity to sustain livelihoods, through:

- (a) Comprehensive analyses in selected production systems of the costs and benefits of alternative management practices and technologies on pollinator conservation and effectiveness, and the valuation of the goods and services provided by pollinator diversity including the pollination requirements and best pollinators of each crop species and the impact of pollinator presence/absence on fruit and seed yield;
- (b) Comprehensive analyses of the impacts of agricultural production, including their intensification and extensification, on the environment and identification of ways to mitigate negative and promote positive impacts;
- (c) Identification, at international and national levels, in close collaboration with relevant international organizations, of appropriate marketing and trade policies, legal and economic measures which may support beneficial practices. This may include certification practices, possibly within existing certification programmes, and the development of codes of conduct.

2.3. Promote methods of sustainable agriculture that employ management practices, technologies and policies that promote the positive and mitigate the negative impacts of agriculture on pollinator diversity. This could include, for example, the protection of natural habitats, within agricultural landscapes, as sources of wild pollinators for crop improvement; the development of guidelines for policy makers and farmers; and the development of model-testing protocols for the introduction of non-native pollinators and to assess impacts of agrochemicals and other technologies on pollinators and pollinator activities.

Ways and means

Case-studies will be carried out and provided by national institutions, civil-society organizations, and research institutes, with support from international organizations for catalysing preparation of studies, mobilizing funds, disseminating results, and facilitating feedback and lessons learned to case-study providers and policy makers. Inputs would be sought from all relevant stakeholders. A framework for the case-studies is provided by the indicative outline for case-studies on agricultural biological diversity <<http://www.biodiv.org/thematic/agro>>.

Timing of expected outputs

A first set of case-studies is already under preparation. Further case-studies would be studies published, analysed and disseminated by 2005. The case-studies should be representative of regional issues and prioritize best practices and lessons learned that can be broadly applied.

ELEMENT 3: CAPACITY-BUILDING

Operational objective

To strengthen the capacities of farmers, indigenous and local communities, and their organizations and other stakeholders, to manage pollinator diversity so as to increase its benefits, and to promote awareness and responsible action.

Rationale

The management of pollinator diversity involves many stakeholders and often implies transfers of costs and benefits between stakeholder groups. It is therefore essential that mechanisms be developed not only to consult stakeholder groups, but also to facilitate their genuine participation in decision-making and in the sharing of benefits. Farmer groups, and other producer organizations, can be instrumental in furthering the interests of farmers in optimizing sustainable, diversified, production systems and consequently in promoting responsible actions concerning the conservation and sustainable use of pollinator diversity.

One major area which needs addressing is the capacity of countries to address the taxonomic impediment, which derives from serious shortfalls in investment in training, research and collections management. It seriously limits our capability to assess and monitor pollinator decline globally, in order to conserve pollinator diversity and to manage it sustainably. The global taxonomic impediment is costly, especially when expressed in terms of those research initiatives in pollination and conservation ecology which are wholly dependent on access to sound bee taxonomy and are rendered wholly non-viable in its absence. There is also a global taxonomic deficit, that is, the unacceptably high numbers of bee genera for which identification keys are not available.

Activities

3.1. Promote awareness about the value of pollinator diversity and the multiple goods and services it provides for sustainable productivity, amongst producer organizations, agricultural cooperatives and enterprises, and consumers, with a view to promoting responsible practices.

3.2. Identify and promote possible improvements in the policy environment, including benefit-sharing arrangements and incentive measures, to support local-level management of pollinators and related dimensions of biodiversity in agricultural ecosystems. This could include consideration of how existing or new certification schemes might contribute to the conservation and sustainable use of pollinator diversity.

3.3. Promote enhanced capabilities to manage pollinator diversity at local level by promoting partnerships among and between farmers, researchers, extension workers and food processors, *inter alia*, through the establishment of local-level forums for farmers, and other stakeholders to evolve genuine partnerships, including training and education programmes.

3.4. Build taxonomic capacity to carry out inventories of the pollinator diversity and distribution in order to optimise their management, through, *inter alia*, the training of taxonomists and parataxonomists of bees and other pollinators.

3.5. Develop tools and mechanisms for the international and regional exchange of information for the conservation, restoration and sustainable use of pollinators. This may include:

- (a) Establishing an inventory of existing pollination and pollinators experts to serve as a pool for consultations in technology transfer, and establish an international advisory group on pollinator conservation.
- (b) Disseminating information on pollination in agricultural environments through databases, Websites, and networks. This may include the establishment of an international information network on pollinator conservation and promotion of networks of farmers and farmers' organizations at regional level for exchange of information and experiences.
- (c) Developing and updating global and national lists of threatened pollinator species, and produce multilingual manuals on pollinator conservation and restoration for farmers.

Ways and means

This element is to be implemented primarily through initiatives within countries, including through extension services, local government, educational and civil-society organizations, including farmer/producer and consumer organizations, and mechanisms emphasizing farmer-farmer exchange. There are opportunities for cooperation with the food processing industry in terms of supplying pesticide-free or low-residue products from agricultural systems that maintain pollinator diversity. Pilot projects for this element might be generated under the Initiative. Funding is likely to be on a project or programme basis. Catalytic support may need to be provided through national, regional and global programmes, organizations, facilities and funding mechanisms, in particular to support capacity-building, exchange and feedback of policy and market information, and of lessons learned from this and programme element 2, between local organizations and policy makers, nationally, regionally and globally.

The taxonomic elements would also be promoted through the Global Taxonomy Initiative.

Timing of expected outputs

Ten on-the-ground cases of enhanced partnerships resulting in greater conservation of pollinator diversity at the local level, by 2006. Introduction of mechanisms promoting pollinator diversity by 2010.

ELEMENT 4: MAINSTREAMING

Operational objective

To support the development of national plans or strategies for the conservation and sustainable use of pollinator diversity and to promote their mainstreaming and integration in sectoral and cross-sectoral plans and programmes.

Rationale

Many countries are now developing biodiversity strategies and action plans in the context of the Convention on Biological Diversity, and many also have a number of other policies, strategies and plans related to agriculture, the environment and national development. Decision V/5 of the Conference of Parties to the Convention on Biological Diversity seeks to promote the mainstreaming of agricultural biodiversity considerations into national strategies and action plans; to mainstream the action plans for components of agricultural biodiversity in sectoral development plans concerned with food, agriculture, forestry and fisheries, and to promote synergy and avoid duplication between the plans for the various components. Pollinator conservation and sustainable use is an important aspect of agricultural biodiversity and should be integrated into this mainstreaming process. In addition, this requires reliable and accessible information, but many countries do not have well developed information, communication or early-warning systems or the capacity to respond to identified threats.

Activities

4.1. Integrate considerations of pollinator diversity, and related dimensions of agricultural biodiversity, including host-plant diversity, at species, ecosystem and landscape levels, consistent with the ecosystem approach, into biodiversity strategies and action plans, and into planning processes in the agricultural sector.

4.2. Support the development or adaptation of relevant systems of information, early warning and communication to enable effective assessment of the state of pollinator diversity and threats to it, in support of national strategies and action plans, and of appropriate response mechanisms.

4.3. Strengthen national institutions to support taxonomy of bees and other pollinators, through, *inter alia*:

- (a) Assessing national taxonomic needs (this would contribute to activity 1.3);
- (b) Maintaining continuity of taxonomic and reference collections of bees and other pollinators;
- (c) Recognition of centres of excellence in bee taxonomy and establishment of centres of excellence as appropriate;
- (d) Repatriation of data through capacity-building and benefit-sharing.

4.4. Include considerations of pollinator diversity, and related dimensions of agricultural biodiversity, including host-plant diversity, at species, ecosystem and landscape levels, consistent with the ecosystem approach, in formal educational programmes at all levels. Integrate pollination issues as a component of sustainable management into agricultural, biological and environmental science courses and curricula and in primary and secondary schools by using local examples and relevant examples from other regions. Promote applied research on pollination in agricultural ecosystems through training of postgraduates.

Ways and means

Activities would be implemented primarily at national level through enhanced communication, coordination mechanisms and planning processes that involve all stakeholder groups, facilitated by international organizations, and by funding mechanisms.

Additional resources may be needed for national capacity-building.

The taxonomic elements would also be promoted through the Global Taxonomy Initiative.

Timing of expected outputs

Progressively increased capacity at national level for taxonomy, information management, assessment and communication.

Consideration of pollinators and related dimensions of agricultural biodiversity incorporated into national biodiversity and/or agricultural sector plans in 50 countries by 2010.

DECISION VI/6 | The International Treaty on Plant Genetic Resources for Food and Agriculture

The Conference of the Parties

1. *Congratulates* the Food and Agriculture Organization of the United Nations and its Commission on Genetic Resources for Food and Agriculture, where the International Treaty on Plant Genetic Resources for Food and Agriculture was negotiated, on successfully completing this important process;
2. *Recognizes* the important role that the International Treaty on Plant Genetic Resources for Food and Agriculture will have, in harmony with the Convention on Biological Diversity, for the conservation and sustainable utilization of this important component of agricultural biological diversity, for facilitated access to plant genetic resources for food and agriculture, and for the fair and equitable sharing of the benefits arising out of their utilization;
3. *Appeals to* Parties and other Governments to give priority consideration to the signature and ratification of the International Treaty on Plant Genetic Resources for Food and Agriculture, so that it may enter expeditiously into force;
4. *Decides to* establish and maintain cooperation with the Commission on Genetic Resources for Food and Agriculture acting as the Interim Committee for the International Treaty on Plant Genetic Resources for Food and Agriculture, and, upon the entry into force of the Treaty, with the Governing Body;
5. *Requests* the Executive Secretary to develop cooperation with the Secretariat of the Commission on Genetic Resources for Food and Agriculture acting as the Interim Committee for the International Treaty on Plant Genetic Resources for Food and Agriculture and, upon its establishment, with the Secretariat of the International Treaty on Plant Genetic Resources for Food and Agriculture;

6. *Requests* the Executive Secretary to convey the present decision to the Commission on Genetic Resources for Food and Agriculture acting as the Interim Committee for the International Treaty on Plant Genetic Resources for Food and Agriculture.

DECISION VI/7 | Identification, monitoring, indicators and assessments

A. Further development of guidelines for incorporating biodiversity-related issues into environmental-impact-assessment legislation or processes and in strategic impact assessment

The Conference of the Parties

1. *Endorses* the draft guidelines for incorporating biodiversity-related issues into environmental impact assessment legislation and/or processes and in strategic environmental assessment contained in the annex to the present decision;
2. *Urges* Parties, other Governments and organizations to apply the guidelines as appropriate in the context of their implementation of paragraph 1 of Article 14 of the Convention and share their experience, *inter alia*, through the clearing-house mechanism and national reporting;
3. *Requests* the Executive Secretary to compile and disseminate, through the clearing-house mechanism and other means of communication, current experiences in environmental impact assessment and strategic environmental assessment procedures that incorporate biodiversity-related issues, as well as experiences of Parties in applying the guidelines; in light of this information, to prepare, in collaboration with relevant organizations, in particular the International Association for Impact Assessment, proposals for further development and refinement of the guidelines, particularly to incorporate all stages of the environmental impact assessment and strategic environmental assessment processes taking into account the ecosystem approach (particularly principles 4, 7 and 8) and to provide a report of this work to the Subsidiary Body prior to the seventh meeting of the Conference of the Parties.

ANNEX

GUIDELINES FOR INCORPORATING BIODIVERSITY-RELATED ISSUES INTO ENVIRONMENTAL IMPACT ASSESSMENT LEGISLATION AND/OR PROCESS AND IN STRATEGIC ENVIRONMENTAL ASSESSMENT

1. For the purpose of these guidelines, the following definitions are used for environmental impact assessment and strategic environmental assessment:
 - (a) *Environmental impact assessment* is a process of evaluating the likely environmental impacts of a proposed project or development, taking into account inter-related socio-economic, cultural and human-health impacts, both beneficial and adverse. Although legislation and practice vary around the world, the fundamental components of an environmental impact assessment would necessarily involve the following stages:

- (ii) Screening to determine which projects or developments require a full or partial impact assessment study;
 - (iii) Scoping to identify which potential impacts are relevant to assess, and to derive terms of reference for the impact assessment;
 - (iv) Impact assessment to predict and identify the likely environmental impacts of a proposed project or development taking into account inter-related consequences of the project proposal, and the socio-economic impacts;
 - (iv) Identifying mitigation measures (including not proceeding with the development, finding alternative designs or sites which avoid the impacts, incorporating safeguards in the design of the project, or providing compensation for adverse impacts);
 - (v) Deciding whether to approve the project or not; and
 - (vi) Monitoring and evaluating the development activities, predicted impacts and proposed mitigation measures to ensure that unpredicted impacts or failed mitigation measures are identified and addressed in a timely fashion;
- (b) *Strategic environmental assessment* is the formalized, systematic and comprehensive process of identifying and evaluating the environmental consequences of proposed policies, plans or programmes to ensure that they are fully included and appropriately addressed at the earliest possible stage of decision-making on a par with economic and social considerations.⁹⁴ Strategic environmental assessment, by its nature, covers a wider range of activities or a wider area and often over a longer time span than the environmental impact assessment of projects. Strategic environmental assessment might be applied to an entire sector (such as a national policy on energy for example) or to a geographical area, (for example, in the context of a regional development scheme). The basic steps of strategic environmental assessment are similar to the steps in environmental impact assessment procedures,⁹⁵ but the scope differs. Strategic environmental assessment does not replace or reduce the need for project-level environmental impact assessment, but it can help to streamline the incorporation of environmental concerns (including biodiversity) into the decision-making process, often making project-level environmental impact assessment a more effective process.

1. Purpose and approach

2. The objective of these draft guidelines is to provide general advice on incorporation of biodiversity considerations into new or existing environmental impact assessment procedures, noting that existing procedures take biodiversity into consideration in different ways. A draft framework has been developed to address the screening and scoping phases of environmental impact assessment. Further development of the framework will be required to address the incorporation of biodiversity into subsequent stages of the environmental impact assessment process,

94 Based on Sadler and Verheem, 1996.

95 Saddler and Verheem, 1996; South Africa, 2000; Nierynck, 1997; Nooteboom, 1999.

including impact assessment, mitigation, evaluation and monitoring, and into strategic environmental assessment.

3. Individual countries may redefine the steps in the procedure to their needs and requirements as befits their institutional and legal setting. The environmental impact assessment process, in order to be effective, should be fully incorporated into existing legal planning processes and not be seen as an “add-on” process.

4. As a prerequisite, the definition of the term “environment” in national legislation and procedures should fully incorporate the concept of biological diversity as defined by the Convention on Biological Diversity, such that plants, animals and micro-organisms are considered at the genetic, species/community and ecosystem/habitat levels, and also in terms of ecosystem structure and function.

5. With regard to biodiversity considerations, the ecosystem approach, as described in decision V/6 of the Conference of the Parties and taking into account any further elaboration of the concept within the framework of the Convention, is an appropriate framework for the assessment of planned action and policies. In accordance with the approach, the proper temporal and spatial scales of the problems should be determined as well as the functions of biodiversity and their tangible and intangible values for humans that could be affected by the proposed project or policy, the type of adaptive mitigation measures and the need for the participation of stakeholders in decision-making.

6. Environmental impact assessment procedures should refer to other relevant national, regional and international legislation, regulations, guidelines and other policy documents such as the national biodiversity strategy and action plan documents, the Convention on Biological Diversity and biodiversity-related conventions and agreements including, in particular, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the Convention on the Conservation of Migratory Species of Wild Animals and the related agreements, the Convention on Wetlands (Ramsar, Iran, 1971), the Convention on Environmental Impact Assessment in a Transboundary Context; the United Nations Convention on the Law of the Sea; the European Union directives on environmental impact assessment, and the Protocol for the Protection of the Mediterranean Sea against Pollution from Land-based Sources.

7. Consideration should be given to improving integration of national biodiversity strategy and action plans and national development strategies using strategic environmental assessment as a tool for such integration to promote the establishment of clear conservation targets through the national biodiversity strategy and action plan process and the use of those targets for the screening and scoping targets of environmental impact assessment and for developing mitigation measures.

2. Biodiversity issues at different stages of environmental impact assessment

A. SCREENING

8. Screening is used to determine which proposals should be subject to impact assessment, to exclude those unlikely to have harmful environmental impacts and to indicate the level of environmental appraisal required. If screening criteria do not include biodiversity measures, there is a risk that proposals with potentially significant impacts on biodiversity will be screened out.

9. Since a legal requirement for environmental impact assessment on environmental grounds does not guarantee that biological diversity will be taken into account, consideration should be given to incorporating biodiversity criteria into existing or new screening criteria.

10. Types of existing screening mechanisms include:

- (a) Positive lists identifying projects requiring environmental impact assessment. A few countries use (or have used) negative lists, identifying those projects not subject to environmental impact assessment. These lists should be reassessed to evaluate their inclusion of biodiversity aspects;
- (b) Expert judgement (with or without a limited study, sometimes referred to as “initial environmental examination” or “preliminary environmental assessment”); and
- (c) A combination of a positive list and expert judgement; for a number of activities an environmental impact assessment is more appropriate, for others an expert judgement may be desirable to determine the need for an environmental impact assessment.

11. The result of screening can be that:

- (a) An environmental impact assessment is required;
- (b)
 - (i) A limited environmental study is sufficient because only limited environmental impacts are expected; the screening decision is based on a set of criteria with quantitative norms or threshold values;
 - (ii) There is still uncertainty whether an environmental impact assessment is required and an initial environmental examination has to be conducted to determine whether a project requires environmental impact assessment or not, and
- (c) The project does not require an environmental impact assessment.

12. How to use these guidelines for screening:

- (a) Countries with a positive list identifying projects requiring environmental impact assessment should use, as appropriate, appendices I and II below for guidance on reconsidering their existing positive list with respect to biological diversity considerations. By assessing the possible impacts of categories of activities on biological diversity the existing list can be adjusted, if required;

- (b) In countries where screening is based on expert judgement, experience has shown that professionals make screening decisions, often using “mini environmental impact assessment” to come to this decision. These guidelines, its appendices and other guidelines help provide these professionals with the means to come to a motivated, transparent and consistent screening decision. Furthermore, the expert teams should include professionals with biodiversity expertise;
- (c) In countries where screening is based on a combination of a positive list and expert judgement, country-specific thematic or sector guidelines, often including quantitative norms or thresholds, facilitate the responsible people to make a well-founded and defensible decision. For biodiversity, thematic guidelines could be developed,⁹⁶ sector guidelines need to be reviewed on biodiversity considerations.

The screening criteria

13. Screening criteria may relate to: (i) categories of activities, including thresholds referring to magnitude of the activity and/or size of the intervention area, duration and frequency or to (ii) a magnitude of biophysical change that is caused by the activity, or to (iii) maps indicating areas important for biodiversity with special legal status or of high biodiversity value and endemism, species patterns, breeding sites, or areas with species of high genetic value.

14. Determining norms or threshold values is partly a technical and partly a political process of which the outcome may vary for countries and for ecosystems. The technical process should at least provide a description of:

- (a) Categories of activities that may affect biological diversity and the direct and indirect biophysical changes likely to result from these activities, taking into account characteristics such as: type or nature of activity, magnitude, extent/location, timing, duration, reversibility/irreversibility, likelihood, and significance; possibility of interaction with other activities or impacts;
- (b) Area of influence. Knowing the biophysical changes that result from an activity, the expected area of influence of these changes can be modelled or predicted, including the probability of off-site effects;
- (c) Biodiversity maps indicating ecosystems and/or land-use types and their use and non-use values (showing the use and non-use values of biodiversity).

15. The process of developing a national biodiversity strategy and action plan can generate valuable information such as conservation priorities and targets which can guide further development of environmental impact assessment screening criteria.⁹⁷ Appendix 2 below presents a generic list of criteria, intended to be a practical reference for further in-country development of criteria.

Pertinent questions for screening

16. Considering the objectives of the Convention on Biological Diversity, i.e., in particular, conservation, sustainable use and equitable sharing of benefits derived

⁹⁶ Some concrete targets in the draft global strategy for plant conservation (see item 17.3 below).

⁹⁷ Summarized in the IAIA information document by Treweek, 2001, box 2.

from biological diversity, fundamental questions need to be answered in an environment impact assessment study:

- (a) Does the intended activity affect the physical environment in such a manner or cause such biological losses that it influences the chance of extinction of cultivars, varieties, populations of species, or the chance of loss of habitats or ecosystems?
- (b) Does the intended activity surpass the maximal sustainable yield, the carrying capacity of a habitat/ecosystem or the maximum and minimum⁹⁸ allowable disturbance level of a resource, population, or ecosystem?
- (c) Does the intended activity result in changes to the access to and rights over biological resources?

17. To facilitate the development of criteria, the questions above have been reformulated for the three levels of diversity, reproduced in appendix 1 below.

B. SCOPING

18. Scoping narrows the focus of the broad issues found to be significant during the screening stage. It is used to derive terms of reference (sometimes referred to as guidelines) for environmental impact assessment. Scoping also enables the competent authority (or environmental impact assessment professionals in countries where scoping is voluntary):

- (a) To guide study teams on significant issues and alternatives to be assessed, clarify how they should be examined (methods of prediction and analysis, depth of analysis), and according to which guidelines and criteria;
- (b) To provide an opportunity for stakeholders to have their interests taken into account in the environmental impact assessment;
- (c) To ensure that the resulting environmental impact statement is useful to the decision maker and is understandable to the public.

19. During the scoping phase, promising alternatives can be identified for in-depth consideration during the environmental impact assessment study.

20. The following sequence provides an example of iterative mechanism for scoping, impact assessment and consideration of mitigation measures, which should be carried out with the help of existing information and the available knowledge among stakeholders:

- (a) Describe the type of project, its nature, magnitude, location, timing, duration and frequency;
- (b) Describe the expected biophysical changes in soil, water, air, flora and fauna;
- (c) Describe biophysical changes that result from social change processes as a result of the proposed project;
- (d) Determine the spatial and temporal scale of influence of each biophysical change;

⁹⁸ For example, fire can be too frequent and too infrequent to sustain the integrity/health of a given ecosystem.

- (e) Describe ecosystems and land-use types potentially influenced by the biophysical changes identified;
- (f) Determine for each ecosystem or land-use type if the biophysical changes affect one of the following components of biological diversity: the composition (what is there), the temporal/spatial structure (how are biodiversity components organized in time and space), or key processes (how is biodiversity created and/or maintained);
- (g) Identify in consultation with stakeholders the current and potential use-functions, non-use functions and other longer-term less tangible benefits of biological diversity provided by the ecosystems or land-use types and determine the values these functions represent for society (see appendix 3 for an indicative list of functions);
- (h) Determine which of these functions will be significantly affected by the proposed project, taking into account mitigation measures;
- (i) For each alternative, define mitigation and/or compensation measures to avoid, minimize or compensate the expected impacts;
- (j) With the help of the biodiversity checklist on scoping (see appendix 4 below), determine which issues will provide information relevant to decision making and can realistically be studied;
- (k) Provide information on the severity of impacts, i.e. apply weights to the expected impacts for the alternatives considered. Weigh expected impacts to a reference situation (baseline), which may be the existing situation, a historical situation, or an external reference situation;
- (l) Identify necessary surveys to gather comprehensive information about the biological diversity in the affected area where appropriate.

21. The expected impacts of the proposed activity, including identified alternatives, should be compared with the selected reference situation and with the autonomous development (what will happen with biodiversity over time if the project is not implemented). There should be awareness that doing nothing may in some cases also have significant effects on biological diversity, sometimes even worse than the impacts of the proposed activity (e.g. projects counteracting degradation processes).

22. At present, evaluation criteria for biological diversity, especially at ecosystem level, are under-developed and need serious attention when developing in-country mechanisms to incorporate biodiversity in environmental impact assessment.

C. IMPACT ANALYSIS AND ASSESSMENT

23. Environmental impact assessment should be an iterative process of assessing impacts, redesigning alternatives and comparison. The main tasks of impact analysis and assessment are:

- (a) Refinement of the understanding of the nature of the potential impacts identified during screening and scoping and described in the terms of reference. This includes the identification of indirect and cumulative impacts, and of the likely

causes of the impacts (impact analysis and assessment). Identification and description of relevant criteria for decision-making can be an essential element of this period;

- (b) Review and redesign of alternatives; consideration of mitigation measures; planning of impact management; evaluation of impacts; and comparison of the alternatives; and
- (c) Reporting of study results in an environmental impact statement.

24. Assessing impacts usually involves a detailed analysis of their nature, magnitude, extent and effect, and a judgement of their significance, i.e., whether the impacts are acceptable to stakeholders, require mitigation, or are just unacceptable. Biodiversity information available is usually limited and descriptive and cannot be used as a basis for numerical predictions. There is a need to develop or compile biodiversity criteria for impact evaluation and to have measurable standards or objectives against which the significance of individual impacts can be evaluated. The priorities and targets set in the national biodiversity action plan and strategy process can provide guidance for developing these criteria. Tools will need to be developed to deal with uncertainty, including criteria on using risk assessment techniques, precautionary approach and adaptive management.

D. CONSIDERATION OF MITIGATION MEASURES

25. If the evaluation process concludes that the impacts are significant, the next stage in the process is to propose mitigation ideally drawn together into an “environmental management plan.” The purpose of mitigation in environmental impact assessment is to look for better ways to implement project activities so that negative impacts of the activities are avoided or reduced to acceptable levels and the environmental benefits are enhanced, and to make sure that the public or individuals do not bear costs which are greater than the benefits which accrue to them. Remedial action can take several forms, i.e. avoidance (or prevention), mitigation (including restoration and rehabilitation of sites), and compensation (often associated with residual impacts after prevention and mitigation).

E. REPORTING: THE ENVIRONMENTAL IMPACT STATEMENT (EIS)

26. The environmental impact statement is designed to assist: (i) the proponent to plan, design and implement the proposal in a way that eliminates or minimizes the negative effect on the biophysical and socio-economic environments and maximizes the benefits to all parties in the most cost effective manner; (ii) the Government or responsible authority to decide whether a proposal should be approved and the terms and conditions that should be applied; and (iii) the public to understand the proposal and its impacts on the community and environment and provide an opportunity for comments on the proposed action for consideration by decision makers. Some adverse impacts may be wide ranging and have effects beyond the limits of particular habitats/ecosystems or national boundaries. Therefore, environmental management plans and strategies contained in the environmental impact statement should consider regional and transboundary impacts, taking into account the ecosystem approach.

F. REVIEW

27. The purpose of review of the environmental impact statement is to ensure that the information for decision makers is sufficient, focused on the key issues, scientifically and technically accurate, and if the likely impacts are acceptable from an environmental viewpoint and the design complies with relevant standards and policies, or standards of good practice where official standards do not exist. The review should also consider whether all of the relevant impacts of a proposed activity have been identified and adequately addressed in the environmental impact assessment. To this end, biodiversity specialists should be called upon for the review and information on official standards and/or standards for good practice to be compiled and disseminated.

28. Public involvement, including minority groups, is important in various stages of the process and particularly at this stage. The concerns and comments of all stakeholders are considered and included in the final report presented to decision makers. The process establishes local ownership of the proposal and promotes a better understanding of relevant issues and concerns.

29. Review should also guarantee that the information provided in the environmental impact statement is sufficient for a decision maker to determine whether the project is compliant with or contradictory to the objectives of the Convention on Biological Diversity.

G. DECISION-MAKING

30. Decision-making takes place throughout the process of environmental impact assessment in an incremental way from the screening and scoping stages to decisions during data-collecting and analysis, and impact prediction to making choices between alternatives and mitigation measures and finally the decision between refusal or authorization of the project. Biodiversity issues should play a part in decision-making throughout. This final decision is essentially a political choice about whether or not the proposal is to proceed, and under what conditions. If rejected, the project can be redesigned and resubmitted. It is desirable that the proponent and the decision-making body are two different entities.

31. The precautionary approach should be applied in decision-making in cases of scientific uncertainty about risk of significant harm to biodiversity. As scientific certainty improves, decisions can be modified accordingly.

H. MONITORING AND ENVIRONMENTAL AUDITING

32. Monitoring and auditing are used to see what actually occurs after project implementation has started. Predicted impacts on biodiversity should be monitored, as should the effectiveness of mitigation measures proposed in the environmental impact assessment. Proper environmental management should ensure that anticipated impacts are maintained within predicted levels, and unanticipated impacts are managed before they become a problem and the expected benefits (or positive developments) are achieved as the project proceeds. The results of monitoring provide information for periodic review and alteration of environmental management

plans, and for optimizing environmental protection through good practice at all stages of the project. Biodiversity data generated by environmental impact assessment should be made accessible and useable by others and should be linked to biodiversity assessment processes being designed and carried out under the Convention on Biological Diversity.

33. An environmental audit is an independent examination and assessment of a project's (past) performance, is part of the evaluation of the environmental management plan and contributes to the enforcement of EIA approval decisions.

3. Incorporation of biodiversity considerations in strategic environmental assessments

34. The guidelines proposed for the integration of biodiversity in environmental impact assessment are also applicable to strategic environmental assessment, taking into account that for the latter type of assessment, biological diversity concerns should be considered from the early stages of the drafting process, including when developing new legislative and regulatory frameworks (decision V/18, paragraphs 1(c) and 2(a)), and at the decision-making and/or environmental planning levels (decision V/18, para. 2(a)), and that strategic environmental assessments by their nature cover policies and programmes, a wider range of activities over a wider area.

35. Strategic environmental assessment, while not a new process, is not practised as widely as environmental impact assessment. As experience accumulates in countries, it may then be necessary to draw more specific guidelines for the incorporation of biodiversity in the process.

4. Ways and means

A. CAPACITY-BUILDING

36. Any activity aimed at the incorporation of biodiversity considerations into national environmental impact assessment systems should be accompanied by appropriate capacity development activities. Expertise in taxonomy,⁹⁹ conservation biology, ecology, and traditional knowledge is required as well as local expertise in methodologies, techniques and procedures. Environmental impact assessments should involve ecologists with extensive knowledge on the relevant ecosystem(s) in the assessment team.

37. It is also recommended to develop training workshops on biodiversity and environmental impact/strategic environmental assessment for both assessment practitioners and biodiversity specialists to build a common understanding of the issues. School and university curricula should be reviewed to ensure that they incorporate material on biodiversity conservation, sustainable development and environmental impact/strategic environmental assessment.

38. Biodiversity-relevant data should be organized in regularly updated and accessible databases, making use of rosters of biodiversity experts.

99 See the Global Taxonomy Initiative and the programme of work (decision VI/8).

B. LEGISLATIVE AUTHORITY

39. If environmental impact assessment and strategic environmental assessment procedures are incorporated into legislation, and the requirements for project/policy developers to find the most environmentally sound, efficient options that avoid, reduce or mitigate biodiversity and other adverse impacts are made explicit, this will prompt developers to, at a very early stage, use environmental impact assessment tools to improve the development process prior to the project consent stage or in some cases prior to screening procedures.

C. PARTICIPATION

40. Relevant stakeholders or their representatives, and in particular indigenous and local communities should be involved in the development of guidelines or recommendations for environmental impact assessments as well as throughout the assessment processes relevant to them, including decision-making.

D. INCENTIVES

41. The possible link between impact assessment and incentive measures is pointed out in decision III/18 of the Conference of the Parties, on incentive measures. In paragraph 6 of that decision, the Conference of the Parties encouraged Parties to incorporate biological diversity considerations into impact assessments as a step in the design and implementation of incentive measures. The endorsement of the impact assessment process and its implementation within a legislative framework can act as an incentive, especially if applied at the policy level, to protect and, in certain cases even restore and rehabilitate biological diversity.⁹ Financial or other incentives can also be part of a negotiated approval package for a project.

E. COOPERATION

42. Regional collaboration is of particular importance, including for the development of criteria and indicators for the evaluation of impact and possibly criteria and indicators that can provide early warning of potential threats and adequately distinguish the effects of anthropogenic activities from natural processes, and the use of standardized methods of collection, assembly and exchange of information is needed to ensure regional compatibility and accessibility of data. Guidelines and sharing of information and experiences should be made available through, *inter alia*, the Convention's clearing-house mechanism.

43. As a follow-up to the implementation of decision IV/10 C of the Conference of the Parties, collaboration between the Convention on Biological Diversity and other biodiversity-related conventions, including in particular the Ramsar Convention and the Convention on Migratory Species, which have listed sites and binding agreements on certain species, and other relevant organizations and bodies will facilitate the development and implementation of any guidelines agreed upon for the integration of biodiversity-related issues in environmental impact assessment and strategic environmental assessment. Such a collaborative approach, also

100 UNEP/CBD/COP/4/20 and UNEP/CBD/SBSTTA/4/10.

embodied in resolution VII.16 of the Conference of the Parties to the Ramsar Convention (“The Ramsar Convention and impact assessment: strategic, environmental and social”), could lead to the development of an umbrella set of guidelines on impact assessment for biodiversity-related conventions.

44. Web-based resources such as the clearing-house mechanism of the Convention on Biological Diversity may help to raise awareness about best available methods and useful sources of information and experience, and should be developed and used for the provision and exchange of information on environmental impact assessment.

45. Communication between practitioners of environmental impact assessment and scientists working in the biodiversity domain is in urgent need of improvement and should be enhanced through workshops and case-study assessments.¹⁰¹

Appendix 1

Questions pertinent to screening on biological diversity impacts

Level of Diversity	Biological diversity perspective	
	CONSERVATION OF BIOLOGICAL DIVERSITY (NON-USE VALUES)	SUSTAINABLE USE OF BIODIVERSITY (USE VALUES)
GENETIC DIVERSITY ¹	(I) Does the intended activity cause a local loss of varieties/cultivars/breeds of cultivated plants and/or domesticated animals and their relatives, genes or genomes of social, scientific and economic importance?	
SPECIES DIVERSITY ²	(II) Does the intended activity cause a direct or indirect loss of a population of a species?	(III) Does the intended activity affect the sustainable use of a population of a species?
ECOSYSTEM DIVERSITY ²	(IV) Does the intended activity lead to serious damage or total loss of (an) ecosystem(s) or land-use type(s), thus leading to a loss of ecosystem diversity (i.e., the loss of indirect use values and non-use values)?	(V) Does the intended activity affect the sustainable exploitation of (an) ecosystem(s) or land-use type(s) by humans in such manner that the exploitation becomes destructive or non-sustainable (i.e., the loss of direct use values)?

(1) THE POTENTIAL LOSS OF NATURAL GENETIC DIVERSITY (GENETIC EROSION) IS EXTREMELY DIFFICULT TO DETERMINE, AND DOES NOT PROVIDE ANY PRACTICAL CLUES FOR FORMAL SCREENING. THE ISSUE PROBABLY ONLY COMES UP WHEN DEALING WITH HIGHLY THREATENED, LEGALLY PROTECTED SPECIES WHICH ARE LIMITED IN NUMBERS AND/OR HAVE HIGHLY SEPARATED POPULATIONS (RHINOCEROS, TIGERS, WHALES, ETC.), OR WHEN COMPLETE ECOSYSTEMS BECOME SEPARATED AND THE RISK OF GENETIC EROSION APPLIES TO MANY SPECIES (THE REASON TO CONSTRUCT SO-CALLED ECO-DUCTS ACROSS MAJOR LINE INFRA-STRUCTURE). THESE ISSUES ARE DEALT WITH AT SPECIES OR ECOSYSTEM LEVEL.

(2) SPECIES DIVERSITY: THE LEVEL AT WHICH “POPULATION” IS TO BE DEFINED FULLY DEPENDS ON THE SCREENING CRITERIA USED BY A COUNTRY. FOR EXAMPLE, IN THE PROCESS OF OBTAINING A SPECIAL STATUS, THE CONSERVATION STATUS OF SPECIES CAN BE ASSESSED WITHIN THE BOUNDARIES OF A COUNTRY (FOR LEGAL PROTECTION), OR CAN BE ASSESSED GLOBALLY (IUCN RED LISTS). SIMILARLY, THE SCALE AT WHICH ECOSYSTEMS ARE DEFINED DEPENDS ON THE DEFINITION OF CRITERIA IN A COUNTRY.

101 See UNEP/CBD/COP/5/INF/34.

Appendix 2

THE SCREENING CRITERIA

This is a suggested outline of a set of screening criteria, to be elaborated on country level. It only deals with biodiversity criteria and thus is an add-on to already existing screening criteria.

CATEGORY A: *Environmental impact assessment mandatory*:

Only in the case criteria can be based on formal legal backing, such as:

- National legislation, for example in case of impact on protected species and protected areas;
- International conventions such as CITES, the Convention on Biological Diversity, Ramsar Convention on Wetlands, etc.;
- Directives from supranational bodies, such as the European Union directive 92/43/EEC of 21 May 1992 on conservation of natural habitats and of wild fauna and flora and directive 79/409/EEC on the conservation of wild birds.

Indicative list of activities for which an environmental impact assessment could be mandatory:

(a) *At the genetic level* (relates to screening question I in appendix 1 above):

- Directly or indirectly cause a local loss of legally protected varieties/cultivars/breeds of cultivated plants and/or domesticated animals and their relatives, genes or genomes of social, scientific and economic importance e.g., by introducing living modified organisms that can transfer transgenes to legally protected varieties/cultivars/breeds of cultivated plants and/or domesticated animals and their relatives.

(b) *At species level* (relates to screening question II and III in appendix 1 above):

- Directly affect legally protected species, for example by extractive, polluting or other disturbing activities;
- Indirectly affect legally protected species, for example by reducing its habitat, altering its habitat in such a manner that its survival is threatened, introducing predators, competitors or parasites of protected species, alien species or GMOs;
- Directly or indirectly affect all of the above for cases which are important in respect of e.g., stop-over areas for migratory birds, breeding grounds of migratory fish, commercial trade in species protected by CITES;
- Directly or indirectly affect non-legally protected, threatened species.

(c) *At ecosystem level* (screening questions IV and V in appendix 1 above):

- Are located in legally protected areas;
- Are located in the vicinity of legally protected areas;
- Have direct influence on legally protected areas, for example by emissions into the area, diversion of surface water that flows through the area, extraction of groundwater in a shared aquifer, disturbance by noise or lights, pollution through air.

CATEGORY B: *The need for, or the level of environmental impact assessment, is to be determined:*

In cases where there is no legal basis to require an environmental impact assessment, but one can suspect that the proposed activity may have a significant impact on biological diversity, or that a limited study is needed to solve uncertainties or design limited mitigation measures. This category covers the frequently referred to but difficult to use concept of “sensitive areas.” As long as so-called sensitive areas do not have any legal protected status it is difficult to use the concept in practice, so a more practical alternative is provided.

The following categories of criteria point towards possible impacts on biological diversity, and further attention is thus required:

- (a) *Activities in, or in the vicinity of, or with influence on areas with legal status having a probable link to biological diversity but not legally protecting biological diversity (relates to all five screening questions in appendix 1 above).* For example: a Ramsar site has the official recognition of having internationally important wetland values, but this recognition does not automatically imply legal protection of biological diversity in these wetlands). Other examples include areas allocated to indigenous and local communities, extractive reserves, landscape preservation areas, sites covered by international treaties or conventions for preservation of natural and/or cultural heritage such as the UNESCO biosphere reserves and World Heritage Sites;
- (b) *Impacts on biological diversity possible or likely, but the environmental impact assessment is not necessarily triggered by law:*
 - (i) *At the genetic level:*
 - Replacing agricultural, forestry or fishery varieties or breeds by new varieties, including the introduction of living modified organisms (LMOs) (*screening questions I and II*).
 - (ii) *At the species level:*
 - All introductions of non-indigenous species (*questions II and III*);
 - All activities which directly or indirectly affect sensitive or threatened species if or in case these species are not yet protected (good reference for threatened species is provided by the IUCN Red Lists); sensitive species may be endemic, umbrella species, species at the edge of their range, or with restricted distributions, rapidly declining species (*question II*). Particular attention should be given to species which are important in local livelihoods and cultures;
 - All extractive activities related to the direct exploitation of species (fisheries, forestry, hunting, collecting of plants (including living botanical and zoological resources, etc.) (*question III*);
 - All activities leading to reproductive isolation of populations of species (such as line infrastructure) (*question II*).

(iii) *At the ecosystem level:*

- All extractive activities related to the use of resources on which biological diversity depends (exploitation of surface and ground-water, open pit mining of soil components such as clay, sand, gravel, etc.) (*questions IV and V*);
- All activities involving the clearing or flooding of land (*questions IV and V*);
- All activities leading to pollution of the environment (*questions IV and V*);
- Activities leading to the displacement of people (*questions IV and V*);
- All activities leading to reproductive isolation of ecosystems (*question IV*);
- All activities that significantly affect ecosystem functions that represent values for society (see appendix 3 below for a list of functions provided by nature). Some of these functions depend on relatively neglected taxa;
- All activities in areas of known importance for biological diversity (*questions IV and V*), such as areas containing high diversity (hot spots), large numbers of endemic or threatened species, or wilderness; required by migratory species; of social, economic, cultural or scientific importance; or which are representative, unique (e.g. where rare or sensitive species occur) or associated with key evolutionary or other biological processes.

CATEGORY C: *No environmental impact assessment required:*

Activities which are not covered by one of the categories A or B, or are designated as category C after initial environmental examination.

The generic nature of these guidelines does not allow for the positive identification of types of activities or areas where environmental impact assessment from a biodiversity perspective is not needed. At country level, however, it will be possible to indicate geographical areas where biological diversity considerations do not play a role of importance and, conversely, areas where they do play an important role (biodiversity-sensitive areas).

Appendix 3

Indicative list (non-exhaustive) of examples of functions of the natural environment that are directly (flora and fauna) or indirectly (services provided by ecosystems such as water supply) derived from biological diversity.

PRODUCTION FUNCTIONS

Natural production

- Timber production
- Firewood production
- Production of harvestable grasses (construction and artisanal use)
- Naturally produced fodder & manure
- Harvestable peat
- Secondary (minor) products
- Harvestable bush meat (food)
- Fish and shellfish productivity
- Drinking water supply
- Supply of water for irrigation and industry
- Water supply for hydroelectricity
- Supply of surface water for other landscapes
- Supply of ground water for other landscapes

Nature-based human production

- Crop productivity
- Tree plantations productivity
- Managed forest productivity
- Rangeland/livestock productivity
- Aquaculture productivity (freshwater)
- Mariculture productivity (brackish/saltwater)

CARRYING FUNCTIONS

- Suitability for constructions
- Suitability for indigenous settlement
- Suitability for rural settlement
- Suitability for urban settlement
- Suitability for industry
- Suitability for infrastructure
- Suitability for transport infrastructure
- Suitability for shipping/navigation
- Suitability for road transport
- Suitability for rail transport
- Suitability for air transport
- Suitability for power distribution
- Suitability for use of pipelines

- Suitability for leisure and tourism activities
- Suitability for nature conservation

PROCESSING AND REGULATION FUNCTIONS

Land-based processing and regulation functions

- Decomposition of organic material (land based)
- Natural desalinization of soils
- Development/prevention of acid sulphate soils
- Biological control mechanisms
- Seasonal cleansing of soils
- Soil water storage capacity
- Coastal protection against floods
- Coastal stabilization (against accretion/erosion)
- Soil protection

Water related processing and regulation functions

- Water filtering function
- Dilution of pollutants function
- Discharge of pollutants function
- Flushing/cleansing function
- Bio-chemical/physical purification of water
- Storage for pollutants function
- Flow regulation for flood control
- River base flow regulation
- Water storage capacity
- Ground water recharge capacity
- Regulation of water balance
- Sedimentation/retention capacity
- Protection against water erosion
- Protection against wave action
- Prevention of saline groundwater intrusion
- Prevention of saline surface-water intrusion
- Transmission of diseases

AIR-RELATED PROCESSING AND
REGULATION FUNCTIONS

- Filtering of air
- Carry off by air to other areas
- Photo-chemical air processing (smog)
- Wind breaks
- Transmission of diseases
- Carbon sequestration

BIODIVERSITY-RELATED REGULATION
FUNCTIONS

- Maintenance of genetic, species and ecosystem composition

- Maintenance of horizontal and vertical spatial structure, and of temporal structure
- Maintenance of key processes for structuring or maintaining biological diversity
- Maintenance of pollinator services

SIGNIFICATION FUNCTIONS

- Cultural/religious/scientific/landscape functions

Appendix 4

Biodiversity checklist on scoping for the identification of the impacts of proposed projects on components of biodiversity (Not exhaustive).

Levels of Diversity	Biological diversity perspective			
	COMPOSITION	STRUCTURE (TEMPORAL)	STRUCTURE (SPATIAL: HORIZONTAL AND VERTICAL)	KEY PROCESSES
GENETIC DIVERSITY	<ul style="list-style-type: none"> Minimal viable population (avoid destruction by inbreeding/gene erosion). Local cultivars. Living modified organisms. 	<ul style="list-style-type: none"> Cycles with high and low genetic diversity within a population. 	<ul style="list-style-type: none"> Dispersal of natural genetic variability. Dispersal of agricultural cultivars. 	<ul style="list-style-type: none"> Exchange of genetic material between populations (gene flow). Mutagenic influences. Intraspecific competition.
SPECIES DIVERSITY	<ul style="list-style-type: none"> Species composition, genera, families etc., rarity/abundance, endemism/exotics. Population size and trends. Known key species (essential role). Conservation status. 	<ul style="list-style-type: none"> Seasonal, lunar, tidal, diurnal rhythms (migration, breeding, flowering, leaf development, etc). Reproductive rate, fertility, mortality, growth rate. Reproductive strategy. 	<ul style="list-style-type: none"> Minimal areas for species to survive. Essential areas (stepping stones) for migrating species. Niche requirements within ecosystem (substrate preference, layer within ecosystem) Relative or absolute isolation. 	<ul style="list-style-type: none"> Regulation mechanisms such as predation, herbivory, parasitism. Interactions between species. Ecological function of a species.
ECOSYSTEM DIVERSITY	<ul style="list-style-type: none"> Types and surface area of ecosystems. niqueness/abundance. Succession stage, existing disturbances and trends (=autonomous development). 	<ul style="list-style-type: none"> Adaptations to/dependency on regular rhythms: seasonal. Adaptations to/dependency on irregular events: droughts, floods, frost, fire, wind. Succession (rate). 	<ul style="list-style-type: none"> Spatial relations between landscape elements (local and remote). Spatial distribution (continuous or discontinuous/ patchy). Minimal area for ecosystem to survive. Vertical structure (layered, horizons, stratified). 	<ul style="list-style-type: none"> Structuring process(es) of key importance for the maintenance of the ecosystem itself or for other ecosystems.

B. DESIGNING NATIONAL-LEVEL MONITORING PROGRAMMES AND INDICATORS

The Conference of the Parties

1. *Requests* the Executive Secretary to report on the development and use of indicators in all the thematic areas and cross cutting issues to the Subsidiary Body on Scientific, Technical and Technological Advice prior to the seventh meeting of the Conference of the Parties;
2. *Urges* Parties that have yet not done so to respond to the questionnaire on the subject of indicators that was sent by the Executive Secretary in May 2001 so as to enable the Executive Secretary to update the analysis;
3. *Requests* the Executive Secretary to convene a meeting of an expert group that is broadly representative of experts from both United Nations and biogeographical regions. The group should further develop the three annexes to the note of the Executive Secretary on ongoing work on indicators¹⁰² on:
 - (a) Principles for developing national-level monitoring and indicators;
 - (b) A set of standard questions for developing national-level indicators; and
 - (c) A list of available and potential indicators based on a conceptual framework that has qualitative and quantitative approach;
4. *Requests* the Executive Secretary to report to a meeting of the Subsidiary Body on Scientific, Technical and Technological Advice prior to the seventh meeting of the Conference of Parties. In doing so, the Executive Secretary should take into account the specific comments of delegates in the seventh meeting of the Subsidiary Body on Scientific, Technical and Technological Advice and the following guidance:
 - (a) Give particular attention to the note by the Executive Secretary on recommendations for a core set of indicators on biological diversity prepared for the third meeting of the Subsidiary Body¹⁰³ and background paper prepared for the same meeting by the liaison group on indicators of biological diversity¹⁰⁴ and subsequent related papers;
 - (b) Consider development and segregation of the key questions contained in annex II to the note by the Executive Secretary on ongoing work on indicators¹⁰² according to the three levels of biodiversity, and reorder them to correspond to articles of the convention as far as possible, and give attention to the use of early warning indicators;
 - (c) Consider developing and organizing the list of indicators for each thematic area grouped as driver, pressure, state, impact and response to pressure on biodiversity;
 - (d) Regional approaches to indicator development should be promoted in order to assess the status and trends of biodiversity. For the development of the list of indicators, there is a need for harmonization and collaboration with regional and international initiatives, including the Organisation for Economic

102 UNEP/CBD/SBSTTA/7/12.

103 UNEP/CBD/SBSTTA/3/9.

104 UNEP/CBD/SBSTTA/3/INF.13.

Co-operation and Development, the Commission on Sustainable Development, the Ramsar Convention on Wetlands, the Pan-European processes (the Pan-European Biological and Landscape Strategy and the Ministerial Conference on the Protection of Forests in Europe), the Montreal process on criteria and indicators for the conservation and sustainable management of temperate and boreal forests, the Food and Agriculture Organization of the United Nations and the United Nations Forum on Forests;

- (e) Note that the list of indicators should provide a resource that will support users in identifying the most appropriate indicators for their needs, and to access experience in other countries, regions and sectors, and that indicators must be policy and management relevant.

C. SCIENTIFIC ASSESSMENTS

The Conference of the Parties

1. *Welcomes* the outline for the assessment reports developed by the Millennium Ecosystem Assessment;¹⁰⁵
2. *Encourages* Parties to support the involvement of experts in the Millennium Ecosystem Assessment process and provide assistance to developing countries and countries with economics in transition that are interested in undertaking national or regional assessments within the framework of the Millennium Ecosystems Assessment;
3. *Requests* the Subsidiary Body on Scientific, Technical, and Technological Advice to review the findings of the Millennium Ecosystem Assessment and provide recommendations to the Conference of the Parties based on the review;
4. *Recognizing* the importance of the assessment of the status of the world's protected areas,¹⁰⁶ encourages the Executive Secretary, in close collaboration with the World Conservation Monitoring Centre of the United Nations Environment Programme and IUCN, to facilitate development and implementation of this assessment.

DECISION VI/8 | Global Taxonomy Initiative

The Conference of the Parties,

Understanding taxonomy to be a priority in implementing the Convention on Biological Diversity,

Noting that some groups of organisms provide particular taxonomic difficulties in national and regional monitoring and assessment work, particularly organisms at the micro level,

Recognizing the need for a programme of work at the national, regional and global levels, and the particular value of regional activities,

105 UNEP/CBD/COP/6/INF/38, annex I.

106 UNEP/CBD/COP/6/INF/25.

1. *Endorses* the programme of work for the Global Taxonomy Initiative, as annexed to the present decision, and the further submission and elaboration of potential pilot projects, including those listed in the progress report by the Executive Secretary on the Global Taxonomy Initiative¹⁰⁷ and the report on progress and status of the Global Taxonomy Initiative;¹⁰⁸
2. *Urges* Parties, Governments, international and regional organizations, and other relevant organizations to promote, and, as appropriate, carry out, the programme of work;
3. *Recognizing* the value of supporting and building on existing national, regional, subregional and global initiatives, partnerships and institutions, *invites* the Executive Secretary to encourage the involvement of such entities to support Parties, Governments and relevant organizations in carrying out the programme of work, and recommends the continuation of the regional workshops on the Global Taxonomy Initiative to facilitate this process;
4. *Emphasizes* the need to coordinate activities with other existing initiatives, such as the Global Biodiversity Information Facility and the clearing-house mechanism of the Convention on Biological Diversity;
5. *Requests* the Executive Secretary to complete the guide to the Global Taxonomy Initiative, and provide information and clarification to Parties and Governments concerning the Global Taxonomy Initiative, in particular on the process for developing projects aimed at implementing the programme of work, including existing guidance from the financial mechanism;
6. *Requests* all Parties and other Governments to:
 - (a) Designate a national focal point for the Global Taxonomy Initiative, linked to other national focal points, as requested in decision V/9, paragraph 4;
 - (b) Provide updated information, through the clearing-house mechanism, about legal requirements for exchange of biological specimens and about current legislation and rules for access and benefit-sharing in terms of the needs of the Global Taxonomy Initiative;
 - (c) Initiate the setting up of national and regional networks to aid the Parties in their taxonomic needs in implementing the Convention on Biological Diversity;
7. *Considers* capacity development at the national and regional levels as a driving force in implementing the programme of work;
8. *Decides* that the post of Global Taxonomy Initiative Programme Officer within the Secretariat of the Convention on Biological Diversity be made permanent, with funding from the core budget of the Convention, and that adequate operational funds be provided to enable the occupant of the post to carry out her or his duties.

107 UNEP/CBD/SBSTTA/6/INF/4.

108 UNEP/CBD/COP/6/INF/23.

**ANNEX
PROGRAMME OF WORK FOR THE GLOBAL TAXONOMY INITIATIVE**

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I. Introduction

1. Broadly understood, taxonomy is the classification of life, though it is most often focused on describing species, their genetic variability, and their relationships to one another. For the purposes of the Convention taxonomy is taken in its broadest sense and is inclusive of systematics and biosystematics at the genetic, species and ecosystem levels.

2. The Global Taxonomy Initiative (GTI) covers the taxonomic work required to support the implementation of the Convention at all three levels of biodiversity (genetic, species and ecosystem), and is concerned with all organisms, i.e. plants, animals and micro-organisms.

3. The GTI has been established under the Convention on Biological Diversity to underpin decision-making in conservation of biological diversity, sustainable use of its components and equitable sharing of the benefits derived from the utilization of genetic resources, by addressing:

- (a) The lack of taxonomic information on the identity of components of biological diversity in many parts of the world; and
- (b) The need to build capacity for taxonomic activity in all regions, but especially developing countries, including reference materials, databases, and taxonomic expertise relevant to the objectives of the Convention on Biological Diversity.

4. In its decision V/9, adopted at its fifth meeting, the Conference of the Parties requested the Executive Secretary to draft as a component of the Strategic Plan¹⁰⁹ for the Convention on Biological Diversity a programme of work for the GTI defining timetables, goals, products and pilot projects.

5. The Conference of the Parties established the GTI specifically to support its work programmes in the thematic areas (marine and coastal biological diversity, agricultural biodiversity, dry and sub-humid land biological diversity, inland water biological diversity, forest biological diversity and mountain biological diversity), and in the cross-cutting issues (invasive alien species, access and benefit-sharing, scientific assessments, indicators, traditional knowledge) under the Convention.

6. Section II contains a programme of work for the GTI. It presents successively (i) the overall objectives of the programme of work, (ii) activities addressing taxonomic needs assessments at the global, regional and national levels, and (iii) targeted actions within the broader work programmes of the Convention on Biological Diversity.

II. Programme of work

A. OVERALL OBJECTIVES

1. What Has the Conference of the Parties Asked the GTI to Be?

7. In its decision III/10, on identification, monitoring and assessment, the Conference of the Parties established the need for specific action under the Convention

¹⁰⁹ See decision VI/26.

in capacity-building in taxonomy, through its endorsement of SBSTTA recommendation II/2.

8. In decision IV/1 D, the Conference of the Parties endorsed, as initial advice, a set of Suggestions for Action to develop and implement a Global Taxonomy Initiative. The Conference of the Parties stressed the urgent need for the further implementation of recommendation II/2 of the Subsidiary Body on Scientific, Technical and Technological Advice concerning capacity-building in all fields of taxonomy to assist in the implementation of the Convention, through the incorporation of targeted actions in its work plan, including promoting regional activities to set regional agendas.

9. In decision V/9, the Conference of the Parties adopted a range of activities for the GTI, including the preparation of a programme of work for the GTI defining timetables, goals, products and pilot projects. The format adopted has taken into account that provided in decision V/20, on the operations of the Convention, which specifies the following parameters:

- (a) Planned activities;
- (b) The expected products;
- (c) The timing of each of these activities and products;
- (d) The actors carrying out these activities and cooperation with relevant organizations;
- (e) The mechanisms used to realize and/or support the goals and activities, or to generate the expected products; and
- (f) Financial, human-resource and other capacity requirements.

10. Also in decision V/9, the Conference of the Parties urged that “pilot projects” for the GTI be submitted to the Executive Secretary and the GTI Coordination Mechanism by Parties, Governments and relevant organizations by 31 December 2001.

2. What should the GTI achieve?

11. The GTI should seek to provide the key information required for the implementation of the Convention on Biological Diversity, particularly Article 7, on identification and monitoring, through increasing the fundamental biological data essential to underpin the conservation, sustainable use and equitable sharing of the benefits from the utilization of biological diversity. That is, to address the problems of insufficient knowledge of all components of biological diversity (including their classification, description, value and function) and lack of taxonomic capacity, to overcome what has been termed “the taxonomic impediment.”

12. In formulating the programme of work to achieve this end, the GTI should provide the global platform to help accelerate current taxonomic efforts in areas identified as high priority by countries and regional groupings of countries.

13. The GTI programme of work has been designed to focus on supplying the needed taxonomic information to support the major work areas of the Convention,

and the need to support capacity-building to ensure the ability of countries to undertake the priority taxonomic work required to implement the Convention.

14. This programme of work is intended to fulfil the following functions:

- (a) To contribute to the implementation of the Convention's Strategic Plan (in preparation).
- (b) To set operational objectives with clear expected outputs and ways and means through which to achieve the set objectives;
- (c) To provide the rationale for the choice of the operational targets, with indications of opportunities for further elaboration of the programme of work; and
- (d) To serve as a guide to all biodiversity stakeholders on specific objectives to which they can contribute individually or collectively, at the local, national or international level.

3. Operational objectives

15. In considering the following five operational objectives, it will be necessary to address capacity-building specifically with regard to human resources, systems and infrastructure needs in taxonomy, at the local, national, regional and global levels. It has been recognized that, for operational objectives 4 and 5, further setting of priorities might be required for integration within the work plans of the Convention:

OPERATIONAL OBJECTIVE 1: Assess taxonomic needs and capacities at national, regional and global levels for the implementation of the Convention.

OPERATIONAL OBJECTIVE 2: Provide focus to help build and maintain the human resources, systems and infrastructure needed to obtain, collate and curate the biological specimens that are the basis for taxonomic knowledge.

OPERATIONAL OBJECTIVE 3: Facilitate an improved and effective infrastructure/system for access to taxonomic information; with priority on ensuring that countries of origin gain access to information concerning elements of their biodiversity.

OPERATIONAL OBJECTIVE 4: Within the major thematic work programmes of the Convention include key taxonomic objectives to generate information needed for decision-making in conservation and sustainable use of biological diversity and its components.

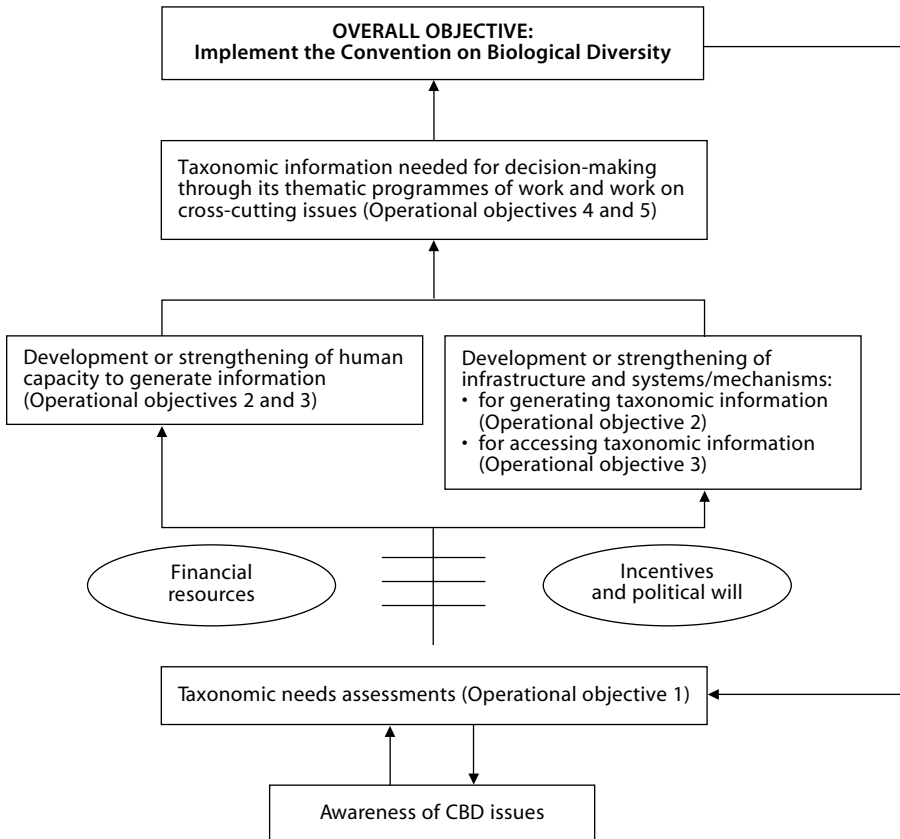
OPERATIONAL OBJECTIVE 5: Within the work on cross-cutting issues of the Convention, include key taxonomic objectives to generate information needed for decision-making in conservation and sustainable use of biological diversity and its components.

16. Diagram 1 summarizes the rationale and linkages between the above operational objectives.

17. It is important to note that the planned activities described in sections B and C below are designed to be mutually reinforcing in achieving the overall objective of the GTI, and outputs from one objective will help facilitate greater achievement of the other activities. Particular stress may be placed upon the necessity outlined in planned activity 3 for capacity development at national, regional and global lev-

els, with emphasis on facilitating and fostering both South-South and South-North partnerships and information exchange. Bilateral, multinational and regional cooperation and networking will be of importance in implementing the programme of work.

DIAGRAM 1: RATIONALE AND LINKAGES BETWEEN THE FIVE OPERATIONAL OBJECTIVES OF THE PROGRAMME OF WORK



B. TAXONOMIC NEEDS ASSESSMENTS AT THE NATIONAL, REGIONAL AND GLOBAL LEVELS

1. OPERATIONAL OBJECTIVE 1: Assess taxonomic needs and capacities at national, regional and global levels for the implementation of the Convention

I.1. PLANNED ACTIVITY 1: Country-based taxonomic needs assessments and identification of priorities

(i) Rationale

In its decision IV/1 D, the Conference of the Parties recognized the need for each country to conduct a national taxonomic needs assessment. Furthermore, in decision V/9, the Conference of the Parties urged Parties, Governments and relevant organizations to undertake as a priority activity, assessments of national taxonomic capacity to identify and, where possible, quantify national and regional-level taxonomic impediments and needs. Assessments should be undertaken within the framework of undertaking the necessary planning to produce or update national biodiversity strategies and action plans under the Convention. To this end, the needs assessments will be required to clearly articulate how the lack of taxonomic information and/or capacity is an impediment to the implementation of national biodiversity strategies and action plans.

The Global Environment Facility (GEF) has been requested to support developing countries in undertaking the necessary needs assessments upon which to base action. (Decision III/5 provides additional guidance to the GEF to provide financial resources to developing countries for country-driven activities and programmes, targeting capacity-building, including taxonomy, to enable developing countries to develop and carry out an initial assessment for designing, implementing and monitoring programmes. Decision V/9 urges eligible Parties and consortia of eligible Parties to seek resources for the agreed priority actions, including needs assessments, through the financial mechanism.)

(ii) Outputs

Each country would provide through their national biodiversity strategies and action plans, as well as through national reports to the Conference of the Parties, a report on their taxonomic capacity and priority needs, which would then be disseminated through the Convention's clearing-house mechanism.

(iii) Timing

In its decision V/9, the Conference of the Parties urged Parties, Governments and relevant organizations to undertake this priority activity and, while not setting a specific timeframe, requested Parties to report on their actions to the Conference of the Parties at its sixth meeting (April 2002). As this is a fundamental part of the process of clearly identifying solutions to current lack of capacity it is very important for all countries to complete their needs assessment as soon as possible. Full or preliminary needs assessments should have been reported to the Executive Secretary by December 2001 for report to the Conference of the Parties at its sixth meeting, and final assessments by December 2002.

(iv) Actors

National Governments, with the support of national and international organizations and institutions as needed, would take primary carriage of this activity. The Executive Secretary would compile completed assessments into an information paper for the seventh meeting of the Conference of the Parties.

(v) Mechanisms

The GEF was requested to provide funds for countries to undertake their needs assessments as part of a broader biodiversity information requirements process. An approach for the development of a standardized framework and instruments will facilitate compilation and comparison of information for baseline assessments and ongoing monitoring. As initial advice, a list of issues to be addressed has been developed by DIVERSITAS, and was provided to SBSTTA at its fourth meeting.¹¹⁰

(vi) Financial, human resources and other capacity requirements

National Governments will be required to fund this activity, potentially with additional support from donors.

(vii) Pilot projects

The development of guidelines for the preparation of country-based taxonomic needs assessments, with specific advice on the integration within the overall implementation of national biodiversity strategies and action plans, is proposed as a pilot project to be undertaken by a relevant international organization or consortium of organizations.

1.2. PLANNED ACTIVITY 2: Regional taxonomic needs assessments and identification of priorities

(i) Rationale

Ideally, country-level needs assessments provide the core input into the development of an assessment of regional capacity, the gaps in capacity across the region, and finally the setting of priority actions to fill the gaps. In many regions of the world it will be advantageous to pool resources and to act cooperatively in building taxonomic capacity to support conservation and decision-making. Regional activities in taxonomy have been supported by the Conference of the Parties in decisions III/10, IV/1 D and V/9, which all identify regional level activities as a major activity for the GTI. Decision III/10 endorsed recommendation II/2 of the SBSTTA, which sought to prioritize strengthening of regional and subregional networks for taxonomy, regional collaboration and regional and subregional training programmes. Decision IV/1 D stressed the urgent need for the further implementation of recommendation II/2 of the SBSTTA concerning capacity-building in all fields of taxonomy to assist in the implementation of the Convention, through the incorporation of targeted actions in its work plan, including promoting regional activities to set regional agendas. Decision V/9 also called for the identification of national and

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regional priority taxonomic information requirements. Furthermore, decision V/9 called for short-term activities, including regional meetings of scientists, managers and policy-makers to prioritize the most urgent global taxonomic needs and facilitate the formulation of specific regional and national projects to meet the needs identified.

(ii) Outputs

Combined with best available information on national taxonomic needs (if possible national taxonomic needs assessments), regionally agreed plans of action, that provide identified priorities, will provide a clear focus for activities under the GTI. To develop such plans of action regional workshops will be held, under the general guidance of the Executive Secretary and the GTI coordination mechanism. The challenge of the workshops will be to blend academic advice and perspective with country needs to fulfil its obligations under the Convention.

(iii) Timing

Two regional workshops, one in Africa and one in Central America, have taken place in 2001. Planning for a workshop in Asia, which will be held in 2002, has begun. Other meetings, including in South America, North America, Europe and a second one in Africa, are being discussed.

Ideally the GTI should endeavour to hold all regional workshops by the end of 2003, preferably by December 2003 as input to discussions at the seventh meeting of the Conference of the Parties.

(iv) Actors

National governments, taxonomic institutions and global, regional and bilateral funding agencies are the main actors in the development of regional taxonomic needs assessments and priorities.

(v) Mechanisms

Existing or proposed regional biodiversity projects, as well as national biodiversity strategies and action plans, will provide a key mechanism for identification of the most urgent taxonomic information requirements at the regional level. The development of regional taxonomic needs assessments and priorities is best facilitated through regional workshops supported by prior research into country level capacity, compiled into regional syntheses. Active regional networks of taxonomists would be best placed to facilitate the compilation of national needs assessments into cohesive regional syntheses.

(vi) Financial, human resources and other capacity requirements

The Government of Sweden, through the Swedish International Development Cooperation Agency (SIDA), has funded two regional workshops in 2001. Japan has agreed to partially fund the Asian workshop, but no sources of funding have been agreed at this stage for additional workshops.

(vii) Pilot projects

Existing or proposed activities (or elements of activities) in some regions could be considered as pilot studies in the preparation of regional based taxonomic needs assessments, such as SABONET and SAFRINET in southern Africa, and BOZONET in Eastern Africa. However these existing activities need to be broadened to include all taxa, as well as input from the full range of biodiversity stakeholders needing taxonomic information. It is intended that the outputs from each regional workshop will be shared with all future workshops in order to facilitate clear and unambiguous, readily achievable pilot projects.

1.3. PLANNED ACTIVITY 3: Global taxonomic needs assessment

(i) Rationale

Given the nature of taxonomic activity, and the lack of knowledge of key groups of organisms with global distributions of importance to humankind and biodiversity concerns, a global dimension is critical. It is widely recognized that generally there is very little data available on global diversity and distribution patterns, and where it does exist it is usually in non-standardized formats that may restrict its usefulness. Agreed global cooperation to finalize taxonomic work on globally important groups should involve both developed and developing countries, and will provide a major input into development of capacity-building initiatives. The global taxonomic needs assessment can result from a compilation of the regional taxonomic needs assessments, with activity to provide some agreed priority actions that can be undertaken at the global level.

(ii) Outputs

A concise global plan of action using the outputs from the regional workshops, with the advice and support of international organizations and the GTI Coordination Mechanism.

(iii) Timing

Progress towards production of a draft global plan of action on priority groups for study was reported to the Executive Secretary by December 2001, as input to discussions at the sixth meeting of the Conference of the Parties. A draft plan should be finalized by December 2002.

(iv) Actors

National Governments, taxonomic institutions and global, regional and bilateral funding agencies are the main actors in the development of global taxonomic needs assessments and priorities. At the global level organisations such as, but not limited to, FAO, IUCN, UNEP-WCMC, UNESCO, the Ecosystem Conservation Group (ECG), and programmes such as BioNET INTERNATIONAL, DIVERSITAS, the Global Biodiversity Information Facility (GBIF), Species 2000, and Systematics Agenda 2000 International among others, will also have key roles to play.

(v) Mechanisms

A workshop focusing on global level taxonomic priorities should be organized, perhaps through the Ecosystem Conservation Group and GBIF. The taxonomic requirements of the Millennium Ecosystem Assessment should be a significant focus of setting global priorities. Such a workshop could be held in a developing country to highlight their special needs.

(vi) Financial, human resources and other capacity requirements

Funding should be sought for this activity from Parties and key intergovernmental and non-governmental science based institutions interested in this activity.

(vii) Pilot projects

Some pilot projects already exist that address some elements of this activity, such as ECOPORT, Species 2000, and the developing GBIF projects.

1.4. PLANNED ACTIVITY 4: Public awareness and education

(i) Rationale

The need to raise awareness and to educate on the importance of taxonomy to underpin the Convention is critical to the success of the Global Taxonomy Initiative, and, within the programme of work, it is necessary to identify and target those groups who would benefit from increased awareness and education. This will include those working in and associated with work in areas of high biodiversity. In developing a public awareness and education package it will be necessary to balance the needs for formal education against the need for wider public awareness-raising. This activity will best be developed in conjunction with the activity under way following decision V/17 on education and public awareness, being carried out jointly by the Secretariat of the Convention on Biological Diversity and UNESCO. This joint activity will provide the focus for public awareness and education on taxonomy within the Convention through the development of a specific module on taxonomy. The module would test out techniques to develop regionally appropriate public awareness tools to help remove the taxonomic impediment, which would be refined in the later stages of the education and public awareness activity under the Convention, and should focus on educational materials for training to facilitate implementation of the Convention.

(ii) Outputs

A package of materials and activities aimed at broadening public understanding of the importance of taxonomy in achieving the objectives of the Convention. Examples could include a brochure on the GTI, enhancement of Web pages, tutorials for education managers, popular scientific films, etc. A special focus on using the public awareness activity to acquire new levels of taxonomic information, through, *inter alia*, public involvement in parataxonomic activity, should form part of these initiatives.

(iii) Timing

Activities will be planned in 2002, and further developed as appropriate.

(iv) Actors

At the global level this activity could be jointly executed by the Convention Secretariat and UNESCO, but with prime carriage for this project by regional networks in conjunction with key taxonomic institutions that already have considerable experience in public-awareness programmes, and have indicated a willingness to participate in GTI activities.

(v) Mechanisms

Toolkits addressing particular taxonomic issues will be developed by the lead agencies for trial in selected regions of developing and developed countries. A key mechanism will involve participatory activity by local communities to strengthen the training and awareness raising for parataxonomists.

(vi) Financial, human resources and other capacity requirements

This work element will be undertaken under the Global Initiative on Biodiversity Education and Public Awareness being elaborated by the Convention Secretariat and UNESCO, as called for in decision V/17 of the fifth meeting of the Conference of the Parties.

(vii) Pilot projects

Pilot projects should be developed within the joint public-awareness activity of the Convention Secretariat and UNESCO. The recent activities of Systematics Agenda 2000 International and BioNET-INTERNATIONAL in this area could also be expanded into pilot projects under the GTI.

C. TARGETED ACTIONS

2. OPERATIONAL OBJECTIVE 2: Provide focus to help build and maintain the systems and infrastructure needed to obtain, collate and curate the biological specimens that are the basis for taxonomic knowledge.

2.1. PLANNED ACTIVITY 5: Global and regional capacity-building to support access to and generation of taxonomic information

(i) Rationale

A significant impediment to greatly increasing the world's taxonomic base for the implementation of the Convention, and indeed more effectively utilizing the current taxonomic knowledge, lies in the limited capacity in many nations, and the decreasing taxonomic capacity world-wide. A key objective of the GTI should thus be to address the global and regional capacity-building needs, particularly of developing countries. There are two main areas of concern that need to be addressed simultaneously:

(a) Human capacity-building; and

(b) Infrastructure capacity-building.

Human capacity-building requires major increases in training programmes for taxonomists and parataxonomists throughout the world, for it is now well established that the “taxasphere,” the world’s global taxonomic expertise, is currently shrinking just at the time when we need it to advance our knowledge base rapidly. In addition to training, new employment opportunities should be created.

Maintaining and improving the existing taxonomic infrastructure can be achieved only through adequate funding, and new strategies are required to make optimal use of our past investments, while minimizing the costs and maximizing the benefits of future investments. In its decisions IV/1 D and V/9, the Conference of the Parties has urged countries to establish or consolidate regional and national taxonomic reference centres. There is a need to explore globally how the best possible outcomes for improving taxonomic capacity can be achieved. The GTI should address at the global and regional levels the coordination of collections infrastructure within countries and regions leading to improvements of long-term infrastructure regionally. Furthermore, such strategic planning should therefore encourage the creation or strengthening of national and regional taxonomic reference centres.

(ii) Outputs

Increased human and institutional taxonomic capacity directed at meeting the needs of implementing the Convention.

(iii) Timing

Activities need to begin immediately and be included in all work elements throughout the programme of work, with priority in covering the major upcoming work areas of the Convention in a timely manner, such that increases in capacity are achieved prior to the major element of work being undertaken.

(iv) Actors

All Governments, international and national funding agencies, biosystematic institutions and taxonomic organizations have a role to play. Expert institutions in developed and developing countries and their professional staff with expertise in taxonomic groups around the world have much to offer in terms of capacity-building. Within planned activities 1 and 2 above, the development of national and regional taxonomic priorities, detailed regional priorities for capacity-building, both human and institutional, should be addressed.

(v) Mechanisms

In its decision III/10, the Conference of the Parties endorsed SBSTTA recommendation II/2, concerning capacity-building for taxonomy, in which the GEF was requested to provide funds for training programmes, strengthening reference collections, making information housed in collections available to countries of origin, producing and distributing taxonomic guides, strengthening infrastructure and disseminating taxonomic information through, *inter alia*, the clearing-house mechanism.

(vi) Financial, human resources and other capacity requirements

The financial and human resources requirements of this activity are substantial. Funding needs may extend beyond possible contributions from individual Parties. However, through national and regional priority-setting, it will be possible to take a staged approach to undertaking the work required.

(vii) Pilot projects

Consortia of major institutions should participate in the development of pilot projects to identify priority activities including capacity-building and development of information, through facilitating regional conferences to document existing holdings and by designating lead agencies in a collegiate process to maximize taxonomic effort across all groups.

SABONET and BioNET-INTERNATIONAL are two existing examples of projects that could be considered pilots of a regional and global approach respectively, that could be strengthened to provide greater capacity-building activities. The Smithsonian Institution has submitted a potential pilot project on neo-tropical moths that could also be considered for regional capacity-building.

2.2. PLANNED ACTIVITY 6: Strengthening of existing networks for regional cooperation in taxonomy

(i) Rationale

To facilitate the development of cooperative programmes that increase taxonomic capacity in developing countries through fostering North-South and South-South collaboration.

Taxonomic capacity in terms of both human and institutional capacity varies widely between countries and regions. Although many developed countries have relatively comprehensive reference collections and a number of experts, no single country has a complete taxonomic inventory of national biodiversity, nor experts in all relevant taxonomic groups. In many cases, developing countries have very little or no physical reference collections of local biodiversity, nor trained personnel. Much of the existing reference material from developing countries resides in the expert institutions of the developed world, as do the experts in particular taxonomic groups. However, even in developed countries taxonomy has been under-resourced for many years, leading to a general decline in infrastructure, and a dearth of younger professionals.

In order to facilitate taxonomic capacity-building to underpin the Convention on Biological Diversity, cooperative programmes need to be established and/or strengthened between the countries with the expertise and reference materials and those without. A number of regional networks that facilitate cooperation between countries in building taxonomic capacity in certain taxonomic groups currently exist, e.g., SABONET, a cooperative network between 10 countries in southern Africa focused on flowering plants. The most comprehensive network currently in existence is that fostered by BioNET-INTERNATIONAL, the Global Network for Taxonomy. This initiative currently has seven extant subregional networks covering some 120 countries, with another four under development, and a further five planned. It is envisaged that these 16 networks will provide a global coverage of collaborative North-South

and South-South networks for taxonomic capacity-building. The Global Network for Taxonomy is a donor-funded programme and the rate of network establishment is dependent on adequate continued funding. In establishing subregional cooperative networks, BioNET-INTERNATIONAL works through official governmental endorsement and comprehensive needs assessment activities to establish regional and national priorities.

(ii) Outputs

A global network, ideally comprised of increasingly self-sufficient subregional networks, that covers all taxa. While the actual capacity-building initiatives should have a finite project-based life, ideally the networks themselves would remain in perpetuity once established and underpinned by member country Governments.

(iii) Timing

Given that the lack of taxonomic capacity is a severe impediment to the abilities of countries to meet their obligations under the Convention on Biological Diversity, and that most taxonomic capacity can readily be shared and utilized across institutional and national boundaries, it follows that building of taxonomic capacity can best be facilitated by subregional cooperative networks and global partnerships. Therefore plans for strengthening and/or building of regional networks should at least be in place by December 2002, particularly ensuring that existing relevant networks become fully operational across the full spectrum of taxonomic groups. Strategies should be in place to complete the global coverage by December 2002. In addition, over the next five years, taxonomic institutions should look for opportunities to build capacity-development partnerships, particularly between institutions in developed and developing countries.

(iv) Actors

Existing regional and subregional networks, with assistance from organizations such as BioNet-INTERNATIONAL and UNESCO, and with regional and extra-regional partner organizations and networks, could be utilized to build a more complete coverage. These networks should play the role of implementing mechanisms, such that the GTI has access to, and interaction with all relevant taxonomic institutions within a subregion.

To facilitate this development the expert institutions of the developed world that house the relevant subregional taxonomic reference materials and information, and the professional staff with expertise in taxonomic groups from these subregions, should be actively involved.

(v) Mechanisms

An agreed strategy on strengthening and building networks to ensure global coverage both geographically and by taxon group is a huge undertaking. Different countries and regions have different levels of capacity, and different taxonomic needs and priorities. Existing subregional networks can serve as implementing mechanisms for improving taxonomic capacity in developing countries. These existing networks need to be broadened in scope, and the establishment of the remain-

ing networks currently under development or in the planning stages needs to be undertaken as soon as possible. This will require completion of needs assessments and priority setting for each network, where these do not exist or need updating and/or expansion. Regional taxonomic reference centres that house network reference materials and host the network's Information and Communications System provide a useful mechanism to prevent duplication of infrastructure, but they require sound means of communication to provide all countries involved with equal access to the information. As part of this, improved access by taxonomists of all Parties to the taxonomic reference material itself, particularly type specimens and material presently held outside countries of origin, is important in developing work within the GTI.

(vi) Financial, human resources and other capacity requirements

Funding will be required to support the work programmes of the individual networks, but the countries themselves need to endorse the operations and specifically the human resource and institutional costs of maintaining, operating and developing such collaborative networks. These costs will depend on the status of each country's capacity and the scope of the work programmes. Such collaborative networks can be cost-saving mechanisms in certain taxonomic groups/areas because of the 'economies of scale' produced by the sharing of taxonomic capacity, and reduce the need for each country to attempt to build the needed capacity individually.

Ideally the networks should have a dedicated full-time secretariat, but depending on needs, they can be operated on a part-time basis by staff already employed within relevant institutions.

Capacity-building in taxonomy necessarily includes the infrastructure capacity to house reference material, together with all of the reference material and equipment to enable identifications.

(vii) Pilot projects

Three pilot projects can be proposed. The first pilot project could work with one of the existing BioNET-INTERNATIONAL networks and evaluate the current structure, mechanisms and operations of the network to assess its ability to expand to fully meet the objectives of the GTI in underpinning the Convention on Biological Diversity. Currently, many of the existing BioNET-INTERNATIONAL networks are focused on micro-organisms and invertebrates, often with an agricultural orientation, and as such would need to be expanded to include all taxon groups and relevant institutions. The second pilot project could be undertaken in partnership with BioNET-INTERNATIONAL in the establishment of new networks designed to meet the requirements of the Convention. The third project is currently under formulation under the name BOZONET and is an eastern African taxonomic capacity-building project for botany and zoology.

3. OPERATIONAL OBJECTIVE 3: Facilitate an improved and effective infrastructure/ system for access to taxonomic information; with priority on ensuring that countries of origin gain access to information concerning elements of their biodiversity

3.I. PLANNED ACTIVITY 7: Develop a coordinated global taxonomy information system

(i) Rationale

Existing taxonomic information is widely scattered and not centrally available. This activity will firstly identify the current status of major taxonomic information systems in particular their major foci, and plan a coordinated approach to the development of a global taxonomic information infrastructure, as the major element of the GTI under the Convention's clearing-house mechanism.

(ii) Outputs

An agreed strategy to develop information services that optimizes access to taxonomic information systems world-wide, in appropriate formats. This strategy would also include common standards for exchange of data and consideration of intellectual property rights.

(iii) Timing

Work took place in 2001 and information was provided as an input to discussions by the sixth meeting of the Conference of the Parties; the activity will be further developed within a five-year framework and reports provided to SBSTTA as appropriate.

(iv) Actors

Actors will include ECOPORT, GBIF, Species 2000, the Integrated Taxonomic Information System (ITIS), Tree of Life, NABIN, ISIS, BIN21, BCIS, BioNET-INTERNATIONAL, as well as large-scale biosystematics research institutions and other stakeholders of taxonomic information, in collaboration with the clearing-house mechanism of the Convention on Biological Diversity.

(v) Mechanisms

Assessment of the objectives of each system, and their prospective target audience, as a means to evaluate the fulfilment of the needs of Parties in accessing taxonomic information required under the Convention on Biological Diversity. The existing International Plant Names Index (IPNI) and the Global Plant Checklist (IOPI) among others could provide useful models for developing a global strategy.

(vi) Financial, human resources and other capacity requirements

Sources of funding need to be identified.

(vii) Pilot projects

As a precursor to developing pilot projects it is proposed to hold a workshop that brings together stakeholders of all the existing global and major regional biodi-

versity information systems to identify overlaps, synergies, and gaps in order to develop a coordinated global strategy for harmonizing the existing systems.

Several pilot projects are already under way including SABONET and Species Analyst, and several potential projects have been put forward in recent international taxonomic meetings, and submitted to the GTI as potential pilot projects, such as GLOBIS, a butterfly information system for the world, and the World Termite Database.

4. OPERATIONAL OBJECTIVE 4: Within the major thematic work programmes of the Convention include key taxonomic objectives to generate information needed for decision-making in conservation and sustainable use of biological diversity and its components

It is recognized that taxonomy is fundamental to the thematic areas of the Convention on Biological Diversity through discovery, identification, and documentation of biological diversity. Because there are inadequate global taxonomic resources to meet all demands, it is important to indicate taxonomic priorities within each of the thematic areas of the Convention on Biological Diversity. Such priorities should recognize indigenous knowledge systems where appropriate permission has been obtained. Within existing thematic work programmes, workshops should be conducted in appropriate regions, involving taxonomic experts to identify key taxa for inventory and monitoring programmes. Sufficient flexibility should be maintained in order to respond to possible future modifications of priorities.

4. I. PLANNED ACTIVITY 8: Forest biological diversity

(i) *Rationale*

In the annex to decision IV/7, on forest biological diversity, containing the work programme on forest biological diversity, under programme element 3 on criteria and indicators for forest biological diversity, the following activity is identified: *Taxonomic studies and inventories at the national level, which provide for a basic assessment of forest biological diversity.*

(ii) *Outputs*

An increased knowledge of the species composition of forests, through national taxonomic studies and inventories. Using this increased knowledge base facilitates selection of criteria and indicators for forest biological diversity and may guide in the selection of sites to be protected and in the valuation of resources.

(iii) *Timing*

As this activity is carried out at the national level there will be variable timetables globally. The second round of national reports for the implementation of the Convention was due in May 2001 and provided an opportunity for countries to report on taxonomic studies and inventories carried out at the national level that provide for a basic assessment of forest biological diversity.

(iv) Actors

National governments and institutions will have the main responsibility, with possible advice from a collaborative partnership of forest members on methodologies for the development of appropriate criteria and indicators. The active involvement of international organizations such as the Center for International Forestry Research (CIFOR), the International Centre for Research in Agroforestry (ICRAF), and the United Nations Forum on Forests (UNFF) will provide useful links between existing initiatives.

(v) Mechanisms

In decision IV/7, the Conference of the Parties agreed that countries would review specific indicators of forest biological diversity derived by the major international processes related to sustainable forest management. Depending on the selection of the criteria and indicators chosen, additional taxonomic studies and inventories will then be required.

(vi) Financial, human resources and other capacity requirements

These requirements will be country-dependent, and resource requirements and sources will vary.

(vii) Pilot projects

To facilitate the implementation of one element of the programme of work on forest biological diversity, a pilot project is proposed in the selection of indicators for below-ground diversity in forests in each of the three forest biomes: tropical, temperate, boreal. While there is a need to continue developing knowledge in many components of forest ecosystems, the least known, and highest priority, is the below-ground biological diversity. It is understood that it plays a major role in contributing to the development and the health of the above-ground biological diversity by, for instance, processing nutrients or minerals that are then made available to, and assimilated by, plant biodiversity.

4.2. PLANNED ACTIVITY 9: Marine and coastal biological diversity

(i) Rationale

Two major elements of taxonomic work within marine and coastal ecosystems can be considered as high priority for achieving the Convention's objectives in marine and coastal systems, namely ballast water organisms, and key organisms for monitoring the health of mangrove systems through their invertebrate fauna. The ballast water organisms sub-element will require, *inter alia*, a focus on pelagic juvenile stages of benthic organisms. The second element focuses on mangroves, which are among the world's most rapidly changing systems. Within the marine and coastal biodiversity programme of work there is a need to develop taxonomic support for baseline monitoring of invertebrate fauna in mangrove systems.

(ii) Outputs

Identification aids for quarantine and other officials to identify and monitor the introduction of novel marine organisms.

Taxonomic guides to key invertebrate organisms in mangrove systems to aid management of the continuum from natural to disturbed mangrove ecosystems. Taxonomic data will also assist in selecting sites for protected areas and for resource valuation.

(iii) Timing

Within the timeframe of the GloBallast programme, produce basic guides for the identification of major organism groups found in ballast water at major sources.

Within the next three years, develop taxonomic guides to the identification of mangrove invertebrate fauna that can be used as indicators of habitat change.

(iv) Actors

The International Maritime Organization (IMO) should take the lead role in the taxonomic work in ballast water, under their GloBallast work programme, which would then be integrated with the activities foreseen under the invasive alien species work of the Convention on Biological Diversity, and the GTI programme of work.

International conventions, in particular the Ramsar Convention on Wetlands of International Importance especially as Waterfowl Habitat, and taxonomic institutions with expertise in coastal invertebrates should play a key role in conjunction with national institutions from Parties with significant extent of mangrove ecosystems under threat, in the implementation of the necessary taxonomic work.

(v) Mechanisms

The IMO GloBallast work programme could include a taxonomic component for the identification of marine pelagic taxa, including those with adult benthic forms, which will form a key element of the GTI in the marine environment. The International Society for Mangrove Ecology (ISME) could facilitate the development of the work element on mangrove invertebrate fauna, including training workshops of key personnel from taxonomic institutions in tropical areas. Three workshops, one in Africa, one in the neotropics and one in Asia have been suggested and are in preparation for 2001 with support from UNESCO. The International Coral Reef Initiative (ICRI) and its network can assist with regard to coral reefs.

(vi) Financial, human resources and other capacity requirements

The IMO GloBallast programme could provide the appropriate resources for a pilot project involving six developing countries.

Funding support is required for the three capacity-building workshops as well as appropriate infrastructure support for the mangrove invertebrate taxonomy and production of guides and ICRI work.

(vii) Pilot projects

The GloBallast programme is a pilot project under the IMO, with direct relevance to the invasive alien species and GTI programmes of work.

A pilot project focused in south-east Asia on mangrove invertebrates, particularly involving Malaysia, Indonesia and Philippines, could be developed in conjunction with the International Center for Living Aquatic Resources Management (ICLARM) and ISME.

4.3. PLANNED ACTIVITY 10: Dry and sub-humid lands biodiversity

(i) Rationale

Decision V/23 on consideration of options for conservation and sustainable use of biological diversity in dryland, Mediterranean, arid, semi-arid, grassland and savannah ecosystems establishes a programme of work, including, *inter alia*, assessment of the status and trends, identification of specific areas within dry and sub-humid lands of particular value for biological diversity and/or under particular threat, and the further development of indicators. Under each of these activities targeted actions on furthering the knowledge base on the organisms that maintain the crucial soil crust should be developed at national and regional levels, as well as the need for greater knowledge of the micro-organisms in nutrient cycling, and increased taxonomic information of pests and diseases.

Correct identification of indicator taxa, such as crust-forming lichens, often requires special identification aids and techniques, and the development of such tools is necessary for increasing the capacity of rangeland managers to understand their function in maintaining dryland ecosystems. In many parts of the world, there is a need to increase taxonomic capacity to identify the lichens, and to then develop identification tools. It is important that such identification tools be designed in such a way that they can be used by rangeland managers to help in identification of key organisms.

(ii) Outputs

Enhanced understanding among agricultural and rangeland managers of lichens as key indicators warning of the advance of soil degradation. This will usually take the form of loss of particular species from the system. Taxonomic work will need to develop easy-to-use identikits for key soil lichens, algae, soil invertebrates, pest insects and other herbivores, and other taxa that will be the harbingers of change.

(iii) Timing

By the seventh meeting of the Conference of the Parties, have developed identification aids in consultation with appropriate national taxonomy and management agencies.

(iv) Actors

The Convention to Combat Desertification (CCD) and other environmental conventions and their relevant collaborators, international agencies (including Interna-

tional Agriculture Research Centres (IARCs)), rangeland managers and national Governments.

(v) Mechanisms

Cooperation with the CCD and other key players among international organizations

(vi) Financial, human resources and other capacity requirements

To facilitate global and regional cooperation and synergy in this work, a project which could attract funding from the IARCs, in conjunction with FAO, can be proposed.

(vii) Pilot projects

A pilot project could be developed among CCD, FAO and UNEP to assess different biological and biochemical indicators of land degradation. This project would require input from a range of taxonomic experts, including algologists and lichenologists. Input would also be required from soil scientists, who can link abiotic information with the taxonomic information obtained. Results can be distilled to a simple identikit system that will allow local managers to identify key species and determine the health of their arid/semi-arid system.

4.4. PLANNED ACTIVITY 11: Inland waters biological diversity

(i) Rationale

As in all other major ecosystems the current status of taxonomic knowledge in inland waters is varied both geographically, and according to the major taxon groups. For the purposes of the GTI targeted activities in rapidly increasing worldwide knowledge of freshwater fish and invertebrates are proposed as high priority.

(ii) Outputs

A series of regional guides to freshwater fish and invertebrates (including adult terrestrial forms where appropriate) as an input to ecosystem monitoring for river and lake health.

(iii) Timing

Produce field-usable regional guides within two years for both professional and public use.

(iv) Actors

National agencies and taxonomic institutions, especially museums, should play a principal role in the implementation of this activity. International support and coordination could be provided through the UNESCO key science activity "Water and Ecosystems." Parataxonomists, in the form of interested members of the public and school students in a number of countries, have been using the technique to monitor aquatic health. This is an area that could be built upon, and maybe also linked to planned activity 11.

(v) Mechanisms

Changes in the species compositions and abundance of macro-invertebrates in freshwater systems are now being studied worldwide as part of approaches to monitoring of ecosystem health. A number of key potential partners are possible for this activity, including from developed and developing country perspectives. The Scientific and Technical Review Panel of the Ramsar Convention on Wetlands of International Importance especially as Waterfowl Habitat should also be involved in this project to provide specialist expertise, and a focus on the concept of using taxonomy to help understand ecological change.

(vi) Financial, human resources and other capacity requirements

There is opportunity to build on existing projects here, or assist regional collaboration between existing projects, which would contribute to the implementation of the GTI while simultaneously improving monitoring of ecosystem health.

4.5. PLANNED ACTIVITY 12: Agricultural biological diversity

(i) Rationale

Within the programme of work on agricultural biological diversity, several areas require taxonomic capacity in order to deliver fully on their objectives. The need for taxonomy ranges from classical taxonomy of the species living in agricultural ecosystems, to the taxonomy of wild relatives of agriculturally important species, to access to existing taxonomic information including basic knowledge on the functional relationships between organisms often recorded by taxonomists.

The value of training and knowledge-sharing among researchers, extension workers, farmers and indigenous peoples is highlighted in decision V/5 of the Conference of the Parties to the Convention on Biological Diversity. Within the agricultural biodiversity work programme specific taxonomy-related activities are envisaged in the following subject areas: pollinators; soil and other below-ground biodiversity, to support agricultural production systems, especially in nutrient cycling; and natural enemies of pests and diseases.

As the agricultural biological diversity work programme develops, significant taxonomic activities will need to be integrated within the proposals for work.

(ii) Outputs

Outputs would include: easy-to-use keys to families, genera and species of pollinators; automated identification systems for pollinators; development of standard methods for identification of soil biodiversity to different taxonomic levels; increased knowledge of soil biodiversity to aid in the identification of indicators of the “health” of below-ground biological diversity; and taxonomic training for farmers and ecosystem managers.

(iii) Timing

Within the agricultural biodiversity work programme the taxonomy related activities are part of the timeframe for the development of the overall activity. Current timeframes are as follows:

- (a) *Pollinators*—In order to initiate the process of implementation of the International Initiative for the Conservation and Sustainable Use of Pollinators a planning meeting took place at the FAO in late 2000. A plan of action was adopted at the sixth meeting of the Conference of the Parties;
- (b) *Soil biota*—Ongoing efforts by Governments and relevant organizations will develop projects with appropriate timing;
- (c) *Pest and disease regulation organisms*—Proposals for activities may be developed by countries and relevant organizations as determined in the programme of work on agrobiodiversity.

(iv) Actors

FAO has been invited by the Conference of the Parties in decision V/5 to lead the International Pollinators Initiative (IPI), and will prepare a proposal for the development of the IPI for the seventh meeting of SBSTTA.

Parties should make contributions on soil biota and organisms involved in pest and disease regulation. In addition, the tropical soil biology and fertility (TSBF) programme hosted by UNESCO in Nairobi is the proposed implementing agency for a full-sized GEF project, which includes major taxonomic components for assessing below-ground biodiversity. Also, the Global Integrated Pest Management (IPM) Facility, based in Rome, which is a programme co-sponsored by FAO, UNEP, UNDP and the World Bank, may contribute as an organisation involved in pest and disease regulation.

(v) Mechanisms

The International Pollinators Initiative (IPI) will contain a major taxonomic component, and the project is currently under development.

A major taxonomic element needs to be built into all current and proposed projects dealing with the sustainable use or conservation of agricultural and non-agricultural lands, if we are to advance our knowledge base on the functional aspects of maintaining ecosystem processes.

As concerns organisms involved in pest and disease regulation, a scoping exercise should be undertaken to determine where the limitations exist in terms of taxonomic information, from basic alpha-taxonomy of pests and natural enemies, to how the information is presented and distributed. This work can be carried out by farmers' networks and research institutions, including the IARC system.

(vi) Financial, human resources and other capacity requirements

All three elements require resources to be identified within existing and new projects, as well as additional resources to be made available to increase technical capacity in most countries of the world.

(vii) Pilot projects

A major UNEP project entitled "Conservation and sustainable management of below-ground biodiversity" in seven countries is currently under assessment by UNEP. A Canadian report "Soil biodiversity: issues for Canadian agriculture" is

being prepared and may be a suitable pilot. A pilot project on termites submitted by the Smithsonian Institution could also be considered.

4.6. PLANNED ACTIVITY 13: Mountain biological diversity

Development of this activity will be undertaken following discussion of this thematic work area at the seventh meeting of the Conference of the Parties. The GTI Coordination Mechanism could play an important role in proactively defining taxonomic needs related to this planned thematic activity.

5. OPERATIONAL OBJECTIVE 5: Within the work on cross-cutting issues of the Convention include key taxonomic objectives to generate information needed for decision-making in conservation and sustainable use of biological diversity and its components.

5.1. PLANNED ACTIVITY 14: Access and benefit-sharing

(i) Rationale

The Conference of the Parties, in its decision V/26, identified “Assessment and inventory of biological resources as well as information management” as key capacity-building needs with respect to access and benefit-sharing arrangements. Indeed, the inventory of biological resources could provide useful information in view of the elaboration of measures regarding access to genetic resources and the equitable sharing of benefits arising from their exploitation. In order to carry out this inventory, increased capacity is often needed at the country level. The primary goal of the GTI is to assist countries in carrying out this inventory in a timely and efficient manner. A major element in increasing capacity to properly inventory and access biological resource information is effective information management. Therefore a key element of the GTI must be the development of appropriate information-technology tools to allow access to existing data, as well as to provide efficient entry of new information generated from any increased knowledge.

The more each country can develop its capacity to properly inventory, collect, classify, and then commercialize its biological resources, the greater will be the return of benefits to that country. These four elements (inventory, collection, classification, commercialization) can be seen as a hierarchy of increasing capacity. The GTI will concentrate on developing capacity in the collection and classification of biodiversity. The GTI should include projects designed to develop capacity in collecting and maintaining biological collections, as well as the proper classification and knowledge of the biological resources. Taxonomic information, in particular at the genetic level, will be critical in tracing the origin of resources and living modified organisms (LMOs).

Increasing access by countries of origin to existing information on biological resources held elsewhere has also been highlighted as a major element of the Global Taxonomy Initiative. In decision V/26, the Conference of the Parties urged countries to adopt measures that are supportive of efforts to facilitate access to genetic resources for scientific, commercial and other uses, and associated knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant to the conservation and sustainable use of biological diversity.

The first step in facilitating access is provision of information, and the Parties have agreed in decision IV/1 D to a series of actions that would increase access to information world-wide. Operational objective 3 of the present programme of work sets out a plan to begin to address this issue.

(ii) Outputs

Interactive catalogues of material available, linked to taxonomic collections in herbaria and museums. Taxonomic support, including at the molecular level, to provide clear identification of specimens in the *ex situ* collections, especially in developing countries, is needed.

A series of country-driven projects could be carried out, combining the development of basic taxonomic capacity and an improved information base on biological resources.

These would assist in developing better linkages between existing initiatives that provide information electronically on genetic resources, as well as new projects to improve the access to, and range of, publicly available taxonomic information. In turn, a basis for the commercialization of components of that biological diversity would be provided.

(iii) Timing

Progress in global networking between countries and taxonomic institutions holding significant *ex situ* collections should be accelerated within a five-year timeframe.

Development of pilot projects should occur as soon as possible.

(iv) Actors

National (and international) culture collections, including microbial collections. The IARC system, especially the Consultative Group on International Agricultural Research (CGIAR), should be involved to select priorities for needed taxonomic effort.

Taxonomic institutions in many countries contain significant holdings of *ex situ* materials from other countries, and in particular from developing countries. Botanical gardens hold both dead and live material that may be of considerable interest to the country of origin of that material, and may also develop new or improved conservation techniques that could aid countries of origin in their conservation and sustainable use efforts.

The FAO Commission on Genetic Resources for Food and Agriculture could play a key partnership role.

The Global Biodiversity Information Facility (GBIF) may be usefully involved in this activity.

(v) Mechanisms

One of the first most important measures any country can take to encourage the sustainable use of its resources and ensure proper sharing of benefits derived from their exploitation is through developing knowledge regarding their own biodiversity, and in particular full cataloguing of its diversity. Through acknowledging the

importance of developing taxonomic capacity and adopting a series of suggested actions and priority activities (in its decisions IV/1 D and V/9), the Conference of the Parties has clearly indicated to Parties, Governments and relevant organizations the major work that needs to be undertaken to build taxonomic capacity within countries.

The basic mechanism for undertaking these actions and activities is through country-driven projects at the national, regional and subregional levels, which are to be implemented with the assistance of developed and developing country institutions that house *ex situ* collections (i.e. herbaria, botanical gardens, museums and zoos), and the financial mechanism. These country-driven projects need to be developed to show clearly how the development of basic taxonomic capacity leads to an improved knowledge base and understanding of the biological resources held by the country, which can then be used to attract the necessary investment in the full range of commercial uses of components of that biological diversity.

Achieving tangible results in the short term will require the promotion of a series of projects that have existing support from within both developing and developed world institutions and that clearly lead to a conservation or sustainable use outcome. A major action plan should be developed with FAO, IARCs (especially CGIAR) and BioNET-INTERNATIONAL as the key intergovernmental organizations and non-governmental organizations, among others.

(vi) Financial, human resources and other capacity requirements

Capacity-building of taxonomic institutions is a costly and ongoing matter, and strategic input to help conservation and sustainable use efforts significantly must be based on those areas where useful outcomes can be demonstrated in the short to medium term. It is to be hoped that demonstrating benefit may then lead to further investment in infrastructure support and development.

New resources are needed to initiate activities, although existing resources within key organizations may be able to be mobilized for the development of an action plan.

5.2. PLANNED ACTIVITY 15: Invasive alien species

Development of this activity will be undertaken based on priorities identified through GISP phase I, the review of the status of invasive alien species and of ongoing measures addressing invasive alien species under way within the Convention on Biological Diversity, and the contents of the decisions taken by the sixth meeting of the Conference of the Parties to the Convention on Biological Diversity regarding invasive alien species.¹¹¹

5.3. PLANNED ACTIVITY 16: Support in implementation of Article 8(j)

(i) Rationale

The Conference of the Parties has acknowledged that traditional biodiversity-related knowledge (TBRK) has the potential to inform the activities of the Convention on Biological Diversity. Before it can do so, indigenous and local com-

¹¹¹ See decision VI/23.

munities require protection of their intellectual property in any collaborative efforts aimed at meshing traditional knowledge and science. Given that the GTI has the potential to make traditional biodiversity-related knowledge more accessible to a wide range of users, due regard must be given to the concerns raised by indigenous and local communities regarding the right to preserve, protect and manage traditional biodiversity-related knowledge, particularly traditional taxonomic knowledge.

In its decision V/16, the Conference of the Parties endorsed a programme of work to implement Article 8(j) based on a number of principles, including full and effective participation of indigenous and local communities, the valuing of traditional knowledge, acknowledgment of spiritual and cultural values and the requirement for prior informed consent from traditional knowledge holders.

Paragraph 17 of that decision requests the Parties to support the development of registers of traditional knowledge, innovations and practices of indigenous and local communities through participatory programmes and consultations with indigenous and local communities, taking into account strengthening legislation, customary practices and traditional systems of resources management, such as the protection of traditional knowledge against unauthorized use.

A number of tasks in the programme of work for the implementation of Article 8(j) have a direct bearing on the proposed activities of the GTI, in particular tasks 1, 2 and 7 in phase 1 and tasks 6, 10, 13, and 16 in phase 2 (decision V/16).

Traditional knowledge systems include taxonomic information, which if used in combination with Linnaean taxonomies could support the GTI. Access to and use of traditional knowledge must have the prior informed consent of the holders of that knowledge and be based on mutually agreed terms. When this has occurred, comparison of indigenous taxonomies and Linnaean taxonomies in different regions could be made to provide general principles to assist in the conservation and sustainable use of elements of biodiversity in different ecosystems.

(ii) Outputs

Regional and subregional guides based on ethical research practices and developed with full and effective participation of indigenous and local communities. These guides could highlight the similarities and differences between the two taxonomies and may be in the form of catalogues and species lists, or be more targeted resource material that provides interpretation information for a wide variety of environmental managers, in particular protected area and conservation managers.

(iii) Timing

Preparation of guides to be completed as part of implementation activities under Article 8(j).

(iv) Actors

National and subnational governments, indigenous and local groups, indigenous research centres and indigenous non-governmental organizations should take the lead in this work element. Potentially the GBIF could play a lead role in providing a global role in information distribution. Some international and national institu-

tions already hold significant information and have active programs in compiling indigenous and local taxonomies. These institutions, with the full and effective participation of indigenous and local communities, should be encouraged through additional “catalytic” funding to ensure that their research practices are based on agreement between parties and the principle of prior informed assent.

(v) Mechanisms

The Convention on Biological Diversity, UNESCO, the International Social Science Council (ISSC) and the International Council of Scientific Unions (ICSU) offer the appropriate platform to develop with the full and effective participation of indigenous and local communities suitable plans of work leading to project development. The Ad Hoc Open-ended Working Group on Article 8(j) should play a key role in advising on the development of projects.

(vi) Financial, human resources and other capacity requirements

New resources are required to initiate this activity.

5.4. PLANNED ACTIVITY 17: Support for ecosystem approach and work under the Convention on Biological Diversity on assessment including impact assessments, monitoring and indicators

(i) Rationale

Under the ecosystem approach, a key activity will be the Millennium Ecosystem Assessment. The Millennium Ecosystem Assessment will require considerable scientific effort for the characterization of ecosystems, including better data on key species that comprise ecosystems and their role in maintaining ecosystem processes. In many regions taxonomic knowledge needed to fulfil these efforts is not available, which will therefore require specific activities to be undertaken (created under the GTI). The Millennium Ecosystem Assessment seeks policy-relevant information; the GTI is a policy response to a recognized impediment, or knowledge block, in our system of biodiversity understanding. The GTI seeks to facilitate gathering of the pertinent species information that would be used to characterize ecosystems, including those that help to illustrate the value of goods and services flowing from ecosystems.

The Millennium Ecosystem Assessment will be required to report on issues such as patterns of species and ecosystem diversity—the activities of the GTI in facilitating better knowledge of the species and their distribution will help provide this information. All information fed into the Millennium Ecosystem Assessment will need appropriate geo-referencing—which is a key plank for all activities envisaged under the GTI. The GTI will also be focusing on taxonomic activity in areas of relevance to the Convention, especially the key ecosystem themes. Thus the products of the GTI can complement the Millennium Ecosystem Assessment activity in thematic ecosystems, which in turn may illustrate the extent of removal of the taxonomic impediment – providing a positive feedback process.

The GTI also has relevance to the suite of environmental conventions associated with the Convention on Biological Diversity (e.g., the Convention on the Conservation of Migratory Species of Wild Animals, the Convention on International

Trade in Endangered Species of Wild Fauna and Flora (CITES), and the Convention on Desertification), and to the Commission on Sustainable Development, all of which have a direct interest in the outcomes of the Millennium Ecosystem Assessment. There is scope for linking envisaged work programmes under the Millennium Ecosystem Assessment with the key action areas under the GTI.

(ii) Outputs

Production of taxonomic overviews to help guide the Millennium Ecosystem Assessment to focus on key areas and issues of importance. These overviews can be compiled from work under the other operational objectives, but may need special focus for the global ecosystem context of the Millennium Ecosystem Assessment.

(iii) Timing

To be linked with the Millennium Ecosystem Assessment development and programme.

(iv) Actors

The Millennium Ecosystem Assessment advisory mechanisms, and the UNEP World Conservation Monitoring Centre (WCMC) and UNESCO as key synthesizers.

(v) Mechanisms

The Convention's cross-cutting issue of assessments and the programme of work on indicators of biological diversity include a number of programme elements where input from the GTI would be required, including the development of a menu of indicators in thematic areas and development of methodology sheets, guidelines and training for supporting the development of national monitoring and indicator programmes. Specific input required from the GTI would be in the identification, development and testing of suitable indicators, and priority taxonomic information required as input to scientific assessments.

(vi) Financial, human resources and other capacity requirements

The development of financial and human resource requirements will need to be undertaken within the development of specific Millennium Ecosystem Assessment project proposals, as well as through agreed activities in indicator development.

5.5. PLANNED ACTIVITY 18: Protected areas

Development of this activity will be undertaken following discussion of this cross-cutting work area. The GTI Coordination Mechanism could play an important role in proactively defining taxonomic needs related to this planned activity for the ninth meeting of SBSTTA, prior to the seventh meeting of the Conference of the Parties.

III. Monitoring and Assessment of the GTI

The GTI Coordination Mechanism has been tasked to assist the Executive Secretary to facilitate international cooperation and to coordinate activities on matters pertaining to the implementation and development of the GTI, and in this role will provide overall monitoring and assessment of the activities undertaken as part of the GTI.

The Parties will provide regular updates on activities under the GTI through the national reporting process under the Convention on Biological Diversity.

Reports on the progress of implementing the GTI programme of work will be made by the Executive Secretary to SBSTTA to enable review of progress by that body.

DECISION VI/9 | Global Strategy for Plant Conservation

The Conference of the Parties

1. *Adopts* the Global Strategy for Plant Conservation, including outcome-oriented global targets for 2010, annexed to the present decision;
2. *Invites* relevant international and regional organizations to endorse the strategy and to contribute to its implementation, including to adopt these targets, in order to promote a common effort towards halting the loss of plant diversity;
3. *Emphasizes* that the targets should be viewed as a flexible framework within which national and/or regional targets may be developed, according to national priorities and capacities, and taking into account differences in plant diversity between countries;
4. *Invites* Parties and Governments to develop national and/or regional targets, and, as appropriate, to incorporate them into relevant plans, programmes and initiatives, including national biodiversity strategies and action plans;
5. *Stresses* the potential role of the strategy in contributing to poverty alleviation and sustainable development;
6. *Emphasizes* the need for capacity-building, particularly in developing countries, small island developing States, and countries with economies in transition, in order to enable them to implement the strategy;
7. *Invites* Parties, other Governments, the financial mechanism, and funding organizations to provide adequate and timely support to the implementation of the strategy, especially by developing country Parties, in particular the least developed countries and small island developing States among them, and Parties with economies in transition;
8. *Decides* to review, at its eighth and tenth meetings, the progress made in reaching the global targets, and provide additional guidance in light of those reviews, including, as necessary, refinement of the targets;

9. *Decides* to consider the Global Strategy for Plant Conservation as a pilot approach for the use of outcome targets under the Convention within the context of the Strategic Plan and, also consider the wider application of this approach to other areas under the Convention, including other taxonomic groups;

10. *Requests* the Subsidiary Body on Scientific, Technical and Technological Advice:

- (a) To take the targets into consideration in its periodic reviews of the thematic and cross-cutting programmes of work of the Convention;
- (b) To develop ways and means, within the Convention's thematic and cross-cutting programmes of work, for promoting implementation of the global strategy for plant conservation, and for monitoring and assessing progress; and to report to the Conference of the Parties at its seventh meeting;

11. *Welcomes* the contribution of the “Gran Canaria Group” in developing this Strategy, and invite the organizations involved, and other relevant organizations, in collaboration with the Executive Secretary, to contribute to the further development, implementation and monitoring of the Strategy.

ANNEX GLOBAL STRATEGY FOR PLANT CONSERVATION

A. Objectives

1. The ultimate and long-term objective of the Global Strategy for Plant Conservation is to halt the current and continuing loss of plant diversity.

2. The Strategy will provide a framework to facilitate harmony between existing initiatives aimed at plant conservation, to identify gaps where new initiatives are required, and to promote mobilization of the necessary resources.

3. The Strategy will be a tool to enhance the ecosystem approach to the conservation and sustainable use of biodiversity and focus on the vital role of plants in the structure and functioning of ecological systems and assure provision of the goods and services such systems provide.

4. The Strategy will also:

- (a) Provide a pilot exercise under the Convention for the setting of targets that relate to ultimate objectives of the Convention;
- (b) Act as a means to develop and implement the thematic programmes of work of the Convention.

5. Within the ultimate and long-term objective, a number of sub-objectives can be identified as follows:

- (a) *Understanding and documenting plant diversity:*
 - (i) Document the plant diversity of the world, including its use and its distribution in the wild, in protected areas and in *ex situ* collections;

- (ii) Monitor the status and trends in global plant diversity and its conservation, and threats to plant diversity, and identify plant species, plant communities, and associated habitats and ecosystems, at risk, including consideration of “red lists”;
 - (iii) Develop an integrated, distributed, interactive information system to manage and make accessible information on plant diversity;
 - (iv) Promote research on the genetic diversity, systematics, taxonomy, ecology and conservation biology of plants and plant communities, and associated habitats and ecosystems, and on social, cultural and economic factors that impact biodiversity, so that plant diversity, both in the wild and in the context of human activities, can be well understood and utilized to support conservation action;
- (b) *Conserving plant diversity*: Improve long-term conservation, management and restoration of plant diversity, plant communities, and the associated habitats and ecosystems, *in situ* (both in more natural and in more managed environments), and, where necessary to complement *in situ* measures, *ex situ*, preferably in the country of origin. The Strategy will pay special attention to the conservation of the world’s important areas of plant diversity, and to the conservation of plant species of direct importance to human societies;
- (c) *Using plant diversity sustainably*:
- (i) Strengthen measures to control unsustainable utilization of plant resources;
 - (ii) Support the development of livelihoods based on sustainable use of plants, and promote the fair and equitable sharing of benefits arising from the use of plant diversity;
- (d) *Promoting education and awareness about plant diversity*: Articulate and emphasize the importance of plant diversity, the goods and services that it provides, and the need for its conservation and sustainable use, in order to mobilize necessary popular and political support for its conservation and sustainable use;
- (e) *Building capacity for the conservation of plant diversity*:
- (i) Enhance the human resources, physical and technological infrastructure necessary, and necessary financial support for plant conservation;
 - (ii) Link and integrate actors to maximize action and potential synergies in support of plant conservation.

B. Rationale, scope and general principles

6. Plants are universally recognized as a vital part of the world’s biological diversity and an essential resource for the planet. In addition to the small number of crop plants used for basic food and fibres, many thousands of wild plants have great economic and cultural importance and potential, providing food, medicine, fuel, clothing and shelter for vast numbers of people throughout the world. Plants play

a key role in maintaining the planet's basic environmental balance and ecosystem stability and provide an important component of the habitats for the world's animal life. At present, a complete inventory of the plants of the world has not been assembled, but it is estimated that the total number of vascular plant species may be of the order of 300,000. Of particular concern is the fact that many are in danger of extinction, threatened by habitat transformation, over-exploitation, alien invasive species, pollution and climate change. The disappearance of such vital and large amounts of biodiversity sets one of the greatest challenges for the world community: to halt the destruction of the plant diversity that is so essential to meet the present and future needs of humankind. The Global Strategy for Plant Conservation is proposed to address this challenge. While the entry point for the Strategy is conservation, aspects of sustainable use and benefit-sharing are also included.

7. The rationale for a strategy focusing on plants has two aspects:

- (a) Plants are primary producers and provide habitat infrastructure for many ecosystems;
- (b) Setting meaningful targets is feasible since scientific understanding of at least higher plants, though incomplete, is better than for most other groups.

8. Accordingly, the Strategy addresses the Plant Kingdom with focus on higher plants, and other well-described groups such as Bryophytes and Pteridophytes. The setting of measurable targets for this set of taxa is more credible than for many lower plant groups. This does not imply that these groups do not have important ecological functions, nor that they are not threatened. However, effective action will be best achieved by focusing, in an initial phase at least, on achievable outcomes for known taxa. Parties may choose on a national basis to include lower taxa.

9. The Strategy applies to plant genetic diversity, plant species and communities and their associated habitats and ecosystems.

10. The Strategy would provide a framework for actions at global, regional, national and local levels. A global dimension to the Strategy is important because it can:

- (a) Facilitate the development of a global consensus of key objectives, targets and actions;
- (b) Strengthen possibility of implementing necessary transnational actions (such as some recovery programmes);
- (c) Optimize availability and usefulness of information;
- (d) Be used to focus research on key generic issues (such as conservation methods);
- (e) Allow the identification of appropriate standards for plant conservation;
- (f) Mobilize support for globally significant actions (globally threatened species; "centres of plant diversity" and "hot spots"); and
- (g) Allow for collaboration between national, regional and international entities.

11. The Global Strategy for Plant Conservation will:

- (a) Apply the Convention provisions on access and benefit-sharing, drawing as appropriate on the Bonn Guidelines for access and benefit-sharing, with a view to ensuring a fair and equitable sharing of benefits arising from the use of genetic resources, and consistent with the International Treaty on Plant Genetic Resources for Food and Agriculture;
- (b) Build upon the knowledge, innovations and practices of indigenous and local communities, with the approval and involvement of the holders of such knowledge, innovations and practices, and contribute to the implementation of Article 8(j) of the Convention;
- (c) Apply the ecosystem approach adopted under the Convention, recognizing the interaction of plants and plant communities, with other components of ecosystems, at all scales, and their role in ecosystem functions and processes. The ecosystem approach also implies, *inter alia*, intersectoral cooperation, decentralization of management to the lowest level appropriate, equitable distribution of benefits, and the use of adaptive management policies that can deal with uncertainties and are modified in the light of experience and changing conditions;
- (d) Employ *in situ* conservation measures as the primary approach for conservation, complementing them where necessary with *ex situ* measures. The Strategy provides an opportunity to explore linkages between *in situ* and *ex situ* conservation, including in restoration programmes.
- (e) Adopt a multidisciplinary approach that takes into account scientific, social and economic issues;
- (f) Strengthen initiatives on national inventories.

C. Targets

12. The global targets for the year 2010¹¹² are as follows, and their terms and technical rationale are appended to the present Strategy:

- (a) *Understanding and documenting plant diversity:*
 - (i) A widely accessible working list of known plant species, as a step towards a complete world flora;
 - (ii) A preliminary assessment of the conservation status of all known plant species, at national, regional and international levels;
 - (iii) Development of models with protocols for plant conservation and sustainable use, based on research and practical experience;
- (b) *Conserving plant diversity:*
 - (iv) At least 10 per cent of each of the world's ecological regions effectively conserved;
 - (v) Protection of 50 per cent of the most important areas for plant diversity assured;

112 The date of 2010 has been used to synchronize the Strategy with the Convention's Strategic Plan (see decision VI/26).

- (vi) At least 30 per cent of production lands managed consistent with the conservation of plant diversity;
 - (vii) 60 per cent of the world's threatened species conserved *in situ*;
 - (viii) 60 per cent of threatened plant species in accessible *ex situ* collections, preferably in the country of origin, and 10 per cent of them included in recovery and restoration programmes;
 - (ix) 70 per cent of the genetic diversity of crops and other major socio-economically valuable plant species conserved, and associated indigenous and local knowledge maintained;
 - (x) Management plans in place for at least 100 major alien species that threaten plants, plant communities and associated habitats and ecosystems;
- (c) *Using plant diversity sustainably:*
- (xi) No species of wild flora endangered by international trade;
 - (xii) 30 per cent of plant-based products derived from sources that are sustainably managed;
 - (xiii) The decline of plant resources, and associated indigenous and local knowledge, innovations and practices that support sustainable livelihoods, local food security and health care, halted;
- (d) *Promoting education and awareness about plant diversity:*
- (xiv) The importance of plant diversity and the need for its conservation incorporated into communication, educational and public-awareness programmes;
- (e) *Building capacity for the conservation of plant diversity:*
- (xv) The number of trained people working with appropriate facilities in plant conservation increased, according to national needs, to achieve the targets of this Strategy;
 - (xvi) Networks for plant conservation activities established or strengthened at national, regional and international levels.

13. These targets provide a framework for policy formulation and a basis for monitoring. National targets developed within this framework may vary from country to country, according to national priorities and capacities taking into account differences in plant diversity.

D. The Strategy as a framework

14. The Strategy is not intended to be a “programme of work” analogous to existing thematic and cross-cutting programmes of work under the Convention. It does not, therefore, contain detailed activities, expected outputs, etc. Rather, the Strategy provides a framework by means of setting outcome-orientated targets (these differ from the “process” targets used so far under the Convention). It is envisaged that the activities necessary to reach those targets could be developed within this framework. In many cases, activities are already under way, or envisaged in existing initiatives. These include:

- (a) Activities aimed at plant conservation within national biodiversity strategies and action plans and relevant sectoral and cross-sectoral plans, programmes and policies. In this respect, Parties and Governments may wish to report on the incorporation of the Strategy in their national plans, programmes and policies;
- (b) Relevant activities under existing relevant initiatives, in particular: the Strategic Plan and work of the Plants Committee of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the International Plant Protection Convention (IPPC); the International Treaty on Plant Genetic Resources of the Food and Agriculture Organization; the Berne Convention on the Conservation of European Wildlife and Natural Habitats, the FAO Global Plan of Action for Plant Genetic Resources for Food and Agriculture; the Man and the Biosphere programme of the United Nations Educational, Scientific Cultural Organization (UNESCO); the Global Strategy on Invasive Alien Species of the Global Invasive Species Programme (GISP); the plant conservation programme of the IUCN Species Survival Commission; the International Agenda for Botanic Gardens in Conservation; activities of the International Association of Botanic Gardens; the WWF-UNESCO people and plants programme, and regional strategies such as the European Plant Conservation Strategy of the Council of Europe and *Planta Europa*; and
- (c) Relevant activities under the programmes of work of the Convention on Biological Diversity, including those relating to agricultural biodiversity, forest biological diversity, inland water biological diversity, marine and coastal biological diversity, and dry and sub-humid lands, as well as activities involving cross-cutting issues such as access and benefit-sharing, sustainable use, indicators, alien species, the Global Taxonomy Initiative, and issues related to Article 8(j).

15. The Strategy and its 16 targets are intended to provide a framework for policy makers and public opinion and catalyse the reforms necessary to achieve plant conservation. Clear, stable, long-term targets that are adopted by the international community can help shape expectations and create the conditions in which all actors, whether Governments, the private sector, or civil society, have the confidence to develop solutions to address threats to plant diversity. For the targets to be widely understood, and appealing to public opinion, they need to be kept fairly simple and straightforward. They should be understood in a commonsensical rather than a literal way. In order that the number of targets be kept manageable, they need to focus on a set of activities that are strategic, rather than aiming to be comprehensive. Targets may be reviewed, and appropriate revised, as major new scientific evidence becomes available on important areas for plant diversity, threats to diversity, and major alien species that threaten plants, plant communities and associated habitats and ecosystems.

E. Further work required to develop and implement the Strategy

16. Measures to implement the Strategy will need to be put in place at international, national, and subnational levels. This will include development of national targets and their incorporation into relevant plans, programmes and initiatives, including national biodiversity strategies and action plans. National targets will

vary from country to country according to differences in levels of plant diversity and national priorities. Multilateral and bilateral funding agencies should consider putting in place policies and procedures to ensure that their funding activities are supportive of and do not run counter to the strategy and its targets.

17. For each target, the scope of activities may need to be clarified and sub-targets, or milestones, developed. In order to monitor progress towards achieving the targets, baseline data and a series of indicators may need to be developed. This would draw upon relevant national and international data sets (such as national “red lists”), and make full use of the clearing-house mechanism.

18. Regional components of the Strategy might be developed, perhaps using a biogeographical approach.

19. In addition to the Parties to the Convention, the design, development and implementation of the strategy should involve a range of actors, including:

- (a) International initiatives (e.g., intergovernmental organizations, United Nations agencies, multilateral aid agencies);
- (b) Conservation and research organizations (including protected-area management boards, botanic gardens, gene banks, universities, research institutes, non-governmental organizations and networks of non-governmental organizations);
- (c) Communities and major groups (including indigenous and local communities, farmers, women, youth);
- (d) Governments (central, regional, local authorities);
- (e) The private sector.

20. In order to promote implementation of the strategy and facilitate cooperation between these initiatives, the Executive Secretary will collaborate with relevant stakeholders. To ensure full participation, the actors mentioned in paragraph 19 above should reflect not only United Nations geographical regions but also biogeographical regions. This collaboration will aim at avoiding duplication of effort, promote collaboration and synergies among existing initiatives, and facilitate analysis of the status, trends, and effectiveness of different measures on the conservation and sustainable use of plant diversity. Consideration might also be given to the establishment of a flexible coordination mechanism.

Appendix

Terms and Technical Rationale for the Sixteen Targets of the Global Strategy for Plant Conservation

A. UNDERSTANDING AND DOCUMENTING PLANT DIVERSITY

TARGET I: *A widely accessible working list of known plant species, as a step towards a complete world flora*

A working list of known plant species is considered to be a fundamental requirement for plant conservation. The target is considered to be attainable by 2010, especially given that it is to be a *working* rather than a definitive list, and it is limited to *known*

organisms (currently about 270,000, which may increase by 10–20% by 2010). Some 900,000 scientific names are known for these 270,000 species. In effect the target will require the compilation and synthesis of existing knowledge, focusing on names and synonyms, and geographical distribution. Both national flora and compilations and international initiatives are important in this respect. The list could be made *accessible* through the World Wide Web, complemented by CD-ROM and printed versions. Further work on national and regional floras is necessary to lay the basis for the longer term aim of developing a complete world flora, including local and vernacular names.

TARGET 2: A preliminary assessment of the conservation status of all known plant species, at national, regional and international levels

Over 60,000 species have been evaluated for conservation status according to internationally accepted criteria, of which 34,000 are classified as globally threatened with extinction (IUCN, 1997). In addition, many countries have assessed the conservation status of their own floras. There are currently about 270,000 known species. Of those still to be evaluated, sufficient information for a full assessment is only available for a proportion. Thus, only a *preliminary* assessment will have been carried out on the remaining, “data-deficient” species. Subsequently, further fieldwork will be essential to enable more comprehensive assessments to be undertaken.

TARGET 3: Development of models with protocols for plant conservation and sustainable use, based on research and practical experience

Conservation biology research, and methodologies and practical techniques for conservation are fundamental to the conservation of plant diversity and the sustainable use of its components. These can be applied through the development and effective dissemination of relevant models and protocols for applying best practice, based on the results of existing and new research and practical experience of management. ‘Protocols’ in this sense, can be understood as practical guidance on how to conduct plant conservation and sustainable use activities in particular settings. Key areas where the development of models with protocols is required include: the integration of *in situ* and *ex situ* conservation; maintenance of threatened plants within ecosystems; applying the ecosystem approach; balancing sustainable use with conservation; and methodologies for setting conservation priorities; and methodologies for monitoring conservation and sustainable use activities.

B. CONSERVING PLANT DIVERSITY

TARGET 4: At least 10 per cent of each of the world’s ecological regions effectively conserved

About 10% of the land surface is currently covered by protected areas. In general, forests and mountain areas are well represented in protected areas, while natural grasslands (such as prairies) and coastal and estuarine ecosystems, including mangroves, are poorly represented. The target would imply: (i) increasing the representation of different ecological regions in protected areas, and (ii) increasing the

effectiveness of protected areas. Since some ecological regions will include protected areas covering more than 10% of their area, the qualifier “at least” is used. In some cases, ecosystems restoration and rehabilitation may be necessary. Effective conservation is understood to mean that the area is managed to achieve a favorable conservation status for plant species and communities. Various approaches are available for use in the identification of ecological regions, based on major vegetation types. Further targets may be agreed in the future.

TARGET 5: *Protection of 50 per cent of the most important areas for plant diversity assured*

The most important areas for plant diversity would be identified according to the criteria including endemism, species richness, and/or uniqueness of habitats, including relict ecosystems, also taking into account the provision of ecosystem services. They would be identified primarily at local and national levels. *Protection* would be *assured* through effective conservation measures, including protected areas. Experience from regional initiatives on important plant areas, as well as a similar approach on important bird areas suggests that 50% is a realistic target for 2010. In the longer term the protection of all important plant areas should be assured.

TARGET 6: *At least 30 per cent of production lands managed consistent with the conservation of plant diversity*

1. For the purpose of the target, *production lands* refer to lands where the primary purpose is agriculture (including horticulture), grazing, or wood production. *Consistent with conservation of plant diversity* implies that a number of objectives are integrated into the management of such production lands:

- Conservation of plant diversity which is an integral part of the production system itself (i.e., crop, pasture or tree species and genetic diversity);
- Protection of other plant species in the production landscape that are unique, threatened, or of particular socio-economic value;
- Use of management practices that avoid significant adverse impacts on plant diversity in surrounding ecosystems, for example by avoiding excessive release of agro-chemicals and preventing unsustainable soil erosion.

2. Increasingly, integrated production methods are being applied in agriculture, including integrated pest management, conservation agriculture, and on-farm management of plant genetic resources. Similarly, sustainable forest management practices are being more broadly applied. Against this background, and with the above understanding of the terms used, the target is considered feasible. Higher targets are appropriate for natural or semi-natural forests and grasslands.

TARGET 7: *60 per cent of the world's threatened species conserved in situ*

Conserved *in situ* is here understood to mean that populations of the species are effectively maintained in at least one protected area or through other *in situ* management measures. In some countries this figure has already been met, but it would require additional efforts in many countries. The target should be seen as a step towards the effective *in situ* conservation of all threatened species.

TARGET 8: *60 per cent of threatened plant species in accessible ex situ collections, preferably in the country of origin, and 10 per cent of them included in recovery and restoration programmes*

Currently, over 10,000 threatened species are maintained in living collections (botanic gardens, seed banks, and tissue culture collections), representing some 30% of known threatened species. It is considered that this could be increased to meet the proposed target by 2010, with additional resources, technology development and transfer, especially for species with recalcitrant seeds. Within this target it is suggested that priority be given to critically endangered species, for which a target of 90% should be attained. It is estimated that currently about 2% of threatened species are included in recovery and restoration programmes. Against this baseline, a target of 10% is recommended.

TARGET 9: *70 per cent of the genetic diversity of crops and other major socio-economically valuable plant species conserved, and associated indigenous and local knowledge maintained*

Theory and practice demonstrate that, with an appropriate strategy, 70% of the genetic diversity of a crop can be contained in a relatively small sample (generally, less than one thousand accessions). For any one species, therefore, the target is readily attainable. For some 200–300 crops, it is expected that 70% of genetic diversity is already conserved *ex situ* in gene banks. Genetic diversity is also conserved through on farm management. By working with local communities, associated indigenous and local knowledge can also be maintained. Combining genebank, on farm, and other *in situ* approaches, the target could be reached for all crops in production, as well as major forage and tree species. Other major socio-economically important species, such as medicinal plants, could be selected on a case-by-case basis, according to national priorities. Through the combined actions of countries, some 2,000 or 3,000 species could be covered in all.

TARGET 10: *Management plans in place for at least 100 major alien species that threaten plants, plant communities and associated habitats and ecosystems*

There is no agreed reliable estimate of the number of alien species that threaten indigenous plants, plant communities and associated habitats and ecosystems to such an extent that they may be considered as “major.” It is recommended therefore that the target be established for an absolute number of such major invasive alien species. The wording “At least 100” is considered appropriate. The 100 invasive alien species would be selected on the basis of national priorities, also taking into account their significance at regional and global levels. For many alien species, it is expected that different management plans will be required in different countries in which they threaten plants, plant communities and associated habitats and ecosystems. This target would be considered as a first step towards developing management plans for all major alien species that threaten plants, plant communities and associated habitats and ecosystems.

C. USING PLANT DIVERSITY SUSTAINABLY

TARGET 11: *No species of wild flora endangered by international trade*

The proposed formulation of the target is more precise since it focuses on those species that are actually threatened by international trade. So formulated, the target is attainable and is complementary to target 12. Species of wild flora endangered by international trade include but are not limited to species listed on CITES appendix 1. The target is consistent with the main purpose of the CITES Strategic Plan (to 2005): “No species of wild flora subject to unsustainable exploitation because of international trade.”

TARGET 12: *30 per cent of plant-based products derived from sources that are sustainably managed*

1. *Plant-based products* include food products, timber, paper and other wood-based products, other fibre products, and ornamental, medicinal and other plants for direct use.

2. *Sources that are sustainably managed* are understood to include:

- Natural or semi-natural ecosystems that are sustainably managed (by avoiding over-harvesting of products, or damage to other components of the ecosystem), excepting that commercial extraction of resources from some primary forests and near-pristine ecosystems of important conservation value might be excluded.
- Sustainably managed, plantation forests and agricultural lands.

3. In both cases, sustainable management should be understood to integrate social and environmental considerations, such as the fair and equitable sharing of benefits and the participation of indigenous and local communities.

4. Indicators for progress might include:

- Direct measures e.g.: products meeting relevant verified standards (such as for organic food, certified timber, and intermediate standards that codify good practices for sustainable agriculture and forestry);
- Indirect measures e.g.: products from sources considered to be sustainable, or near-sustainable, on the basis of farming system analyses, taking into account the adoption of integrated production methods. Assessment of progress will be assisted by the development of criteria and indicators of sustainable agricultural and forest management.

5. Certified organic foods and timber currently account for about 2% of production globally. For several product categories, examples exist of 10–20% of products meeting intermediate standards. Against this baseline, the target is considered to be attainable. It would be applied to each category of plant-based products, understanding that for some categories it will be more difficult to reach and more difficult to monitor progress. Implementation would require a combination of product-specific and sector-wide approaches, consistent with the Convention’s programme of work on agricultural biodiversity.

TARGET 13: *The decline of plant resources, and associated indigenous and local knowledge innovations and practices, that support sustainable livelihoods, local food security and health care, halted.*

Plant diversity underpins livelihoods, food security and health care. This target is consistent with one of the widely agreed international development targets, namely to “ensure that current trends in the loss of environmental resources are effectively reversed at both global and national levels by 2015.” It is recommended feasible to halt the decline by 2010 and subsequently to reverse the decline. Relevant plant resources and methods to address their decline are largely site specific and thus implementation must be locally driven. The scope of the target is understood to encompass plant resources and associated ethnobotanical knowledge. Measures to address the decline in associated indigenous and local knowledge should be implemented consistent with the Convention’s programme of work on Article 8(j) and related provisions.

D. PROMOTING EDUCATION AND AWARENESS ABOUT PLANT DIVERSITY

TARGET 14: *The importance of plant diversity and the need for its conservation incorporated into communication, education and public awareness programmes*

Communication, education and the raising of public awareness about the importance of plant diversity are crucial for the achievement of all the targets of the strategy. This target is understood to refer to both informal and formal education at all levels, including primary, secondary and tertiary education. Key target audiences include not only children and other students, but also policy-makers and the public in general. Consideration should be given to developing specific indicators to monitor progress towards achievement of the overall target. It may be helpful to develop indicators for specific target audiences. Given the strategic importance of education about plant conservation, this issue should be included not only in environmental curricula, but should also be included in broader areas of mainstream education policy.

E. BUILDING CAPACITY FOR THE CONSERVATION OF PLANT DIVERSITY

TARGET 15: *The number of trained people working with appropriate facilities in plant conservation increased, according to national needs, to achieve the targets of this Strategy*

The achievement of the targets included in the Strategy will require very considerable capacity-building, particularly to address the need for conservation practitioners trained in a range of disciplines, with access to adequate facilities. In addition to training programmes, the achievement of this target will require long-term commitment to maintaining infrastructure. “Appropriate facilities” are understood to include adequate technological, institutional and financial resources. Capacity-building should be based on national needs assessments. It is likely that the number of trained people working in plant conservation world-wide will need to double by 2010. Given the current geographical disparity between biodiversity and expertise, this is likely to involve considerably more than a doubling of capacity in many developing countries, small island developing States and coun-

tries with economies in transition. Increased capacity should be understood to include not only in-service training, but also the training of additional staff and other stakeholders, particularly at the community level.

TARGET I6: *Networks for plant conservation activities established or strengthened at national, regional and international levels*

Networks can enhance communication and provide a mechanism to exchange information, know-how and technology. Networks will provide an important component in the coordination of effort among many stakeholders for the achievement of all the targets of the strategy. They will also help to avoid duplication of effort and to optimise the efficient allocation of resources. Effective networks provide a means to develop common approaches to plant conservation problems, to share policies and priorities and to help disseminate the implementation of all such policies at different levels. They can also help to strengthen links between different sectors relevant to conservation, e.g. the botanical, environmental, agricultural, forest and educational sectors. Networks provide an essential link between on-the-ground conservation action and coordination, monitoring and policy development at all levels. This target is understood to include the broadening of participation in existing networks, as well as the establishment, where necessary, of new networks.

DECISION VI/10 | Article 8(j) and related provisions

The Conference of the Parties,

Recalling decision V/16,

Also recalling the second phase of the programme of work and the general principles on the implementation of Article 8(j) and related provisions,

Further recalling paragraph 2 of decision V/16 to complete task 7 relating to the fair and equitable sharing of benefits and task 12 concerning the safeguard and full guarantee of the rights of indigenous and local communities over their traditional knowledge, innovations and practices (which could include *sui generis* systems) within the context of the Convention of the first phase of the programme of work, and that tasks 5 and 11 have not been completed,

Emphasizing the need for dialogue with representatives of indigenous and local communities, particularly women for the conservation and sustainable use of biological diversity within the framework of the Convention,

Noting the progress made in the integration of relevant tasks of the programme of work in the thematic programmes of the Convention, and in the implementation of the priority tasks of the programme of work on Article 8(j) and related provisions,

Recalling principle 10 of the Rio Declaration on Environment and Development,

Recognizing the need to further explore ways and means to enhance the full and effective participation of indigenous and local communities in the Convention process,

Recognizing that the Convention on Biological Diversity is the primary international instrument with the mandate to address issues regarding the respect, preservation and maintenance of knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant to the conservation and sustainable use of biological diversity,

Also recognizing that indigenous and local communities have their own systems for the protection and transmission of traditional knowledge as part of their customary law,

Further recognizing the need to strengthen national laws, policies and other measures, where necessary, and the need for synergies with measures at the international level for the protection of traditional knowledge, innovations and practices of indigenous and local communities,

Noting with appreciation the work of the Intergovernmental Committee on Intellectual Property, Genetic Resources, Traditional Knowledge and Folklore of the World Intellectual Property Organization, and that of the Permanent Forum on Indigenous Issues established by the Economic and Social Council, the Working Group on Indigenous Populations of the United Nations Commission on Human Rights, the United Nations Development Programme, the United Nations Environment Programme, the United Nations Educational, Scientific and Cultural Organization, the United Nations Conference on Trade and Development, and the World Health Organization, the International Labour Organization and encourages further collaboration among them and with the Convention on Biological Diversity,

Noting that other relevant international and intergovernmental bodies such as the United Nations Conference on Trade and Development, the United Nations Environment Programme, the Food and Agriculture Organization of the United Nations, the United Nations Educational, Scientific and Cultural Organization, the World Trade Organization, the Working Group on Indigenous Populations of the Commission on Human Rights, and the World Health Organization are also discussing related matters in their work programmes,

Noting the ongoing review process of the World Trade Organization Agreement on Trade-related Aspects of Intellectual Property Rights, particularly with respect to Article 27.3(b) and Article 71 of the Agreement,

Noting also the work on the role of intellectual property rights in the implementation of access and benefit-sharing arrangements with the framework of the Ad Hoc Open-ended Working Group on Access and Benefit-Sharing,

Further noting paragraph 19 of the Declaration of the World Trade Organization Doha Ministerial Meeting related to the examination by World Trade Organization Council on Trade-related Aspects of Intellectual Property Rights of the relationship between the Agreement on Trade-related Aspects of Intellectual Property Rights and the Convention on Biological Diversity as well as the protection of traditional knowledge,

A. Report on progress in the integration of relevant tasks of the programme of work on Article 8(j) and related provisions into the thematic programmes of the Convention on Biological Diversity

1. *Requests* the Executive Secretary of the Convention to examine, in collaboration with the Food and Agriculture Organization of the United Nations, the implication of the International Treaty on Plant Genetic Resources for Food and Agriculture on the issues under Article 8(j) and related provisions;
2. *Notes* the progress made in the integration of the relevant tasks of the programme of work in the thematic programmes of the Convention and *emphasizes* to Parties the need for further action on:
 - (a) With regard to forest biological diversity, the development of methodologies to advance the integration of traditional forest-related knowledge into sustainable forest management, promotion of activities to assemble management experiences and scientific, indigenous and local information at the national and local levels, and dissemination of research results and syntheses of reports on relevant scientific and traditional knowledge on key forest biological issues;
 - (b) With regard to marine and coastal biological diversity, the provision of information regarding approaches to the management of marine and coastal living resources in relation to those used by indigenous and local communities;
 - (c) With regard to inland water ecosystems, the implementation of the guidelines for establishing and strengthening local communities' and indigenous peoples' participation in the management of wetlands, adopted by the Conference of the Parties to the Ramsar Convention, through its resolution VII.8;
 - (d) With regard to agricultural biological diversity, the need to support local dryland and sub-humid ecosystems, and capacity-building to promote farming practices and information exchange to assist farmers and indigenous and local communities to transform unsustainable agricultural practices to sustainable ones and to increase productivity;
3. *Urges* Parties, where they have not already done so, to include information in their national reports on each of the thematic programmes dealt with under the Convention on Biological Diversity, on:
 - (a) The status and trends in relation to traditional knowledge, innovations and practices of indigenous and local communities;
 - (b) Measures taken to enhance the participation of indigenous and local communities, particularly that of women from such communities, and their relevant organizations in the implementation of national work programmes in each of the thematic areas; and
 - (c) Capacity-building measures taken to facilitate the involvement of indigenous and local communities and the application of the knowledge they hold, with their prior informed consent, in the management, conservation and sustainable use of biological diversity in each of the thematic areas at national, subnational and local levels;

4. *Requests* the Executive Secretary to prepare a progress report on the integration of the relevant tasks of the programme of work on Article 8(j) into each of the thematic areas, taking into account the above information, for the consideration of the Ad Hoc Working Group on Article 8(j) and Related Provisions at its third meeting;
5. *Reminds* Parties of the need for further action in relation to the potential impacts of genetic use restriction technologies on the indigenous and local communities and on Farmer's Rights, according to the studies and reports elaborated by different relevant organizations, the consultations held by the Executive Secretary, and other appropriate analysis and information sources.

B. Review of progress in the implementation of the priority tasks of the programme of work on Article 8(j) and related provisions

Recalling paragraph 6 of decision V/19, in which it is recommended that Parties prepare their national reports through a consultative process involving all relevant stakeholders, as appropriate, or by drawing upon information developed through other consultative processes, and requests Parties to ensure that indigenous and local communities, as well as women are included in the consultative process, particularly in relation to the preparation of those sections of the national report dealing with Article 8(j) and related provisions and the programme of work,

6. *Requests* the Executive Secretary to prepare a report on progress on the implementation of the programme of work on Article 8(j) and related provisions based on information submitted in national reports, and other relevant information, for the next meeting of the Ad Hoc Open-ended Inter-sessional Working Group on Article 8(j) and Related Provisions;
7. *Decides* that one meeting of the Ad Hoc Open-ended Inter-sessional Working Group on Article 8(j) and Related Provisions be organized prior to the seventh meeting of the Conference of the Parties in order to ensure further advancement of the implementation of the work programme on Article 8(j) and related provisions.

C. Outline of the composite report on the status and trends regarding the knowledge, innovations and practices of indigenous and local communities relevant to the conservation and sustainable use of biodiversity

8. *Adopts* the outline of the composite report on the status and trends regarding the knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant to the conservation and sustainable use of biological diversity as a basis for proceeding with the first phase of information-gathering and reporting, as contained in annex I to the present decision;
9. *Requests* the Executive Secretary to undertake the first phase of the composite report, based upon elements 1 and 2 in the outline, and to submit the first phase report to the next meeting of the Ad Hoc Open-ended Inter-sessional Working Group on Article 8(j) and Related Provisions. This will include recommendations for the subsequent phases and, as necessary, revision of the outline;

10. *Also requests* the Executive Secretary to use the information contained in the report to support further advancement of the programme of work on Article 8(j) and related provisions of the Convention on Biological Diversity;

11. *Further requests* the Executive Secretary to ensure the full and effective participation of indigenous and local communities, particularly women, in the completion of the report, through, *inter alia*, the organization of regional workshops, and *encourages* Parties and Governments to hold national workshops. In that regard, appropriate financing should be provided. The outcome of the workshops will be submitted to the Secretariat as a contribution to the composite report.

D. Recommendations for the conduct of cultural, environmental and social impact assessment regarding developments proposed to take place on, or which are likely to impact on, sacred sites and on lands and waters traditionally occupied or used by indigenous and local communities

12. *Adopts*, pursuant to Article 8(j) and Article 14 of the Convention on Biological Diversity and decision V/16 of the Conference of the Parties, the recommendations for the conduct of cultural, environmental, and social impact assessments regarding development proposed to take place on, or which are likely to impact on, sacred sites and on lands and waters traditionally occupied or used by indigenous and local communities contained in annex II to the present decision;

13. *Requests* the Ad Hoc Open-ended Inter-sessional Working Group on Article 8(j) and Related Provisions, at its third meeting, to carry out further work on guidelines for the conduct of cultural, environmental and social impact assessments regarding developments proposed to take place on, or which are likely to impact on, sacred sites and on lands and waters traditionally occupied or used by indigenous and local communities. Such work, with the aim of strengthening the social and cultural aspects, should complement and be in conjunction with the “guidelines for incorporating biodiversity-related issues into environmental assessment legislation and/or processes and in strategic environmental assessment,” endorsed by the Conference of the Parties in its decision VI/7 A, and address institutional and procedural considerations;

14. *Also requests* the Ad Hoc Open-ended Inter-sessional Working Group on Article 8(j) and Related Provisions to submit the outcome of its work from its third meeting for consideration at the seventh meeting of the Conference of the Parties;

15. *Invites* Parties and Governments to pay due regard to these recommendations until the complete set of guidelines for impact assessment is finalized;

16. *Requests* Parties and Governments to undertake education and awareness-raising and develop communication strategies that allows indigenous and local communities, with special attention to indigenous and local community women, relevant government departments and agencies, private sector developers, potential stakeholders in development projects, and the public at large to be made aware of these recommendations, for incorporation, as appropriate, into policies and processes for the assessment of proposed developments;

17. *Invites* those secretariats of intergovernmental agreements, agencies, organizations and processes whose mandates and activities involve potential significant impacts on biological diversity, or who are in the process of developing guidelines or policies regarding such impacts, to take into consideration the recommendations contained in annex II to the present decision;

18. *Also invites* international funding and development agencies that provide funding and other forms of assistance to Governments, developing countries, in particular least developed countries and small island developing States, to facilitate the incorporation of the recommendations into policies and processes for the assessment of proposed developments;

19. *Further invites* international funding and development agencies and relevant non-governmental organizations, where requested, and in accordance with their mandates and responsibilities, to consider providing assistance to indigenous and local communities, particularly women, for the conduct of cultural, environmental and social impact assessments regarding developments proposed to take place on territories, lands and waters traditionally occupied or used by them, and which take into account the recommendations in annex II to the present decision.

E. Participatory mechanisms for indigenous and local communities

20. *Invites* Parties, Governments and relevant international, non-governmental and indigenous and local community organizations, to submit to the Executive Secretary information on their national experiences, case-studies, best practices, and lessons learned concerning participatory mechanisms for indigenous and local communities in matters related to the objectives of Article 8(j) and related provisions of the Convention;

21. *Requests* the Executive Secretary to prepare a synthesis report based on the information referred to in paragraph 20 above, and, taking into account that conditions may vary from country to country, *invites* Parties and Governments to use the report as a basis for the establishment and/or strengthening of mechanisms at the national and local levels aimed at promoting full and effective participation of indigenous and local communities, especially women, in the decision-making process regarding the preservation, maintenance and utilization of traditional knowledge relevant for the conservation and sustainable use of biological diversity;

22. *Requests* the Executive Secretary to explore and, as appropriate, secure potential sources of funding to facilitate the full and effective participation of indigenous and local communities of all geographical regions in meetings organized within the framework of the Convention and to report thereon to the Conference of the Parties;

23. *Urges* Parties and Governments to strengthen their efforts to support capacity-building aimed at the full and effective participation of indigenous and local communities, particularly women, in decision-making processes regarding the preservation, maintenance and utilization of traditional knowledge relevant for the conservation and sustainable use of biological diversity at all levels (local, national, regional and international); and, where indigenous and local communities and Par-

ties and Governments deem appropriate, promote their participation in the management of biological diversity; and encourage the capacity-building efforts of indigenous and local communities in getting access to existing protections in national and international laws regarding the preservation, maintenance and utilization of their traditional knowledge;

24. *Also urges* Parties and Governments and, as appropriate, international organizations to encourage and support the development of communication mechanisms, such as the Indigenous Biodiversity Information Network, among indigenous and local communities in response to their need for better understanding of the objectives and provisions of the Convention on Biological Diversity and for supporting discussions on guidelines, priorities, time-lines and the implementation of the thematic programmes of the Convention;

25. *Requests* the Executive Secretary to consult with the secretariats of relevant environmental conventions and programmes, such as the United Nations Convention to Combat Desertification, the United Nations Framework Convention on Climate Change, the Convention on Wetlands (Ramsar, Iran, 1971), the Convention on the Conservation on Migratory Species of Wild Animals, and the Convention on International Trade in Endangered Species of Wild Fauna and Flora, and to explore the possibility of cooperating in order to facilitate collaboration among the different conventions with regard to the participation and involvement of indigenous and local communities in discussions related to the maintenance and application of traditional knowledge relevant for the conservation and sustainable use of biological diversity;

26. *Also requests* the Executive Secretary to communicate with the Permanent Forum on Indigenous Issues, established as a subsidiary organ of the United Nations Economic and Social Council, and other relevant bodies such as the World Intellectual Property Organization, the United Nations Conference on Trade and Development and the United Nations Educational, Scientific and Cultural Organization, in order to explore possibilities of coordination and collaboration on matters of mutual concern;

27. *Urges* Parties and Governments to develop, implement and evaluate, in cooperation with indigenous and local communities, strategies aimed at promoting awareness and enhancing access by indigenous and local communities to information on issues relating to Article 8(j) and related provisions of the Convention;

28. *Requests* the Executive Secretary to establish a technical expert group to develop the roles and responsibilities of the thematic focal point within the clearing-house mechanism of the Convention on issues related to Article 8(j) and related provisions, in accordance with task 8 of the programme of work adopted by the Conference of the Parties in its decision V/16;

29. *Also requests* funding agencies, in particular the Global Environment Facility, to provide information on activities and processes, including information on the criteria for eligibility and access to project funding, and make such information easily accessible to Parties, Governments and indigenous and local communities (for example, through electronic, print/broadcast, popular publications, and other means);

30. *Invites* the Global Environment Facility to give special consideration in funding to projects that clearly contain elements of participation of indigenous and local communities, where appropriate, and to continue to apply the Global Environment Facility's policy on public involvement to support the full and effective participation of indigenous and local communities.

F. Assessment of the effectiveness of existing subnational, national and international instruments, particularly intellectual property rights instruments, that may have implications for the protection of the knowledge, innovations and practices of indigenous and local communities

31. *Invites* the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore of the World Intellectual Property Organization to continue its efforts to promote the more effective participation of indigenous and local communities in its work and invites the Intergovernmental Committee to examine and consider mechanisms to protect traditional knowledge, such as the disclosure of the origin of relevant traditional knowledge in applications for intellectual property rights;

32. *Invites* the Scientific, Technical, and Research Commission of the Organization of African Unity to continue its work and requests the Executive Secretary to encourage and assist the African Union to facilitate implementation of, in a manner consistent with the Convention on Biological Diversity, the African Model Law for the Protection of the Rights of Local Communities, Farmers and Breeders and for the Regulation of Access to Biological Resources;

33. *Also invites* Parties and Governments, with the approval and involvement of indigenous and local communities representatives, to develop and implement strategies to protect traditional knowledge, innovations and practices based on a combination of appropriate approaches, respecting customary laws and practices, including the use of existing intellectual property mechanisms, *sui generis* systems, customary law, the use of contractual arrangements, registers of traditional knowledge, and guidelines and codes of practice, with the support of relevant inter-governmental organizations such as the Working Group on Indigenous Populations of the United Nations Commission on Human Rights, the Permanent Forum on Indigenous Issues established by the Economic and Social Council, the World Health Organization, the World Intellectual Property Organization, the United Nations Educational, Scientific and Cultural Organization, and the United Nations Conference on Trade and Development;

34. *Requests* the Ad Hoc Open-ended Inter-sessional Working Group on Article 8(j) and Related Provisions of the Convention on Biological Diversity to address the issue of *sui generis* systems for the protection of traditional knowledge, focusing in particular on the following issues:

- (a) Clarification of relevant terminology;
- (b) Compiling and assessing existing indigenous, local, national and regional *sui generis* systems;

- (c) Making available this compilation and assessment through the clearing-house mechanism of the Convention;
- (d) Studying existing systems for handling and managing innovations at the local level and their relation to existing national and international systems of intellectual property rights, with a view to ensure their complementarity;
- (e) Assessing the need for further work on such systems at the local, national, regional and international levels;
- (f) Identifying the main elements to be taken into consideration in the development of *sui generis* systems;
- (g) The equitable sharing of benefits arising from the utilization of traditional knowledge, innovations and practices of indigenous and local communities, taking into account the work carried out by the Intergovernmental Committee Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore with a view to promote mutual supportiveness, and existing regional, subregional, national and local initiatives;

35. *Also requests* the Executive Secretary to continue to compile information provided by Parties and Governments relating to existing national legislation and other measures for the protection of traditional knowledge, innovations and practices;

36. *Invites* the World Trade Organization and the World Intellectual Property Organization to make available to the Executive Secretary information referred to in paragraph 35 above provided through their respective notification systems;

37. *Requests* the Executive Secretary to make the information referred to in paragraphs 35 and 36 above available through, *inter alia*, the clearing-house mechanism, with a view to enabling Parties and Governments to monitor the implementation of Article 8(j) and to identify best practices;

38. *Invites* the World Intellectual Property Organization to forward to the Executive Secretary all documents considered to be relevant with respect to advances made by the Intergovernmental Committee so that they be included in documentation for meetings of the Working Group on Article 8(j);

39. *Encourages* Parties and Governments, where they have not already done so, to take measures to establish or improve operational links between their national governmental intellectual-property bodies, national focal points of the Convention on Biological Diversity, and indigenous and local communities and their organizations in order to better coordinate and institute measures to protect their traditional knowledge, innovations and practices relevant to the conservation and sustainable use of biological diversity, particularly with regard to traditional-knowledge documentation initiatives and community-based registries of traditional knowledge;

40. *Also encourages* Parties and Governments, with the assistance of international development agencies and other relevant organizations, as appropriate, and with the participation, involvement and consent of the concerned indigenous and local communities, to undertake pilot projects in order to evaluate the effectiveness of existing intellectual property rights regimes, contractual methods and new systems being developed as a means of protection of traditional knowledge;

41. *Invites* Parties and Governments, with the approval and involvement of indigenous and local communities to examine the feasibility of establishing mechanisms to protect the traditional knowledge, innovations and practices of these communities relevant to the conservation and sustainable use of biological diversity, taking into consideration customary laws and practices, and subject to national legislation:

42. *Also invites* Parties, Governments, international development agencies, and other relevant international organizations and institutions to provide technical and financial assistance to developing country Parties, in particular the least developed and small island developing States among them, and countries with economies in transition, and to indigenous and local communities, in consultation with the national focal points, where appropriate, for the enhancement of national capacities for the establishment and maintenance of mechanisms to protect traditional knowledge at national and subnational levels, and for building the capacity of indigenous and local communities to develop strategies and systems for the protection of traditional knowledge;

43. *Further invites* Parties and Governments, indigenous and local communities and relevant organizations to exchange national experiences among countries where progress has been made in incorporating elements of customary law relevant for the protection of traditional knowledge, innovations and practices of indigenous and local communities in national legislation;

44. *Also invites* Parties and Governments, indigenous and local community organizations and other relevant organizations to submit case-studies and other relevant information for the Executive Secretary to compile and disseminate through the clearing-house mechanism concerning:

- (a) Information regarding the nature, diversity and status under national laws of customary laws of indigenous and local communities, collected with their full and effective participation;
- (b) The development of strategies by indigenous and local communities to protect their traditional knowledge, innovations and practices, emphasizing the approaches used, the method of implementation and problems encountered;
- (c) The establishment of operational links between national intellectual-property authorities and indigenous and local communities to facilitate the protection of their traditional knowledge, innovations and practices relevant to the conservation and sustainable use of biological diversity;
- (d) Experiences in the implementation of regionally harmonized *sui generis* systems; and
- (e) The activities and conduct of researchers and academic institutions pertinent to the protection and promotion of traditional knowledge, innovations and practices;

45. *Requests* the Executive Secretary to disseminate the case-studies and information referred to in paragraph 44 above through the clearing-house mechanism and other relevant means;

46. *Invites* Parties and Governments to encourage the disclosure of the origin of relevant traditional knowledge, innovations and practices of indigenous and local communities relevant to the conservation and sustainable use of biological diversity in applications for intellectual property rights, where the subject matter of the application concerns or makes use of such knowledge in its development;
47. *Urges* Parties and Governments to examine, as appropriate, relevant provisions of the Convention on Biological Diversity with respect to prior informed consent and mutually agreed terms where traditional knowledge is used in its original form or in the development of new products and/or new applications;
48. *Invites* Parties and Governments, with the assistance of the World Intellectual Property Organization, to take into account traditional knowledge in the examination of novelty and inventive step in patent applications;
49. *Also invites* Parties, Governments and relevant international organizations to submit information on the feasibility of establishing appropriate dispute-settlement or arbitration procedures and mechanisms, including the possible application of Article 27 of the Convention on Biological Diversity, to address cases of disputes between contracting Parties concerning the interpretation or application of the Convention relating to traditional knowledge, innovations and practices.

ANNEX I

OUTLINE OF THE COMPOSITE REPORT ON THE STATUS AND TRENDS REGARDING THE KNOWLEDGE, INNOVATIONS AND PRACTICES OF INDIGENOUS AND LOCAL COMMUNITIES RELEVANT TO THE CONSERVATION AND SUSTAINABLE USE OF BIODIVERSITY, AND THE PLAN AND TIMETABLE FOR ITS PREPARATION

I. Outline of the Composite Report

The following is an indicative list of possible topics and sub-topics that could be addressed in the composite report. Review of phase I will lay the necessary foundation for the subsequent review under phase II.

A. PHASE I

1. The state of the retention of traditional biodiversity-related knowledge

1. The state of retention of traditional knowledge varies considerably from country to country and within countries; in relation to global food and medicinal security; and across and within major ecosystem categories. In many indigenous and local communities, some traditional practices relevant to the conservation and sustainable use of biological resources have ceased as a result of such factors as loss of land, disappearance of subsistence species from local ecosystems, and national programmes for modernization and resettlement. However, the knowledge of those practices still remains, making their reintroduction, in relevant circumstances, a practical option for the purposes of indigenous and local communities. In this section, it is proposed, under the following headings, to assess the state of retention of traditional knowledge in relation to three important biological diversity sectors

(food, medicine, and conservation and sustainable use of flora and fauna) and in relation to the major ecosystem categories, and also assess the feasibility of taking measures to conserve and protect threatened traditional knowledge and practices associated with the conservation and sustainable use of biological diversity.

- 1.1 Status of traditional knowledge of plant genetic resources for food and agriculture (PGRFA).
 - 1.2 Status of traditional knowledge of animals and microorganisms for food and other purposes.
 - 1.3 Status of traditional medicinal knowledge.
 - 1.4 Status of traditional knowledge systems concerning the following ecosystem categories:
 - 1.4.1 Forests
 - 1.4.2 Dryland and steppes ecosystems
 - 1.4.3 Marine and coastal ecosystems
 - 1.4.4 Island ecosystems
 - 1.4.5 Mountain and valley ecosystems
 - 1.4.6 Inland waters
 - 1.4.7 Arctic ecosystems.
 - 1.5 Knowledge versus practice: state of retention of traditional knowledge concerning practices relevant to the customary management, conservation and sustainable use of biological diversity that are no longer maintained or are at risk of disappearing.
 - 1.6 Assessing the feasibility of using existing traditional knowledge to maintain customary practices relevant for the management, conservation and sustainable use of biological diversity.
2. The research should be conducted in a fashion that is not intrusive, gives effect to the need to respect, preserve and maintain traditional knowledge, innovations and practices, and respects the capacity of indigenous and local communities to protect traditional knowledge.
2. Identification and assessment of measures and initiatives to protect, promote and facilitate the use of traditional knowledge
3. National reports to date have revealed a range of measures that have been taken in various countries at national and local levels to stem the loss of traditional knowledge. Such measures include legislation governing access to genetic resources that also requires the free prior informed consent of affected indigenous and local communities; recognition of customary systems of land tenure; establishment of traditional knowledge registers; introduction of *sui generis* laws to protect traditional knowledge; language programmes to recover and/or maintain local languages; constitutional recognition of the rights of indigenous and local communities, with empowerment at the local level to enact various laws that can be used to protect the interests of the community; wider application of traditional knowledge, with the consent and involvement of its holders, in a range of biodiversity conservation

and sustainable use measures; repatriation from museums and other holding institutions of important objects and associated information to communities of origin, researchers to return knowledge and information of indigenous peoples to the respective groups; and the establishment of codes of ethics, to be determined by indigenous peoples, to guide conduct of researchers. While measures differ from country to country and among communities, a mix of appropriate initiatives is emerging that can facilitate the revival and maintenance of traditional knowledge and cultural practices relevant to the conservation and sustainable use of biological diversity. It is proposed that these initiatives be assessed under the following headings:

- 2.1 Regional and national land use practices.
- 2.2 Incentive measures.
- 2.3 Capacity-building measures.
- 2.4 Repatriation of objects and associated information to communities of origin.
- 2.5 Strategic planning for conservation and sustainable use of biological diversity within the context of community development planning.
- 2.6 Legislative (including policy and administrative) measures.

B. SUBSEQUENT PHASES

3. The relationship between biological, cultural and linguistic diversity

4. A number of studies have highlighted the fact that many of the centres of highest biological diversity are also places of high cultural and linguistic diversity, and have demonstrated that the relationship between biological, cultural and linguistic diversity is mutually dependent in many of these regions. A decrease in the diversity of any of these components could lead to a loss of traditional knowledge and therefore diminish humanity's capacity to conserve and sustainably use many of the Earth's vital ecosystems. It is proposed that the issues raised with respect to the continued maintenance and application of traditional knowledge, innovations and practices by virtue of the nature of the relationship between biological, cultural and linguistic diversity be addressed under the following headings:

- 3.1 Diversity: the key to a sustainable future.
- 3.2 Loss of local languages as a factor in the loss of traditional knowledge.
- 3.3 Loss of biological diversity as a factor in the loss of traditional knowledge, and vice versa.
- 3.4 Cessation of cultural practices relevant to the conservation and sustainable use of biological diversity as a factor in the loss of traditional knowledge.
- 3.5 Impoverishment.
- 3.6 Migration.
- 3.7 Reduction in numbers of indigenous peoples.
- 3.8 Loss of ancestral lands and territories.

4. Identification of national processes that may threaten the maintenance, preservation and application of traditional knowledge

5. Many of the processes that may continue to threaten the maintenance and survival of traditional knowledge have their roots in the histories of many countries, for example, in the processes of colonization involving conflict, introduced diseases, dispossession of territories, resettlement, forced assimilation, and marginalization of indigenous and local communities. Some studies have indicated that national development programmes and policies, modernization of agricultural production and other natural resource-based industries, education and training programmes, and employment strategies often do not take into sufficient account the needs of indigenous and local communities. Similarly, there has been a lack of effective indigenous and local community involvement in the design of the necessary policies and programmes to enable such communities to protect their traditional knowledge or to capitalize on their innovative capacities for the conservation and sustainable use of biological diversity within the national and global economies. It is proposed that these issues could be addressed as follows:

4.1 Demographic factors.

4.2 National development policies/programmes.

4.3 Education, training and employment policies/programmes.

4.4 National programmes for modernization through the development, transfer and adoption of new technologies.

4.5 Identification of activities, actions, policies and legislative and administrative procedures that may discourage the respect for, preservation and maintenance of traditional biodiversity-related knowledge.

5. Identification of processes at the local community level that may threaten the maintenance, preservation and application of traditional knowledge

6. A number of factors that may threaten the maintenance of traditional knowledge also occur at the local community level, by disrupting the processes of intergenerational transmission of languages, cultural traditions and skills. The significance of these factors will vary from country to country, but they generally include changes to patterns of settlement; the movement of young people to cities for employment, education and lifestyle opportunities; introduction of new technologies, foods and medicines, making people less reliant on traditional ways; low levels of life expectancy brought about by changes in lifestyle and new epidemics such as HIV-AIDS; and a host of new cultural influences disseminated through modern media. Many indigenous and local communities, while having a solid natural resource base and the traditional knowledge to conserve and use it sustainably, nevertheless, may not have sufficient capacity to be able to develop these assets for the benefit of their communities in today's economy. In some instances, this situation has encouraged the development of these assets by outside interests to the detriment of the communities and has resulted in their further marginalization. These issues would be explored under the following headings:

5.1 Territorial factors and factors affecting communal lands.

- 5.2 Cultural factors.
- 5.3 Economic factors (including the relationship between poverty and ecosystem stress).
- 5.4 Social factors (including demographic, gender and familial factors).
- 5.5 Constraints on the exercise of customary laws relevant to the management, conservation and sustainable use of biological diversity.
- 5.6 Lack of capacity to manage contemporary threats to biological diversity resulting from development, over-use and socio-economic pressures generated outside the community.
- 5.7 The impact of HIV-AIDS on the maintenance of traditional knowledge systems.
- 5.8 Impact of organized religions on traditional knowledge and practices.

6. Trends regarding the recognition and implementation of Article 8(j) and related provisions

7. While measures taken in support of Article 8(j) and related provisions both internationally and nationally are relatively recent, it may be possible to discern trends in terms of which measures are proving more effective, how they are being monitored, and what improvements can be made. Many indigenous and local communities, particularly women, have also taken their own initiatives to preserve, protect and promote the use of their traditional knowledge. It is proposed that these trends be analysed according to the following headings:

6.1 International trends:

- 6.1.1 Intergovernmental agencies and processes
- 6.1.2 Non-governmental organizations.

6.2 The role of the World Bank and the regional development banks.

6.3 National trends.

6.4 Trends at the local level.

6.5 Private sector trends.

6.6 Articulation and application of traditional knowledge (including indigenous knowledge) and contemporary scientific management practices for the conservation and sustainable use of biological diversity.

6.7 Implications of globalization.

7. Conclusions: lessons learned and identification of best practices for the maintenance, preservation and application of traditional knowledge

8. The report would include conclusions based on the findings emerging from the consideration of the previous topics and sub-topics.

C. PLAN FOR THE PREPARATION OF THE REPORT

9. The objective is to produce the first phase of a composite report on the status and trends regarding the knowledge, innovations and practices of indigenous and local communities relevant to the conservation and sustainable use of biological diversity for the consideration of the third meeting of the Ad Hoc Open-ended Inter-Sessional Working Group on Article 8(j) and Related Provisions so that the Working Group can make recommendations for the consideration of the Conference of the Parties at its seventh meeting.

10. Accordingly, the following stages are proposed for the preparation of the first phase of the report:

- (a) *Stage 1:* Selection and appointment of a consultant to prepare the report; the consultant should be engaged as soon as possible after the sixth meeting of the Conference of the Parties;
- (b) *Stage 2:* Based on the decision of the Conference of the Parties at its sixth meeting regarding the outline of the report, address the elements of the report. This stage will entail literature surveys, extraction and analysis of information, and preparation of a written report for each of the elements (chapters) identified in the outline. Research and the writing up of the chapters should be completed within 12 months of starting (i.e., September 2003);
- (c) *Stage 3:* The separate chapters of the report are to be edited, and the introduction and concluding chapters, the executive summary and recommendations are to be prepared by the consultant. The executive summary and recommendations should be prepared in a format suitable for presentation to the Ad Hoc Working Group on Article 8(j) and Related Provisions for consideration at its third meeting. This stage should be completed by 31 December 2003, with the distribution of the executive summary and recommendations to Parties, indigenous and local communities, and relevant organizations;
- (d) *Stage 4:* Review of the report by the Ad Hoc Working Group on Article 8(j) and Related Provisions at its third meeting. It is assumed that the third meeting would take place in February or March 2004 to enable sufficient time for the preparation and presentation of the report;
- (e) *Stage 5:* Consideration of the report by the Conference of the Parties at its seventh meeting, taking into account recommendations from the third meeting of the Ad Hoc Working Group on Article 8(j) and Related Provisions.

D. OVERVIEW OF TIMETABLE FOR PREPARATION OF THE FIRST PHASE OF THE COMPOSITE REPORT

STAGE	TASK	RESPONSIBILITY	DURATION	DEADLINE	MEETING
STAGE 1	Appointment of consultant to prepare report	Executive Secretary		30 September 2002	
STAGE 2	Compile the chapters of the first phase of the report	Consultant	12 months	30 September 2003	
STAGE 3	Complete the first phase of the report and distribute to Parties, etc.	Consultant and Executive Secretary	3 months	31 December 2003	
STAGE 4	Review of the first phase of the report	Ad Hoc Open-ended Inter-sessional Working Group on Article 8(j) and Related Provisions			Third meeting of the Working Group
STAGE 5	Consideration of the first phase of the report and recommendations	Conference of the Parties			Seventh meeting of the Conference of the Parties

II. Considerations Regarding the Size and Scope of the Report

11. An accurate and comprehensive assessment of the status and trends with regard to the state of traditional knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant to the conservation and sustainable use of biological diversity is essential to the formulation of policies, plans and strategies at international, regional, national and local levels.

12. The most important considerations concerning the composite report are its scope and size as these will have a direct bearing on the amount of time and resources needed to complete the task. Two factors that have significant bearing on the elements to be addressed in the report are:

- (a) The size and diversity of the global population of the world's indigenous and local communities embodying traditional lifestyles, and, in particular, those communities comprised of small groups of indigenous peoples; and
- (b) The fact that, because of a multitude of factors operating at international, national and local levels, traditional knowledge relevant to the conservation and sustainable use of biological diversity is being lost at an appalling rate—a trend that must be prevented and arrested.

13. To date, no definition of what or who constitutes an indigenous or local community embodying a traditional lifestyle has been advanced for the purposes of the Convention, although matters of definition will be addressed as part of task 12 of the programme of work. A possible working definition and use of terms for the purpose of this report must respect the diversity, in all aspects, of indigenous and local communities.

14. A number of recent studies have shown a direct correlation between biological, cultural and linguistic diversity. The implication being that a loss of cultural diversity will also have a direct impact on biological diversity. According to estimates by the United Nations Educational, Scientific and Cultural Organization (UNESCO), indigenous people comprise between 70 and 80 per cent of the world's estimated 6,000 cultures and speak most of the estimated 6,700 languages in the world today. Most of the world's linguistic diversity is carried by very small communities of indigenous and minority people. Nearly 2,500 languages are in danger of immediate extinction; and an even higher number are losing the ecological contexts that keep them as vibrant languages, resulting in mass extinction of cultural and linguistic diversity and incalculable consequences for the conservation and sustainable use of many of the world's ecosystems.

15. Given the large body of traditional knowledge, innovations and practices relevant for the conservation and sustainable use of biological diversity maintained by indigenous and local communities, and the diverse threats to its maintenance and preservation, it is suggested that the composite report present a thorough and comprehensive analysis as the necessary basis for informed decision-making, policy formulation and implementation, and strategic planning for the conservation and sustainable use of world biological diversity by the Conference of the Parties, Parties and Governments, intergovernmental agencies, regional economic integration organizations, indigenous and local communities, and relevant scientific and non-governmental organizations. However, in presenting such an analysis, it is noted that the possible impacts of intellectual property protection systems on the protection, preservation, maintenance and application of traditional knowledge, innovations and practices have been the subject of a number of analyses.¹¹³ An ongoing assessment of the mechanisms for the protection of traditional knowledge has been carried out by the World Intellectual Property Organization (WIPO), in collaboration with the Convention on Biological Diversity, therefore the impact of intellectual property systems on the protection of traditional knowledge is not further considered in the present report.

16. Indigenous and local communities, as holders of traditional knowledge, will be the primary beneficiaries of the report, as it will identify and assess measures and initiatives to protect, promote and facilitate the use of traditional knowledge.

III. Outline of Composite Report: Rationale

17. The traditional biodiversity-related knowledge of indigenous and local communities and the languages that sustain it are being lost at an accelerating rate. Many communities fear that much of this precious knowledge will be lost with the passing of the current generation of Elders. The erosion of this knowledge creates an irrevocable loss to our storehouse of knowledge of the Earth's biological

113 See, for example, the report of the Executive Secretary on progress in the integration of relevant tasks of the programme of work on Article 8(j) and related provisions into the thematic programmes of the Convention on Biological Diversity (UNEP/CBD/WG8J/1/2) and *Intellectual Property Needs and Expectations of Traditional Knowledge Holders: World Intellectual Property Organization Report on Fact-Finding Missions on Intellectual Property and Traditional Knowledge (1998-1999)* (WIPO, 2001, Geneva).

diversity, its conservation, management and sustainable use, and represents a grave threat to world food and medicinal security and indigenous and local community livelihoods. It is imperative that positive measures to counteract them should be put in place and pursued.

18. The composite report will be compiled in the sequence of priorities determined by the Parties and set out in section I above, with a strong emphasis on item 2 of phase I. It would describe the current situation of the respect for, preservation and maintenance of traditional knowledge, innovations and practices relevant to the conservation and sustainable use of biological diversity at the global level, and identify what is required to ensure their continued maintenance and application, thereby laying the foundation for some form of global plan of action to reverse the loss of this vast body of knowledge essential to the maintenance of much of the planet's biological diversity.

19. It is also anticipated that, for the purposes of the Convention, the report will provide baseline data and information—both quantitative and qualitative—by which future trends in the maintenance, preservation and application of traditional biodiversity-related knowledge, innovations and practices might be monitored and assessed.

20. To the extent feasible, the composite report will be geographically balanced, and will take into consideration regional initiatives as a basis for a global analysis, which will also include information from international sources.

IV. Sources and Availability of Information

21. The priority elements should be compiled from existing published reports and any supplementary information provided by Parties, Governments, organizations representing indigenous and local communities, and it would be based on information already available released in the public domain. The consultant shall observe the applicable national legislation when accessing and using these sources of information.

NATIONAL REPORTS

23. National reports and other relevant information submitted by Parties will ensure comprehensive coverage of the status and trends relating to traditional knowledge, innovations and practices in terms of its state of preservation; recognition and incorporation within national biological diversity programmes and strategies; and national measures being undertaken to enhance and secure respect, preservation and maintenance of traditional knowledge.

AGENCY REPORTS

23. Consistent with the ways and means for undertaking the programme of work identified in section IV of the annex to decision V/16, the Executive Secretary is to consult with and invite relevant international organizations to contribute to the undertaking of task 5, also with a view to avoiding duplication and to encourage synergies. Accordingly, information relevant to task 5 is to be sought

from international agencies such as the World Intellectual Property Organization (WIPO), the World Trade Organization (WTO), the Food and Agriculture Organization of the United Nations (FAO), the World Health Organization (WHO), the Office of the United Nations High Commissioner for Human Rights (UNHCHR), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the International Labour Organization (ILO), the United Nations Conference on Trade and Development (UNCTAD), the World Bank, and the United Nations Development Programme (UNDP), and from the secretariats of environment-related conventions such as the Convention to Combat Desertification, the Convention on Wetlands (Ramsar, Iran, 1971), the Convention on Migratory Species, the United Nations Convention on the Law of the Sea, the Convention on International Trade in Endangered Species, the World Heritage Convention, and the United Nations Framework Convention on Climate Change.

24. In recent years, many United Nations agencies such as UNEP, FAO, UNHCHR, WIPO, ILO, UNCTAD, UNESCO and WHO, and intergovernmental agencies and processes have undertaken surveys and studies, and compiled reports concerning issues relevant to task 5. As examples of these reports, the following can be cited:

- (a) Food and Agriculture Organization of the United Nations, *The State of the World's Plant Genetic Resources for Food and Agriculture*. (FAO, Rome, 1998);
- (b) Oloka-Onyango J and Udagama D, *The realization of Economic, Social and Cultural Rights: Globalization and its Impact on the Full Enjoyment of Human Rights: Preliminary Report* (Commission on Human Rights, Geneva, document E/CN.4/Sub.2/2000/13, 15 June 2000);
- (c) Posey DA (ed), *Cultural and Spiritual Values of Biodiversity: A Complementary Contribution to the Global Biodiversity Assessment* (Intermediate Technology Publications, London and United Nations Environment Programme, Nairobi, 1999);
- (d) World Intellectual Property Organization, *Intellectual Property Needs and Expectations of Traditional Knowledge Holders: World Intellectual Property Organization Report on Fact-finding Missions on Intellectual Property and Traditional Knowledge (1998–1999)* (WIPO, Geneva, 2001).

INDIGENOUS AND LOCAL COMMUNITY ANALYSIS AND INFORMATION

25. Indigenous and local community organizations are well suited to provide relevant assessments of the host of issues that affect the respect, preservation, maintenance and application of their traditional knowledge, innovations and practices. The scope of the work should reflect reasons for traditional knowledge loss and the loss of traditional practices and innovations. On a regional basis, the efforts of indigenous and local communities should be resourced to address this problem. The global diversity of indigenous and local communities must be recognized and taken into account, respecting prevailing traditional practices, with the help of the International Indigenous Forum on Biodiversity.

26. In many countries, peak organizations representing indigenous and local communities have undertaken relevant studies, and proposed policy initiatives and strategies for incorporation into national biological diversity action plans. Many indigenous and local communities also have major responsibilities with government agencies for the management of protected areas under joint or cooperative arrangements. In addition, there is also a wealth of anthropological studies and assessments of the issues confronting indigenous and local communities as they seek to maintain their cultural identities in an increasingly globalized society.

REPORTS BY NON-GOVERNMENTAL ORGANIZATIONS

27. As with international agencies, a number of non-governmental organizations such as the World Wide Fund for Nature (WWF), Terralingua, the African Centre for Technology Studies (ACTS), the Rural Advancement Foundation International (RAFI), Cultural Survival, International Work Group for Indigenous Affairs and the Third World Network, have also published important studies, reports and other information relevant to task 5. One such example is the recent study published by the WWF and Terralingua:

Oviedo G, Maffi L and Larsen PB, *Indigenous and Traditional Peoples of the World and Ecoregion Conservation: An Integrated Approach to Conserving the World's Biological and Cultural Diversity* (WWF International and Terralingua, Gland, Switzerland, 2000).

V. Ways and Means for the Preparation of the Composite Report

28. With regard to the compilation of the composite report, and in light of the comments made in section II above regarding its possible size and scope and following the recommendation of the Working Group on Article 8(j), the Conference of the Parties endorsed following approach for the preparation of the report:

- (a) A consultant team should be employed by the Secretariat, for a period of 12 to 15 months, to prepare a report of some 100–120 pages, including the executive summary (10–15 pages for the benefit of policy makers) and recommendations for distribution to Parties and Governments, relevant intergovernmental agencies, indigenous and local communities and relevant organizations for their consideration prior to the third meeting of the Working Group on Article 8(j);
- (b) Terms of reference for consultant team selection should include background, qualifications, experience, including regional experience, direct knowledge of indigenous cultures, understanding and involvement with indigenous and local communities. An advisory group/steering committee, in which indigenous and local populations will be represented, should assist the work of the consultant and provide a liaison with regional groups and local communities;
- (c) The review of the report should include the full and effective participation of indigenous and local communities, while being mindful to avoid intrusiveness. The report would make particular use of national reports, case-studies, other data submitted to the Executive Secretary in response to various decisions of the Conference of the Parties, and other relevant published information (see

section IV above). Work would essentially entail desktop analysis of this information. The report should be focused, thoroughly researched and scientifically rigorous. It would also include up-to-date information provided by Parties and indigenous and local community organizations. In this context, a mechanism for full participation that respects the needs of indigenous communities should be established. The report must be approved by the Conference of the Parties prior to its formal dissemination in final form;

- (d) In preparing the report, the communities' established codes of ethics guidelines, which entail permission and/or consent of indigenous and local communities to enter the communities and conduct the research, will be respected and followed.

VI. Sources of Funding

29. Consistent with the ways and means for undertaking the programme of work identified in section IV of the annex to decision V/16, Parties, Governments, and international, regional and national organizations should provide appropriate financial support, including to indigenous and local communities, for the development of this report.

ANNEX II

RECOMMENDATIONS FOR THE CONDUCT OF CULTURAL, ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENTS REGARDING DEVELOPMENTS PROPOSED TO TAKE PLACE ON, OR WHICH ARE LIKELY TO IMPACT ON, SACRED SITES AND ON LANDS AND WATERS TRADITIONALLY OCCUPIED OR USED BY INDIGENOUS AND LOCAL COMMUNITIES

1. The purpose of these recommendations is to help facilitate:
 - (a) Appropriate participation and involvement of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biodiversity (hereinafter referred to as "indigenous and local communities");
 - (b) Taking into account the cultural, environmental and social concerns and interests of indigenous and local communities;
 - (c) The inclusion of traditional knowledge, innovations and practices, including technologies and customary methods of indigenous and local communities as part of environmental, social and cultural impact assessment processes.
2. These recommendations are voluntary and intended to serve as guidance for Parties and Governments, according to their national legislation, in the development of their impact assessment regimes.

I. Recommendations for the integration of cultural, environmental and social impact assessments as a single process

3. The recommendations allow for the consideration of the integration of cultural, environmental, social impact assessments as a single process. Accordingly, the con-

duct of impact assessments should meet the requirements of the Convention on Biological Diversity as defined in its Articles 14 and 8(j), and take into account the general principles guiding the programme of work on Article 8(j) and related provisions. These recommendations should take into account work on integration of biodiversity issues into the environmental impact assessment and strategic impact assessment in accordance with Article 14 of the Convention, and pay special attention to cultural and socio-economic considerations.

A. CULTURAL IMPACT ASSESSMENTS

4. Through the cultural impact assessment process, issues that are of particular cultural concern should be identified, such as beliefs and religions, customary practices, forms of social organization, systems of natural resources use, including patterns of land use, places of cultural significance, sacred sites and ritual ceremonies, languages, customary law systems, political structures, roles and customs.

5. There is a need to respect both the custodians and holders of traditional knowledge and the knowledge itself.

6. Possible impacts on all aspects of culture, as indicated in paragraph 4 above, including sacred sites should therefore be taken into consideration while developing cultural impact assessments.

B. ENVIRONMENTAL IMPACT ASSESSMENTS

7. In order to effectively undertake an environmental impact assessment for a proposed development, the analysis should include areas of significant conservation value, environmental constraints, geographical aspects and potential synergistic impacts.

8. The direct and indirect impacts of the development proposal on local biological diversity at ecosystem, species and genetic levels should be assessed, and particularly in terms of those components of biological diversity that the relevant community and its members rely upon for their subsistence, livelihood, and other needs.

9. Development proposals should be rigorously assessed for their potential to introduce alien invasive species into local ecosystems.

10. With respect to living modified organisms, due regard should be paid to Article 8(g) of the Convention on Biological Diversity and other relevant international agreements, and, in particular, the Cartagena Protocol on Biosafety.

C. SOCIO-ECONOMIC IMPACT ASSESSMENTS

11. In order to effectively undertake a socio-economic impact assessment for a proposed development, analysis should be carried out with respect to demographic factors, housing and accommodation, employment, infrastructures and services, income and asset distribution, traditional systems of production as well as educational needs, technical skills and financial implications.

12. Proposed developments should be evaluated in relation to tangible benefits to such communities, such as job creation, viable revenue from the levying of appro-

appropriate fees, access to markets and diversification of income-generating (economic) opportunities for small and medium-sized enterprises.

13. Developments involving changes to traditional practices for food production, or involving the introduction of commercial cultivation and harvesting of a particular wild species should have those changes and introductions assessed.

14. In socio-economic impact assessments, social development indicators consistent with the views of indigenous and local communities should be developed and should give consideration to gender, generational considerations, health, safety, food and livelihood security aspects and the possible effects on social cohesion and mobilization.

II. General Provisions

15. Indigenous and local communities should be fully and effectively involved in the assessment process. The traditional biodiversity-related knowledge of involved indigenous and local communities should be applied along with modern scientific assessment methodologies and procedures. Consultation should allow for sufficient time and should take place in the appropriate language and in a culturally appropriate manner.

16. Where the national legal regime requires prior informed consent of indigenous and local communities, the assessment process shall consider whether such prior informed consent has been obtained.

17. The vital role that women play, in particular indigenous women, in the conservation and sustainable use of biological diversity and the need for the full and effective participation of women in policy-making and implementation for biological diversity conservation should be fully taken into consideration, in accordance with the Convention.

18. Recognition should be given to the resource and capacity-building needs of indigenous and local communities and assistance should be provided, to the extent possible, to facilitate their full and effective participation in impact assessment procedures, including the provision of resources (technical, educational and other needs).

19. All human rights, including social and cultural rights, and any rights related to the environment, must be respected.

20. Pursuant to national legislation, the customary laws and intellectual property rights of indigenous and local communities, with respect to their traditional biodiversity-related knowledge, innovations and practices shall be respected in all circumstances related to the proposed development.

21. In the absence of any legal mechanisms for the protection of traditional knowledge, innovations and practices, indigenous and local communities should, if desired, define their own protocols for access to and use of traditional knowledge in impact assessment procedures, and Governments will assist and participate in such initiatives if required by and according to their national legislation.

22. Consistent with the ecosystem approach, proponents of development proposals should recognize the importance of understanding and applying the values and knowledge, where relevant, of use of biological diversity held by indigenous and local communities and their application for sustainable development.

23. In the context of impact assessments, and particularly with respect to mitigation and threat-abatement measures associated with the development, where there is a threat of significant reduction or loss of biodiversity, lack of full scientific certainty should not be used as a reason for postponing measures to avoid or minimize such a threat.

24. In order to manage any disputes that may arise in relation to a development proposal and in the ensuing impact assessment processes, dispute-resolution means or mechanisms should be available or be established.

DECISION VI/11 | Liability and redress (Article 14, paragraph 2)

The Conference of the Parties,

Recalling decision V/18 adopted at its fifth meeting,

Taking note of the recommendations of the Workshop on Liability and Redress in the Context of the Convention on Biological Diversity, held in Paris from 18 to 20 June 2001,¹¹⁴

Recognizing the central importance of capacity-building and cooperation measures under the Convention to strengthen capacities at the national level with regard to measures for the prevention of damage to biological diversity, the establishment and implementation of national legislative regimes, policy and administrative measures on liability and redress, including through the elaboration of guidelines,

1. *Requests* the Executive Secretary to convene a group of legal and technical experts composed of government-nominated experts based on a fair and equitable geographical representation and including observers from relevant international organizations, including non-governmental organizations and convention secretariats, and with the mandate to review information gathered in accordance with paragraph 2 below, and conduct further analysis of pertinent issues relating to liability and redress in the context of paragraph 2 of Article 14 of the Convention, and in particular:

- (a) Clarifying basic concepts and developing definitions relevant to paragraph 2 of Article 14 (such as the concept of damage to biological diversity, its valuation, classification, and its relationship with environmental damage, the meaning of “purely internal matter”);
- (b) Proposing the possible introduction of elements, as appropriate, to address specifically liability and redress relating to damage to biological diversity into existing liability and redress regimes;

¹¹⁴ UNEP/CBD/COP/6/INF/5, annex I.

- (c) Examining the appropriateness of a liability and redress regime under the Convention on Biological Diversity, as well as exploring issues relating to restoration and compensation;
- (d) Analysing activities and situations that contribute to damage to biological diversity, including situations of potential concern; and
- (e) Considering preventive measures on the basis of the responsibility recognized under Article 3 of the Convention.

The legal and technical expert group shall report to the seventh meeting of the Conference of the Parties;

2. *Requests* the Executive Secretary to continue collecting relevant information and to conduct analysis of such information and other relevant issues, with the cooperation of Parties, Governments and relevant organizations, and to make such information and analysis available prior to convening the group of legal and technical experts. Such information-gathering should focus, as appropriate, on: updating the documentation on sectoral international and regional legal instruments dealing with activities which may cause damage to biological diversity (oil, chemicals, hazardous wastes, wildlife conventions, etc.), as well as developments in private international law; national legal and policy frameworks allowing for mutual recognition and enforcement of judgments, access to justice, liability and redress (restitution, restoration and compensation), extra-judicial settlements, contractual agreements, etc; and case-studies pertaining to transboundary damage to biological diversity including but not limited to case law. Further analysis to be undertaken should relate to the coverage of existing international regimes regarding damage to biological diversity; activities/situations causing damage, including situations of potential concern and whether they can be effectively addressed by means of a liability and redress regime; and concepts and definitions relevant to paragraph 2 of Article 14;

3. *Urges* Parties, Governments and relevant international organizations to cooperate with a view to strengthening capacities at the national level with regard to measures for the prevention of damage to biological diversity, establishment and implementation of national legislative regimes, and policy and administrative measures on liability and redress, and to provide financial resources for this purpose.

DECISION VI/12 | Ecosystem approach

The Conference of the Parties,

Recalling its decisions IV/1 B and V/6 on ecosystem approach,

Noting that, in many countries, implementation of the ecosystem approach has been slow due to financial constraints,

Recognizing the necessity to apply the ecosystem approach in national policies and legislation, and to integrate the approach in thematic and cross-sectoral programmes of the Convention at the local, national and regional level, and with a

view to facilitating the integration of the approach, as appropriate, in the work of other forums and relevant international agreements,

Underlining the importance of developing regional guidelines to apply the ecosystem approach, while *recognizing* efforts made in this direction,

1. *Urges* Parties, other Governments and relevant organizations that have not done so to submit case-studies and lessons learned on the development and implementation of the ecosystem approach at the national and regional levels;
2. *Requests* the Executive Secretary:
 - (a) To continue the collection, compilation and dissemination of case-studies and lessons learned and to prepare a report for consideration by the Subsidiary Body on Scientific, Technical and Technological Advice at a meeting prior to the seventh meeting of the Conference of the Parties;
 - (b) Within the availability of resources and in collaboration with relevant organizations and bodies, in particular the United Nations Forum of Forests, to convene a meeting of experts to compare the ecosystem approach with sustainable forest management, and develop proposals for their integration;
 - (c) To develop proposals for the refinement of the principles and operational guidance of the ecosystem approach on the basis of case-studies and lessons learned, including indicators and strategies for the integration of the ecosystem approach into the programmes of work of the Convention, taking into account regional differences;
3. *Invites* Parties, other Governments and organizations to provide technical and financial resources for the organization of regional workshops to promote the exchange of experiences and regional, national and local capacity-building, and to enhance awareness.

DECISION VI/13 | Sustainable use

The Conference of the Parties,

Recognizing that the challenge of sustainable use of biodiversity is to balance the need to maximize human livelihoods against the necessity of conserving the underlying natural resource base,

Recognizing that sustainable use is a cross-cutting issue relevant to different ecosystems, sectors and thematic areas,

Recognizing the need to further investigate the relationship and balance between conservation and sustainable use of biological diversity, and in particular the role and contribution of sustainable use to the conservation of biological diversity,

Recognizing that the involvement and participation of all stakeholders, including indigenous and local communities, in natural resource management is a prerequisite for their conservation and sustainable use,

Recognizing further the important role played by women in the conservation and sustainable use of biological diversity,

1. *Welcomes* the outcome of the three regional workshops on the Sustainable Use of Biological Diversity, which took place in Maputo (Mozambique) in September 2001, Hanoi (Viet Nam) in January 2002 and Salinas (Ecuador) in February 2002;
2. *Expresses its appreciation* to the Government of the Netherlands for the financial support for these three workshops;
3. *Notes with appreciation* the collaborative efforts and synergies developed during the three workshops by the Convention on Biological Diversity and other international organizations such as the Convention on International Trade in Endangered Species of Wild Fauna and Flora, the Convention on Wetlands (Ramsar, Iran, 1971), the Food and Agriculture Organization of the United Nations, IUCN, the International Tropical Timber Organization and the World Wide Fund For Nature, *welcomes* their future contributions to the process, and *invites* other relevant international organizations to participate in the process;
4. *Requests* the Executive Secretary to organize a fourth open-ended workshop on the sustainable use of biodiversity to synthesize the outcomes of the three workshops, integrate different views and regional differences and develop a set of practical principles and operational guidelines for the sustainable use of biological diversity, to be submitted to the Subsidiary Body on Scientific, Technical and Technological Advice for its consideration prior to the seventh meeting of the Conference of the Parties;
5. *Invites* Parties, other Governments and relevant international organizations to provide appropriate financial support for the organization of the fourth workshop on the sustainable use of biological diversity, with a view to ensuring broad-based participation in the fourth open-ended workshop on the sustainable use of biodiversity;
6. *Reiterates* its invitation to Parties, other Governments, international organizations and other relevant organizations to submit case-studies on the sustainable use of biological diversity;
7. *Requests* the Executive Secretary to continue compiling case-studies submitted by Parties, other Governments, international organizations and other relevant organizations on the sustainable use of biological diversity and make them available through the clearing-house mechanism of the Convention.

DECISION VI/14 | Biological diversity and tourism

The Conference of the Parties,

Recognizing that sustainable tourism, including tourism based on the natural environment (ecotourism), is a vital growing segment of the tourism industry and has a significant potential for realizing benefits in terms of the conservation of biological diversity and the sustainable use of its components,

Recognizing the need to build public awareness and education on the benefits of sustainable tourism and to actively involve the private sector in the conservation and sustainable use of biological diversity through sustainable tourism activities and developments;

Recognizing the need to enhance the participation and involvement of indigenous and local communities in the planning and management of sustainable tourism activities and developments,

1. *Welcomes* the joint efforts of the Convention on Biological Diversity, the United Nations Environment Programme, the Commission on Sustainable Development and the World Tourism Organization with regard to the international work programme on sustainable tourism development;
2. *Takes note* of the progress made in the development of the guidelines for activities related to sustainable tourism development and biological diversity in vulnerable terrestrial, marine and mountain ecosystems;¹¹⁵
3. *Requests* the Executive Secretary:
 - (a) To transmit the draft guidelines on sustainable tourism development in vulnerable areas to the World Ecotourism Summit, which will take place in Quebec City from 19 to 22 May 2002;
 - (b) To review the current draft guidelines taking into account the results of the electronic consultation on the draft international guidelines for activities related to sustainable tourism development¹¹⁶ and the outcome of the World Ecotourism Summit, and to transmit the reviewed draft to the Subsidiary Body on Scientific Technical and Technological Advice for its consideration at a meeting prior to the seventh meeting of the Conference of the Parties for its consideration;
 - (c) To gather and compile existing case-studies on the implementation of the guidelines and make them available to the Subsidiary Body on Scientific, Technical and Technological Advice for its consideration at a meeting prior to the seventh meeting of the Conference of the Parties.

DECISION VI/15 | Incentive measures

The Conference of the Parties,

Underlining the special importance of designing and implementing incentive measures in reaching the objectives of the Convention, especially in regard to the sustainable use of biological diversity, as well as in removing negative impacts on biodiversity,

Recognizing the importance of incentive measures for other cross-cutting issues, such as access to genetic resources and the fair and equitable sharing of benefits arising from their utilization,

115 UNEP/CBD/SBSTTA/7/5, annex I.

116 UNEP/CBD/COP/6/12/Add.2.

Underlining the need for cooperation and collaboration of international organizations in efforts to assist Governments in designing and implementing incentive measures,

1. *Takes note with appreciation* of the progress made in the implementation of the programme of work on incentive measures, established in decision V/15 of the fifth meeting of the Conference of the Parties;
2. *Endorses* the proposals for the design and implementation of incentive measures and the recommendations for further cooperation on incentive measures, contained respectively in annexes I and II to the present decision, as far as they are consistent with Parties' national policies and legislation as well as their international obligations;
3. *Invites* Parties to take these proposals into consideration when designing and implementing incentive measures for conservation and sustainable use of biological diversity;
4. *Recognizes* that further work has to be undertaken on positive incentives and their performance, as well as on perverse incentives and ways and means for their removal or mitigation;
5. *Encourages* Parties and relevant organizations to submit case-studies, lessons learned and other relevant information on incentive measures, especially on positive and perverse incentives, to the Executive Secretary;
6. *Requests* the Executive Secretary to continue compiling and disseminating the information on incentive measures submitted by Parties and organizations, through the clearing-house mechanism of the Convention and other means;
7. *Also requests* the Executive Secretary, in collaboration with relevant organizations, to elaborate proposals for the application of ways and means to remove or mitigate perverse incentives, for consideration by the Subsidiary Body for Scientific, Technical and Technological Advice at a meeting prior to the seventh meeting of the Conference of the Parties;
8. *Requests* Parties, Governments, international and other relevant organizations to provide financial support for the programme of work on incentive measures, taking into consideration the specific circumstances of countries, in particular small island developing States and countries with economies in transition.

ANNEX I

PROPOSALS FOR THE DESIGN AND IMPLEMENTATION OF INCENTIVE MEASURES

1. In general terms, incentive measures should be designed to address the conservation and sustainable use of biological diversity, while taking into account:
 - (a) Local and regional knowledge, geography, circumstances and institutions;
 - (b) The mix of policy measures and structures in place including sectoral considerations;
 - (c) The need to match the scale of the measure to the scale of the problem;

- (d) The measures' relationship to existing international agreements.
2. The following elements should be taken into consideration in the design and implementation of incentive measures for the conservation and sustainable use of biological diversity:

A. Identification of the problem: purpose and issue identification

3. *Goals of the incentive measures.* An incentive measure should have a defined purpose. Consistent with decision V/15, the purpose of incentive measures is to change institutional and individual behaviour in order to achieve in whole or in part the following objectives of the Convention on Biological Diversity: the conservation of biodiversity, the sustainable use of the components of biodiversity and the fair and equitable sharing of benefits arising out of the utilization of genetic resources.

4. *Underlying causes/threats to biodiversity.* The identification of the proximate and underlying causes and the importance of threats to biodiversity and its components are a prerequisite for the selection of the appropriate measure to stop or reverse degradation. Policies that create incentives without removing the underlying causes of biodiversity loss (including perverse incentives) are unlikely to succeed. Therefore, prior to embarking on an exercise to develop incentive measures for conservation or sustainable use, it is important to undertake a thorough study to identify and evaluate the respective and mutually reinforced impacts of any underlying pressures.

5. This study should specifically include threats generated by social or economic forces or by the institutional framework. In some cases social and economic issues are at the root of unsustainable practices and, while addressing market and policy failures with incentive measures may help correct this behaviour, the measures may not address core problems such as lack of resources or poverty and unjustified human demands beyond needs. This might also include the analysis of existing incentive measures, at the national and at the international level; specifically, perverse incentives that might threaten biodiversity, and the barriers that stand in the way of their removal, should be identified.

6. While most of the underlying causes in general are listed in the OECD Handbook of Incentive Measures for Biological Diversity: Design and Implementation,¹¹⁷ it is important that each country implement incentive measures that are targeted at specific causes relevant to its circumstances. Incentives may be directed to correct some underlying causes related to economic development trends, poverty, lack of policy integration, sectoral policy impacts, and perverse measures undertaken at the national, supra-national and international levels.

7. *Identification of relevant experts and stakeholders.* As well as including policy-makers, experts and scientists, the range of stakeholders should include the private sector, women, and local communities as well as individuals, relevant national and multilateral organizations, non-governmental organizations and representatives of indigenous and local communities. These stakeholders may have contributed to

117 OECD Handbook of Incentive Measures for Biological Diversity: Design and Implementation (OECD, 1999).

the issue and/or have practical knowledge of it and could be key players in its successful implementation. Moreover, different levels of decision-making (local, sub-national, national, subregional, regional, international) and their interrelationship must be taken into consideration in order to ensure coherence of the measure.

8. *Establish processes for participation.* In order to ensure that incentive measures are developed in a manner that is participatory and promotes effective policy integration and stakeholder participation, processes should be established to facilitate intergovernmental dialogue as well as dialogue with relevant stakeholders including indigenous and local communities and representatives of civil society.

9. *Set clear targets and indicators.* To the extent feasible, incentive measures should have targets that are specific, measurable, time-driven, and based on an analysis of their effects. The successful monitoring and evaluation of their impacts is an important factor in ensuring the ultimate success of incentive measures. For example, indicators can facilitate the evaluation of a measure and provide useful information in determining the need for corrective action.

B. Design

10. *Ecosystem approach.* The design of incentive measures should, where appropriate and feasible, be based on an ecosystem approach as defined in the framework of the Convention.

11. *Sectoral approach.* The design of incentive measures should also be based, where possible, on an analysis of the incentives of the different economic sectors such as tourism, forestry, fisheries and agriculture.

12. *Sectoral mainstreaming.* Consideration should be given to integrating biodiversity incentives into the incentives provided through other sectors, where appropriate.

13. *Carrying capacity.* The carrying capacity of the different ecosystems has to be fully considered in the design of incentive measures, as the use of resources may be limited by carrying capacity.

14. *Precautionary approach.* Combined with the ecosystem approach, a precautionary approach requires that programmes on incentive measures err on the side of caution when scientific knowledge is uncertain and where there is a threat of significant reduction or loss of biological diversity.

15. *The efficiency objective.* Programmes on incentive measures should primarily consider those measures which best meet biodiversity objectives, and should be designed to ensure that expected benefits are greater than or equal to the cost of implementation, administration, and enforcement. The social and institutional context of a country can affect these costs considerably. Whenever benefits cannot be adequately quantified, cost-effectiveness analysis (i.e., to achieve a given target at minimum cost) should be applied.

16. *Internalization.* Internalization should be considered as one of the guiding principles for selecting appropriate incentive measures to prevent, arrest or reverse the loss of biodiversity and take into account other relevant environmental concerns,

such as climate change, desertification and deforestation. Internalization refers to the incorporation of external costs and benefits into the decisions of producers and consumers. External costs and benefits are essentially environmental “side-effects” of economic activities and incentive measures should strive to internalize a greater proportion of these effects in the calculation of decision makers and consumers. When full internalization is not possible (due to economic and social circumstances), incentives should be designed so as to make sustainable activities more attractive than unsustainable ones.

17. *Undertaking valuation.* While recognizing that full internalization is often not possible because of limitations of valuation methods, as recognized by the Conference of the Parties in its decision IV/10, valuation is nevertheless an important step for better internalizing and raising awareness of the importance of biodiversity values.

18. *Underlying cause of biodiversity loss.* Programmes on incentives should be designed to address the underlying causes of biodiversity loss.

19. *Comprehensibility.* While recognizing the interaction of many factors, incentive measures should remain as simple and focused as possible, allowing for faster implementation and clearer assessment of their effects. They should be easily understood by all stakeholders.

20. *Equity: distributional impacts.* In designing incentive measures, it is important to ensure that the definition of beneficiary communities is inclusive and equitable. A participatory approach to the design and implementation of incentive measures can help ensure that these issues are considered. Any conservation measure has some impact on stakeholders; incentive measures should aim to take into account those who benefit and those who assume the cost of the measure. Incentive measures should be designed and introduced in a way to support poverty alleviation and reduction of disparities between rural and urban communities.

21. *Capturing value for indigenous and local communities.* The value of biological diversity for subsistence, cultural or commercial purposes should be recognized and incentive measures designed so that, to the extent possible, they support the social and economic development needs of indigenous and local communities. The approach of these communities in determining the values of biological diversity should be taken into consideration.

22. *Raising awareness of biodiversity values and services.* Identifying and assessing the value of biodiversity and of the environmental services that it provides can be an incentive in itself and supports the design of other incentive measures. Raising awareness among all stakeholders of the value and services of biodiversity improves the chances for incentive measures to be successful.

23. *Mix of measures.* In many cases, a combination or combinations of various measures is likely to be necessary in order to realize both the public benefits of protecting biodiversity and the private benefits brought about by the sustainable use of its components.

24. *Monitoring and evaluation.* Incentive measures should be designed to facilitate monitoring and evaluation of their successes and failures.

25. *Political and cultural acceptability.* The political and cultural context in which any incentive measure is developed should be taken into account in the design of the instrument.

26. *Funding.* Funding, as appropriate, should be ensured in the design of the incentive measure.

C. Provision of capacity and building of support: facilitating implementation

27. *Physical and human capacity.* Implementation of incentive measures will require adequate physical and human capacity. This includes scientific and technical capacity, as well as capacity related to administrative, educational, training and communications issues. In many cases, in the implementation phase of incentive measures, there will be an ongoing need for training of trainers, managers and other workers, public-education programmes and other forms of human capacity-building. In other cases, there may be a need for physical capacity-building, including the installation of monitoring equipment or other infrastructure needs. Training will often be a necessary component for the effective implementation of incentive measures.

28. *Institutional mechanisms.* Institutional mechanisms are required to encourage dialogue and communication between policy makers within government and stakeholders outside of government at the national and local levels, in order to promote policy integration. Ensuring that avenues exist for intra-governmental dialogue between relevant ministries and agencies with an interest in biodiversity is important, as government agencies will often share responsibilities in the implementation of incentive measures. Community institutional structures should be developed to make indigenous and local communities equal partners in the implementation of incentive measures. For the implementation of incentive measures, existing institutional arrangements should be recognized and strengthened or new ones should be established, as necessary for the conservation and sustainable use of biological diversity.

29. *Transparency and dissemination of public information.* Dissemination of information can play a key role in building support for incentives for conservation and sustainable use. Information on the effects of pressures on biodiversity should be disseminated among stakeholders, administrative and policy authorities and civil society. The provision of information regarding the incentive measure itself to stakeholders and transparency in implementation are also important.

30. *Stakeholder involvement.* Even after the design of a measure, stakeholders should be involved to ensure that incentive measures are implemented effectively on the ground. Relevant stakeholders should play a role in building the capacity of local institutions and individuals in order to enhance their awareness of the importance of biodiversity conservation measures and facilitate their capacity to participate in all stages of the process, from design to implementation.

31. *Funding.* Funding should be ensured for capacity-building.

D. Management, monitoring and enforcement

32. *Administrative and legal capacity.* The ultimate success of any incentive measure is contingent upon successful management, monitoring, enforcement and evaluation of its impact. Adequate capacity to manage, monitor and enforce incentive measures rests in part on adequate stakeholder involvement and the existence of appropriate institutions. It also depends on available administrative and legal capacity.

33. *Policy-impact indicators.* The development of sound policy-impact indicators is key to any useful valuation of the success or failure of incentive measures.

34. *Information systems.* Information systems could facilitate the process of managing, monitoring and enforcing incentive measures.

35. *Funding.* Adequate funding should be available to ensure the effective management, monitoring and enforcement of incentive measures.

E. Guidelines for selecting appropriate and complementary measures

36. The following are guidelines for selecting appropriate and complementary measures:

- (a) Any decision-making process for selecting appropriate and complementary measures should take into account the specific circumstances of the country involved;
- (b) It is important to consider the context in which the incentive measure is being introduced to assist final decision-making on a particular measure or measures;
- (c) A key consideration in the design of an incentive measure is the recognition that a single measure will often not suffice to address the complexities involved in decisions on biodiversity conservation or sustainable use, and that a mix of measures may be needed;
- (d) Equity considerations, such as poverty alleviation, should be given a prominent role in the design and selection of appropriate incentive measures;
- (e) The implementation of incentive measures should not result in a significant increase in the cost of living and/or increase in government revenue;
- (f) The size of the country's economy is an important factor in the selection of financial incentive measures;
- (g) Well defined land and property rights are an important factor in the design and implementation of incentive measures in the conservation of biological diversity and the promotion of sustainable use;
- (h) Positive incentives can influence decision-making by recognizing and rewarding activities that are carried out for conservation and sustainable use purposes;
- (i) The removal of perverse incentives eases pressure on the environment. The identification of both internal and external perverse incentives and other threats to biodiversity conservation and to the promotion of sustainable use, is essential

to the selection and design of incentive measures. The removal of perverse incentives may improve economic efficiency and reduce fiscal expenditures;

- (j) Disincentives continue to be an important tool for ensuring the conservation and sustainable use of biological diversity and can be used in combination with positive incentives.

37. In the process of decision-making, the general or specific features of various types of instruments should be taken into account. The following table¹¹⁸ illustrates a range of existing instruments, their general advantages, disadvantages and applicability. It should be taken into account that this list is not comprehensive since a number of other non-economic incentives (e.g., social and cultural incentives) and international incentives should also be considered in a similar fashion. Furthermore, it has to be taken into consideration that some of the enumerated instruments are still under discussion with respect to their effectiveness and their possible shortcomings.

118 Based on the OECD Handbook of Incentive Measures for Biological Diversity: Design and Implementation.

INSTRUMENT	ADVANTAGES	DISADVANTAGES	APPLICABILITY
Environmental taxes/charges	<ul style="list-style-type: none"> • Maximize economic efficiency. • Easily understandable. 	<ul style="list-style-type: none"> • Rely on measurability of single components and on agreement about external cost values. • Can require extensive monitoring. 	Applicable in situations where impacts are easily measurable (e.g., hunting) and sources of impacts can be easily monitored.
Market creation	<ul style="list-style-type: none"> • Results in the most efficient allocation of resources between competing users, and generates appropriate prices for them. • Low monitoring requirements. 	<ul style="list-style-type: none"> • May be imperfect where there are (large) external effects and/or monopolies. 	Applicable where clearly defined property rights can be established and upheld for easily identifiable goods and services, and transaction costs are low enough.
Removal of perverse incentives	<ul style="list-style-type: none"> • Reforming or removing these incentives can lead to an easing of pressures on the environment, improved economic efficiency and reduced fiscal expenditures. 	<ul style="list-style-type: none"> • Perverse incentives can often be difficult to identify (lack of transparency). • They may be politically difficult to reform because of the strong opposition from recipients. 	Applicable where clear benefits in terms of budgetary, economic efficiency and/or environmental goals can be identified and potential compensatory measures exist to facilitate the support removal process.
Regulations	<ul style="list-style-type: none"> • Easily understandable. • Legally binding. • Can target directly particular activities or processes. 	<ul style="list-style-type: none"> • Can be economically inefficient or costly method of achieving environmental goals, especially if proscribing certain technologies. • Strict enforcement is necessary. • Inflexible. • May be complex and detailed. 	Most applicable where there is a limited range of easily identifiable environmental impacts that need circumscription and/or where the number of actors is limited.
Environmental funds	<ul style="list-style-type: none"> • Transparent and high visibility. • Positive public relations. 	<ul style="list-style-type: none"> • May not maximize economic efficiency. • May be inflexible because funds are earmarked to some extent. 	Applicable where Governments have difficulties raising general funds, where fiscal infrastructure is weak and where clearly identifiable and highly popular causes exist.
Public financing	<ul style="list-style-type: none"> • Popular with recipients. • Promotes desirable activities rather than prohibiting undesirable ones. 	<ul style="list-style-type: none"> • Requires funding. • May lead to economic inefficiencies. • May encourage rent-seeking behaviour. 	Applicable in situations where desirable activities would not be undertaken without support or to create a differential in favour of such activities where it is not feasible to discourage the undesirable alternatives.

ANNEX II RECOMMENDATIONS FOR FURTHER COOPERATION ON INCENTIVE MEASURES

1. Cooperation to assist Governments in designing and implementing incentive measures should be based on the following elements, building on work already under way.

Information

2. It is recognized that the effective design and implementation of incentive measures requires a sound body of knowledge and information. The following measures would assist Parties in ensuring the availability of the required information:

(a) Biodiversity incentives information systems (Internet, flyers, CDs, hard copies, translations, etc.) should be established or strengthened. This could be achieved through the clearing-house mechanism of the Convention, as well as through other competent international, regional, subregional and national organizations;

(b) Information systems should include the following elements:

- (i) Indicators, valuation and assessment methodologies;
- (ii) Meta-analysis of existing cases;
- (iii) Reference manuals and toolkits.

3. Information systems, whether at the national or international level, should be linked to the clearing-house mechanism of the Convention on Biological Diversity.

4. Such information systems would allow Parties to share experiences and lessons learned with other Parties and facilitate the implementation of incentive measures through the use of guidelines.

5. Parties should carry out an assessment of their national biodiversity strategies and action plans to determine whether they are providing incentives for conservation and sustainable use and whether they are identifying and removing perverse incentives.

The involvement of stakeholders including indigenous and local communities

6. States should develop and apply participatory and coherent approaches to policy-making for biodiversity conservation and sustainable use that fully engage all stakeholders including relevant government departments, non-governmental organizations, the private sector, philanthropic organizations and indigenous and local communities in a meaningful dialogue in a timely fashion and promote a consistent approach to the use of incentive measures for conservation and sustainable use of biodiversity.

7. Particular emphasis could be placed on the following elements:

- (a) Advising policy makers directly on the design and implementation of incentive measures;
 - (b) Mobilizing key stakeholder groups in policy dialogues relating to the design and implementation of incentive measures, across governments, non-governmental organizations, the private sector, philanthropic organizations, and indigenous and local communities;
 - (c) Building a network of experts on biodiversity incentives who can provide guidance and information related to specific requests from Governments, civil society and the private sector.
8. In order to encourage a participatory approach, the development of a strategy for policy coordination and stakeholder involvement might be considered. This could include an educational component, a communications component, and a component that highlights successful processes that have been used to generate effective public participation. The Parties would be encouraged to adapt successful processes or components of such a strategy to correspond to their own priorities and situations. Such a coherent and participatory approach to policy-making might also encourage the integration of biodiversity concerns into other sectors and policy areas.

Capacity-building

9. Another key to the effective development and implementation of incentive measures is the existence of appropriate legal and policy frameworks and supporting human capacity. The Conference of the Parties has encouraged Governments to develop supportive legal and policy frameworks for the design and implementation of incentive measures. Furthermore, raising awareness of decision makers and stakeholders on the importance of incentives to achieve the objectives of the Convention is an important aspect of human capacity-building.
10. The following elements are proposed in order to meet this requirement:
- (a) Training biodiversity specialists and decision makers in the design and implementation of incentive measures including training in the use of valuation tools;
 - (b) Implementing training programmes on basic scientific and economic issues related to the conservation and sustainable use of biodiversity;
 - (c) Explaining the value of biodiversity at the community level and within sectors, such as agriculture and forestry;
 - (d) Building capacity related to public awareness;
 - (e) Developing capacity to conduct research and analysis on incentive measures;
 - (f) Developing supportive legal and policy frameworks;
 - (g) Undertaking legislative reviews and providing advice on incentive measures;
 - (h) Developing avenues for financing where necessary.

Valuation

11. Despite the challenges associated with non-market valuation, it is nonetheless important to pursue ways of creating market signals for the social, cultural and economic values of biodiversity. The Conference of the Parties has recognized the importance of valuation as a tool for designing appropriate incentives.¹¹⁹

12. Continued work on valuation can be costly, requires considerable expertise and the ultimate results may be difficult to communicate and the derived monetary values open to challenge. Nevertheless, the methodologies for undertaking valuations should be developed further, as they play a strategic role in the development of incentives for biodiversity conservation and sustainable use. Further cooperative work might include:

- (a) Continued exploration of methodologies for valuation of biodiversity and biodiversity resources;
- (b) Developing and refining non-market methods of valuation;
- (c) Disseminating information on existing techniques for valuation.

13. Work on valuation could be undertaken as a core component of an action plan in partnership with relevant international organizations.

Interlinkages between multilateral environmental agreements (MEAs)

14. There is a need to examine the policies and programmes under different multilateral environmental agreements to ensure that they provide mutually reinforcing incentives. In this respect, the Conference of the Parties noted the joint work programme between the Convention on Biological Diversity and the Convention on Wetlands (Ramsar, Iran, 1971), which includes a focus on incentives, and suggested attention to incentives with regard to other linkages, such as the Convention to Combat Desertification with regard to dryland biodiversity, and the Convention on International Trade in Endangered Species of Wild Fauna and Flora with respect to conservation and sustainable use of species, and the United Nations Framework Convention on Climate Change with respect to land-use change and forest biodiversity. In addition, the United Nations Framework Convention on Climate Change is encouraged to give priority to incentives to avoid deforestation, as a substantial amount of greenhouse gas emissions is due to the destruction of forests, the greatest terrestrial repository of biodiversity.

Linking biodiversity to macro-economic policies

15. It is important to explore the linkages with international organizations/agreements focused on economic policies, in particular trade policies under the World Trade Organization and other policies such as labour (the International Labour Organization) and health (the World Health Organization). In addition, linkages

¹¹⁹ Decision IV/10 of the Conference of the Parties to the Convention on Biological Diversity states that: “economic valuation of biodiversity and biological resources is an important tool for well-targeted and calibrated economic incentive measures.”

to regional and sectoral economic organizations/agreements should be explored to determine their incentive compatibility with the objectives of the Convention.

16. These linkages should not only be explored at the international level but also at the national level. In particular, the Conference of the Parties noted the need to link national biodiversity strategies and action plans with economic development strategies at the macro-economic public sector planning and sectoral levels, such as tourism, forestry, fisheries and agriculture.

Categories of incentive measures

17. The Conference of the Parties recognized that there is a vast array of incentive measures available. Measures should be tailored to the peculiarities of each situation and country. Consideration should also be given to coordination in the development of incentive measures for different sectors, in order to ensure their coherence.

Ecosystem focus

18. Assessments should be prioritized in line with the thematic programmes adopted by the Conference of the Parties. In this regard, the Conference of the Parties also noted the incentive focus in the joint programme of work between the Convention on Biological Diversity and Convention on Wetlands (Ramsar, Iran, 1971).

Pilot projects/case-studies/workshops

19. There is a need to launch pilot projects to strengthen the understanding and capacity to design, implement and assess incentive measures. Pilot projects could focus on a number of activities including awareness-raising, valuation studies, assessment of existing incentives, development of new incentive schemes and removal of barriers to incentives. Such pilot projects should have built-in linkages to existing initiatives under way in UNEP and other relevant organizations.

20. It is important that such pilot projects be country-driven and build the capacities of local institutions and policy makers.

21. Workshops can be valuable means to exchange both positive and negative experiences and best practices with respect to the design and implementation of incentive measures. Country-driven case-studies that reflect both the experiences of developing and developed countries could provide a good basis through which the strengths and weaknesses of specific incentive measures could be evaluated, taking into account the peculiarities of countries, ecosystems and sectors.

Role of international organizations

22. Competent international organizations are invited to support the efforts of Parties in their work on incentive measures, in particular through the dissemination of information, the provision of expertise and technical guidance, and training.

23. An inter-agency coordination committee should be established, based on the liaison group established by the Executive Secretary (including representatives from the Food and Agriculture Organization of the United Nations (FAO), the Organisation for Economic Co-operation and Development (OECD), the United Nations Conference on Trade and Development (UNCTAD), the United Nations Development Programme (UNDP), the United Nations Environment Programme (UNEP) and IUCN as set out in decision V/15 of the Conference of the Parties) to coordinate activities at the international level, thus avoiding overlapping initiatives and activities while providing support to Parties. The committee should also include representatives from the World Bank and the secretariats of other relevant multilateral environmental agreements.

DECISION VI/16 | Additional financial resources

The Conference of the Parties,

Recalling the commitments made by all Parties in Articles 20 and 21 of the Convention on Biological Diversity,

Taking note of the report by the Executive Secretary on additional financial resources,¹²⁰ the report of the Workshop on Financing for Biological Diversity held in Havana on 16–17 July 2001¹²¹ and the first *CBD News Supplement on Financing for Biological Diversity*, as well as the outcomes of the International Workshop on Financial Support for the Development of National Biosafety Frameworks organized by the United Nations Environment Programme in Havana on 14 July 2001,

Taking note of the importance of additional financial resources to implement the Strategic Plan of the Convention,

Recognizing that the Global Environment Facility has made a significant contribution to the implementation of the Convention,

Noting that the level of official development assistance is of concern to all Parties to the Convention on Biological Diversity, and *emphasizing* the need for a substantial increase of international financial support to the implementation of the Convention and the easier flow of such assistance,

Welcoming the positive outcome of the United Nations International Conference on Financing for Development, held in Monterrey, Mexico, in March 2002 as reflected in the Monterrey Consensus, which represents a crucial step towards achieving the goals of poverty eradication, sustained economic growth and promotion of sustainable development,

1. *Commends* the Executive Secretary for the information concerning access to funding for biodiversity projects that has been provided on the website of the Convention;

120 UNEP/CBD/COP/6/14.

121 CBD-GEF/WS-Financing/2.

2. *Commends* also the efforts made by some Governments and organizations to develop partnerships aiming at promoting financial investments in biodiversity;
3. *Notes* the recent initiation of the Conservation Finance Alliance (CFA) facilitated by The Nature Conservancy, the Bureau of the Convention on Wetlands (Ramsar, Iran, 1971) and the Wildlife Conservation Society, involving non-governmental organizations, bilateral and multilateral agencies;
4. *Welcomes* the strong support for a substantial third replenishment of the Global Environment Facility, expressed by both developing and developed countries at the sixth meeting of the Conference of the Parties to the Convention on Biological Diversity;
5. *Urges* donor countries to substantially replenish the Global Environment Facility to levels higher than the current for supporting developing countries, in particular the least developed and the small island developing States, and countries with economies in transition, to implement the Convention on Biological Diversity;
6. *Invites* Parties and Governments, funding institutions and development agencies, as well as other donors to communicate to the Executive Secretary their funding procedures, eligibility criteria and programme priorities in relation to biological diversity as well as their experience in mainstreaming biodiversity into funding operations;
7. *Invites* Parties and Governments to:
 - (a) Share, through the clearing-house mechanism, their experiences on developing and implementing financial measures for supporting national biodiversity strategies and action plans, such as biodiversity trust funds and promotion of the private sector in supporting biological diversity;
 - (b) Review national budgets and monetary policies, including the effectiveness of official development assistance allocated to biological diversity, with a view to promoting the conservation and sustainable use of biological diversity, paying particular attention to positive incentives and their performance as well as perverse incentives and ways and means for their removal or mitigation;
8. *Urges* Parties and Governments, the World Bank, the International Monetary Fund, the United Nations Development Programme and other relevant institutions to take concrete action to review and further integrate biodiversity considerations in the development and implementation of major international development initiatives, such as the Highly Indebted Poor Countries (HIPC) Initiative, Poverty Reduction Strategies (PRSs), and Comprehensive Development Frameworks (CDF), as well as in national sustainable development plans and relevant sectoral policies and plans;
9. *Requests* the Global Environment Facility to explore opportunities to further develop, enhance and strengthen its catalytic role in identifying and promoting co-financing resources, and, also, to take definitive actions to explore and examine innovative and creative financing modalities to leverage increased funds from the private sector and non-traditional sources of funding;

10. *Encourages* the Organisation for Economic Co-operation and Development to integrate data collection efforts on aid targeting the implementation of the Convention on Biological Diversity into its regular data-collection activities, and *invites* the Organisation for Economic Co-operation and Development to provide information on financial flow statistics relating to the objectives of the Convention on Biological Diversity to the Conference of the Parties at its seventh meeting;

11. *Requests* the Executive Secretary:

- (a) In collaboration with the Global Environment Facility, to promote coordination, coherence, and synergies in financing for biological diversity among donor Parties and Governments, bilateral, regional and multilateral funding institutions and development agencies in order to avoid duplication of work, identify gaps in activities, and identify necessary activities and funding;
- (b) In consultation with the Global Environment Facility, to make available, through the clearing-house mechanism, relevant funding information including success stories and best practices of utilizing available financial resources;
- (c) To explore possible cooperation with relevant institutions to address the need for centralizing information on biodiversity related activities of funding institutions and other donors;
- (d) In collaboration with the Global Environment Facility, to explore with interested partners opportunities of developing a global initiative on banking, business and biodiversity, taking into account the existing mechanisms and institutions, and other global and regional initiatives or processes, with a view to increasing funding for biodiversity and mainstreaming biodiversity into the financial sector;
- (e) To follow up on the outcomes of the World Summit on Sustainable Development that are relevant to additional financial resources;
- (f) To compile information concerning the impacts of external debts on the conservation and sustainable use of biodiversity, and examine the possibility of utilizing debt for nature initiatives for supporting the implementation of the Convention on Biological Diversity, and make this information available on the Website of the Convention;
- (g) To prepare a progress report on the implementation of the present decision for consideration by the Conference of the Parties at its seventh meeting.

DECISION VI/17 | Financial mechanism under the Convention

The Conference of the Parties,

Recalling the relevant provisions of the Convention on Biological Diversity in its decisions I/2, II/6, III/5, III/8, IV/11, IV/13, V/12 and V/13,

Taking note of the report of the Global Environment Facility,¹²² and the Second Overall Performance Study of the Global Environment Facility,¹²³

Taking note also of the compilation of past guidance to the financial mechanism,¹²⁴ the executive summary¹²⁵ and the final report of the independent evaluator commissioned for purposes of the second review of the effectiveness of the financial mechanism,¹²⁶

Noting with satisfaction the strong and growing collaboration established between the secretariats of the Convention on Biological Diversity and the Global Environment Facility,

Welcoming the strong support for a substantial third replenishment of the Global Environment Facility, expressed by both developing and developed countries at the sixth meeting of the Conference of the Parties,

1. *Notes* the strong support expressed by developing countries, in particular the least developed and the small island developing States amongst them, and countries with economies in transition, as well as developed countries, for assistance from the Global Environment Facility in the implementation of the Convention;
2. *Noting* the importance of the Small Grants Programme of the Global Environment Facility, *welcomes* its continued expansion to other developing countries, in particular the least developed countries and the small island developing States;
3. *Noting* the efforts of the Global Environment Facility in providing financial resources to Parties with economies in transition for biodiversity-related projects, *welcomes* the continuation of these efforts;
4. *Reiterates* the call to the Global Environment Facility for improving and further streamlining its processes for increased flexibility and improving access to resources from the Global Environment Facility, taking into consideration the findings included in the Second Overall Performance Study of the Global Environment Facility and the second review of the effectiveness of the financial mechanism;
5. *Requests* the Global Environment Facility to consider the benefits to Parties, particularly small island developing States, of an appropriate balance between national and regional projects in the implementation of decisions of the Conference of the Parties;
6. *Requests* the Global Environment Facility, in consultation with the Executive Secretary and other multilateral and bilateral organizations, to explore funding

122 UNEP/CBD/COP/6/9 and Add.1.

123 UNEP/CBD/COP/6/INF/29.

124 UNEP/CBD/COP/6/INF/3.

125 UNEP/CBD/COP/6/13/Add.1.

126 UNEP/CBD/COP/6/INF/4.

modalities for facilitating the preparation of future national reports and thematic reports from Parties, taking into account the comments made by Parties on their experience in accessing relevant funds during the sixth meeting of the Conference of the Parties as well as the recommendations included in the second Overall Performance Study of the GEF and the second review of the effectiveness of the financial mechanism;

7. *Requests* the Global Environment Facility, in consultation with the Executive Secretary of the Convention, to initiate a dialogue to more effectively implement the guidance to the financial mechanism, drawing from the experiences and lessons learned from projects and programmes funded by the Global Environment Facility, and explore opportunities for streamlining the guidance;

8. *Requests* the Global Environment Facility, in its plan of action to respond to the Second Overall Performance Study, to take into consideration the recommendations of the second review of the effectiveness of the financial mechanism, and to report to the Conference of the Parties on how it has done so;

9. *Requests* the Executive Secretary and the Global Environment Facility to explore possible synergies between the review processes of the Convention and the Global Environment Facility, and make suggestions on the arrangements for the third review of the effectiveness of the financial mechanism;

10. *Decides* to provide the following additional guidance to the Global Environment Facility in the provision of financial resources, in accordance with Article 20 and Article 21, paragraph 1 of the Convention and in conformity with decisions I/2, II/6, III/5, IV/13 and V/13 of the Conference of the Parties. In this regard, the Global Environment Facility shall provide financial resources to developing countries Parties, taking into account the special needs of the least developed countries and the small island developing States amongst them, for country-driven activities and programmes, consistent with national priorities and objectives, recognizing that economic and social development and poverty eradication are the first and overriding priorities of developing countries, and taking fully into consideration all relevant decisions from the Conference of the Parties. The Global Environment Facility as the institutional structure operating the financial mechanism should provide financial resources:

- (a) As a priority, for the elaboration, development, and revision as necessary, of national biodiversity strategies and action plans, and for activities which assist their implementation consistent with guidance to the Global Environment Facility from the Conference of the Parties;
- (b) For national capacity-building in biosafety, in particular for enabling effective participation in the Biosafety Clearing-House and in the implementation of the Action Plan for Building Capacities for the Effective Implementation of the Cartagena Protocol on Biosafety proposed by the Intergovernmental Committee on Cartagena Protocol at its second meeting, and for other needs identified in the recommendations of the Intergovernmental Committee at its second meeting for assisting developing countries to prepare for the entry into force of the Protocol;

- (c) For country-driven projects focusing on the identified national priorities, as well as regional and international actions that assist the implementation of the expanded work programme considering conservation of biological diversity, sustainable use of its components and fair and equitable sharing of the benefits from genetic resources in a balanced way, underscoring the importance of ensuring long-term conservation, sustainable use, and benefit-sharing of native forests;
- (d) For country-driven capacity-building activities by developing country Parties, in particular, least developed countries and small island developing States among them, for the implementation of the Global Strategy for Plant Conservation;
- (e) For country-driven activities aimed at enhancing capabilities to address the impacts of mortality related to coral bleaching and physical degradation and destruction of coral reefs, including developing rapid response capabilities to implement measures to address coral-reef degradation, mortality and subsequent recovery;
- (f) For national and regional taxonomic capacity-building, as a basis for implementing the programme of work for the Global Taxonomy Initiative, with particular attention to funding country-driven pilot projects identified under the Global Taxonomy Initiative, taking into consideration the special needs of least developed countries and small island developing States;
- (g) For projects that assist with the implementation of the Plan of Action for the International Initiative for the Conservation and Sustainable Use of Pollinators by developing country Parties, in particular, least developed countries and small island developing States;
- (h) To build capacity of developing country Parties, in particular least developed countries and small island developing States, to participate effectively in the preparatory process for the first Report on the State of World's Animal Genetic Resources;
- (i) For projects that assist with the implementation of the programme of work on biological diversity of inland water ecosystems;
- (j) For projects that assist with the implementation of the programme of work on incentive measures, taking into consideration the specific circumstances of countries, in particular, least developed countries and small island developing States;
- (k) As a priority, for projects that assist with the development and implementation, at national and regional levels, of the invasive alien species strategies and action plans called for in paragraph 6 of decision V/8, in particular those strategies and actions related to geographically and evolutionarily isolated ecosystems, paying particular attention to the needs of least developed countries and small island developing States, including needs related to capacity-building;
- (l) In a timely manner, to eligible Parties for the preparation of national reports;
- (m) For projects that assist with the implementation of the Action Plan on Capacity-building for Access and Benefit-sharing in support of the implementation of the

Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefit Arising out of their Utilization;

- (n) For the enhancement of national capacities for the establishment and maintenance of mechanisms to protect traditional knowledge at national and subnational levels, and for building the capacity of indigenous and local communities to develop strategies and systems for the protection of traditional knowledge;
 - (o) For capacity development and country-driven projects prioritized in the Global Initiative on Communication, Education and Public Awareness;
11. *Requests* the Global Environment Facility to report on the implementation of the present decision to the Conference of the Parties at its seventh meeting.

DECISION VI/18 | Scientific and technical cooperation and the clearing-house mechanism

The Conference of the Parties

1. *Invites* Parties to use effectively the central portal of the clearing-house mechanism and to establish or strengthen national, subregional or regional focal points for the clearing-house mechanism, if they have not done so already;
2. *Requests* the Executive Secretary to commission a review to assess the current and potential role of the clearing-house mechanism in promoting technical and scientific cooperation, including its role in facilitating the transfer of technology and know-how and capacity-building to support implementation of the Convention at the national level, and to report on this review to the Conference of the Parties at its seventh meeting;
3. *Recommends* that the Executive Secretary update and further develop the clearing-house mechanism tool kit referred to in decision IV/2 of the Conference of the Parties, incorporating the use of guidelines, best practices and new information formats, protocols and standards to assist Parties in the establishment or improvement of national, subregional or regional focal points for the clearing-house mechanism;
4. *Urges* the Executive Secretary to convene additional capacity-building workshops at the national, subregional and regional levels referred to in decision V/14 of the Conference of the Parties for clearing-house activities and training in support of national capacities to implement the Convention;
5. *Urges* the Executive Secretary, in collaboration with existing international networks of indigenous and local communities and, as appropriate, national focal points, to assist in the further development of communication networks for use by these communities, with an initial emphasis on information-sharing formats, protocols and standards, having regard to ethical issues pertaining to traditional knowledge. These networks would not be used to exchange or disclose traditional knowledge.

DECISION VI/19 | Communication, education and public awareness

The Conference of the Parties,

Global Initiative on Communication, Education and Public Awareness

Recalling the provisions of Article 13 of the Convention on Biological Diversity and its decisions IV/10 B, paragraph 6, and V/17,

Taking note of the information provided by the Executive Secretary with regard to biodiversity education and public awareness,¹²⁷

Noting with appreciation the work done by the Consultative Working Group of Experts convened according to decision V/17,

Recognizing that communication, education and public awareness are essential elements for the successful and effective implementation of the Convention,

Further recognizing the central role of communication, education and public awareness in the implementation of the Strategic Plan,

Emphasizing that communication and education are two distinct yet complementary disciplines,

Noting that key actors in the implementation of the Convention need effective instruments on communication, education and public awareness to engage major stakeholders and to convey the appropriate messages to mainstream biodiversity,

Recognizing the complementary nature of a global initiative on education and public awareness and the corporate communication of the Secretariat of the Convention on Biological Diversity,

1. *Decides* to adopt the programme of work for a Global Initiative on Communication, Education and Public Awareness, as contained in the annex to the present decision;
2. *Invites* Parties to strongly and effectively promote biodiversity-related issues through the press, the various media, and public relations and communications networks at national levels;
3. *Requests* the Parties to the Convention and other Governments:
 - (a) To support the national, regional and international activities prioritized by the Global Initiative on Education and Public Awareness;
 - (b) To develop adequate capacity to deliver initiatives on communication, education and public awareness, taking into account special needs of developing countries, in particular, the least developed countries and small island developing States;
4. *Requests* the Executive Secretary, in consultation with the United Nations Educational, Scientific and Cultural Organization, the United Nations Environment Programme, the IUCN Commission for Education and Communication, and other

127 UNEP/CBD/COP/6/13, section V, and UNEP/CBD/COP/6/13/Add.2.

members of the Consultative Working Group of Experts established by decision V/17, as well as any relevant institutions, to:

- (a) Monitor and evaluate the implementation of the Global Initiative according to the conditions established in the annex to the present decision for its start-up phase and report regularly on its implementation to the meetings of the Conference of the Parties;
 - (b) Review the communication, education and public-awareness dimensions of existing and new cross-cutting issues and thematic areas, and specifically those priorities and action plans established in the Strategic Plan for the Convention;
 - (c) Promote, in collaboration with the relevant agencies, the development and implementation of demonstration projects that can serve as models to initiate similar projects that can be adopted by Parties, and to report thereon to the Conference of the Parties at its seventh meeting;
 - (d) Seek the submission of relevant case-studies on biodiversity communication, education and public awareness from relevant sources;
 - (e) Develop and implement a corporate communication strategy for the Secretariat.
5. *Invites* the Global Environment Facility to include expertise relating to communication, education and public awareness when evaluating projects for funding approval and to strengthen its involvement in and support of the national implementation of the Global Initiative;
 6. *Invites* the private sector to become an active player in the Global Initiative and encourages the private sector to mobilize resources for this Initiative;
 7. *Invites* the United Nations Environment Programme:
 - (a) To promote biodiversity-related communication, education and public-awareness activities across multilateral environmental agreements and programmes;
 - (b) To promote capacity-building for communication, education and public awareness at the regional level in cooperation with IUCN and others;
 - (c) To develop international mechanisms that facilitate access to environmental information, environmental justice and public participation.
 8. *Urges* the United Nations Educational, Scientific and Cultural Organization to develop a plan to integrate biodiversity into all levels of formal education;
 9. *Invites* other agencies such as the United Nations Development Programme, the World Bank, and development banks:
 - (a) To reflect in their funding policies the Global Initiative on Communication, Education and Public Awareness according to the conditions established in the annex to the present decision;
 - (b) To include expertise on communication, education and public awareness when evaluating projects for funding approval.
 10. *Invites* indigenous people's organizations, community-based organizations and non-governmental organizations to include communication, education and

public awareness in their relevant activities and to support the global initiative on education and public awareness according to the conditions established in the annex to the present decision.

Library and publications

Welcoming the significant increase in the number and variety of publications prepared by the Secretariat, in particular the *Global Biodiversity Outlook*, the Handbook of the Convention, the Technical Series and the various brochures,

11. *Invites* Parties to facilitate the increase in the number of biodiversity-related publications in their national libraries in order to facilitate further dissemination of knowledge on biodiversity issues among the general public;

12. *Requests* the Executive Secretary to:

- (a) Develop appropriate partnerships with public and private research and academic institutions for the exchange of publications related to biodiversity;
- (b) Examine the possibility of establishing formal liaison with schools of environmental education to further disseminate decisions of the Conference of the Parties to future specialists;
- (c) Make available all publications in the area of biodiversity communication, education and public awareness that have been produced by the Secretariat in the six official United Nations languages, subject to the availability of funding, and promote the translation of those publications in the languages of indigenous and local communities;

13. *Invites* United Nations bodies and other international and regional organizations to send copies of their biodiversity-related publications to the library of the Secretariat.

ANNEX PROGRAMME OF WORK FOR THE GLOBAL INITIATIVE ON COMMUNICATION, EDUCATION AND PUBLIC AWARENESS (CEPA)

It is recognized that:

- (a) The concept of biodiversity poses particular communication and education challenges due to its comprehensiveness, complexity and ill-defined nature;
- (b) Key actors in the implementation of the Convention on Biological Diversity need effective technical instruments to engage major stakeholders and to convey the appropriate messages to mainstream biodiversity;
- (c) Despite repeated stated support for education and public awareness, education and communication instruments fail to be effectively utilized in the processes of the Convention. Education and communication instruments lack appropriate funding and are inadequately advised by relevant professional expertise;

- (d) Education and communication, as social instruments, work best when part of an instrument mix designed to formulate, implement and manage the national biodiversity strategy and action plans;
- (e) Biodiversity conservation, sustainable use and equitable sharing call for social change. Education and public awareness are long-term investments towards this change. At the same time, biodiversity issues need to be communicated effectively to ensure the participation of major stakeholders from different sectors. A distinction must therefore be established between communication strategies, on the one hand, and education¹²⁸ and public awareness on the other. For this reason, the expression communication, education and public awareness is used to refer to both disciplines;
- (f) The three programme elements contained below represent two strategic priorities: (i) institutional arrangements; and (ii) programmatic priority areas.

PROGRAMME ELEMENT 1: TOWARDS A GLOBAL COMMUNICATION, EDUCATION AND PUBLIC AWARENESS NETWORK

Operational objectives

1. To establish and manage a global communication, education and public awareness network composed of new information technologies and traditional communication mechanisms;
2. To stimulate the creation of national, subregional and regional communication, education and public awareness networks;
3. To create synergy between existing networks relevant to communication, education and public awareness.

Proposed actions

1. Develop an electronic portal and an alternative information dissemination mechanism towards the establishment of a global network on communication, education and public awareness, building on, where possible, existing initiatives.¹²⁹ The portal will be composed of new communication tools and resources including Internet-based technologies, CD-ROMs, DVDs, etc. The alternative information dissemination mechanism will use traditional media such as brochures and pamphlets and other communication modes such as theatre, music and dance. Using Internet-based and traditional information resources, this global network will:
 - (a) Make visible the expertise in biodiversity communication and education including communication, education and public awareness training databases;
 - (b) Stimulate moderated electronic discussions on issues of interest to communication, education and public awareness professionals;

128 See relevant UNESCO documentation on terminology.

129 Such as the Biodiversity Education and Public Awareness—BEPA Online and the Inter-American Biodiversity Information Network (IABIN).

- (c) Link the portal to other networks and websites on communication and education, for example, those of the Convention on Wetlands (Ramsar, Iran, 1971), the United Nations Framework Convention on Climate Change, etc.;
- (d) Provide access to relevant projects and publications;
- (e) Link with established learning institutions and centres of excellence to ensure the quality of products and materials;
- (f) Stimulate and provide means for people to find those working on similar projects, problems or issues;
- (g) Create access to standards of best practices;
- (h) Ensure that the global network is service- and demand-oriented;
- (i) Promote communication and public awareness at the community level.

2. Identify potential partners and stakeholders:

Create a registry of education and communications experts, organizations and networks (governmental; non-governmental; indigenous; religious; sectoral – business and industry, agriculture, fisheries, forests, tourism; media).

Beneficiaries

Parties, coordinators of national biodiversity strategies and action plans, educators, communicators, non-governmental organizations and governmental implementing agencies.

Expected results

1. The communication, education and public awareness global network for networking is operational and linked to the clearing-house mechanism;
2. Lists of networks and contact addresses, available on the Internet and on CD-ROMs;
3. Enhanced communication and knowledge exchange nationally and regionally.

Lead organization

Secretariat of the Convention, in cooperation with IUCN—the World Conservation Union.

Partners

Parties, UNESCO, UNEP, the IUCN Commission for Education and Communication, the International Union of Biological Sciences (IUBS), the Convention on Wetlands (Ramsar, Iran, 1971).

Time frame

Three years.

Budget

Phase 1: \$250,000 first year; \$100,000 each subsequent year.

Phase 2: Establish phase 2 budget as part of the review process by the Conference of the Parties at its seventh meeting.

PROGRAMME ELEMENT 2: EXCHANGE OF KNOWLEDGE AND EXPERTISE

Operational objectives

1. To enhance exchange of knowledge and expertise among professionals, enhancing development and innovation on communication, education and public awareness;
2. To meet knowledge needs of Parties and other stakeholders for Article 13.

Proposed actions

1. Document and analyse national reports from the Parties on communication, education and public awareness to develop needs for communication, education and public awareness support;
2. Identify links and provide searchable means to access biodiversity knowledge through the clearing-house mechanism;
3. Research, collect and exchange communication, education and public awareness projects and case-studies through the World Wide Web, workshops, CD-ROMs, and publications;
4. Sharing knowledge about tools and criteria for best practices;
5. Provide copyright free graphics and materials, subject to available funding, for adaptation;
6. Develop the global network in programme element 1 to facilitate actions in programme element 2.

Beneficiaries

Parties, coordinators of national biodiversity strategies and action plans, governmental implementing agencies, educators, communicators, non-governmental organizations.

Expected results

1. Biodiversity communication and education solutions for practitioners and parties and stakeholders;
2. Professional exchange of expertise made more accessible.

Lead organization

Secretariat of the Convention on Biological Diversity, in cooperation with UNESCO and IUCN.

Partners

Parties, UNEP, IUBS.

Time frame

Three years.

Budget

\$400,000 per annum (\$1.2 million total).

PROGRAMME ELEMENT 3: CAPACITY-BUILDING FOR COMMUNICATION, EDUCATION AND PUBLIC AWARENESS

Operational objectives

1. Develop capacity of the Parties to market biodiversity to other sectors, and mainstream biodiversity into the work of other sectors;
2. Develop professional capacity of educators and communicators;
3. Enhance stakeholder participation and community development through communication, education and public awareness.

Proposed actions

1. Create and deliver training programmes including: courses help desks, coaching, manuals, check lists, exchange on application of methods to work with stakeholders;
2. Establish system for professional exchanges;
3. Promote twinning programmes;
4. Establish a distance-learning programme on communication, education and public awareness;
5. Improve synergies between communication, education and public awareness research and practice;
6. Build capacity to evaluate and define principles for the evaluation of good communication, education and public awareness practice;
7. Develop appropriate sets of tools for communicators on biodiversity;
8. Establish partnerships with journalists and broadcasters engaged in communicating biodiversity related issues through the mass media;
9. Build capacity for fund-raising.

Beneficiaries

Parties, coordinators of national biodiversity strategies and action plans, educators, communicators, non-governmental organizations, governmental implementing agencies.

Expected results

1. A range of individuals and institutions with an enhanced understanding of the needs, methods and mechanisms of stakeholder participation;

2. A range of individuals and institutions with capacity to plan and manage biodiversity communication and education;
3. Communicators pack – set of tools (among others);
4. Online training course in communication (among others);
5. Greater access at the community level to communication and public education and awareness programmes, courses and resources.

Lead organization

Secretariat of the Convention on Biological Diversity, with the cooperation of UNEP, UNESCO, UNDP, the United Nations Institute for Training and Research (UNITAR), IUCN and WWF.

Partners

Parties.

Time frame

Three years.

Budget

\$300,000 per annum (\$900,000 total).

DECISION VI/20 | Cooperation with other organizations, initiatives and conventions

Cooperation with various international organizations, initiatives and other conventions

The Conference of the Parties

1. *Reaffirms* the importance of cooperation and the need to design and implement mutually supportive activities with other conventions, international organizations and initiatives, as specified under this and other decisions;
2. *Welcomes* the further contribution that the Millennium Ecosystem Assessment, the Global International Waters Assessment, the Forest Resources Assessment 2000, the report on the State of the World's Plant and Animal Resources of the Food and Agriculture Organization of the United Nations, the World Water Assessment Programme and the IUCN Red List assessment have made to the work of the Subsidiary Body on Scientific, Technical and Technological Advice and the Convention;
3. *Invites* those conducting these assessments to keep the Subsidiary Body on Scientific, Technical and Technological Advice informed of their work, and *further invites* them to report to the Subsidiary Body on Scientific, Technical and Technological Advice at its eighth and ninth meetings;

4. *Welcomes* the work of the United Nations Environment Programme on the harmonization of environmental reporting and encourages its continuation, whilst recognizing the need to ensure that this does not affect the ability of the Conference of the Parties to adjust national reporting procedures under the Convention in order to better meet the needs of Parties;
5. *Recognizes* the importance of collaboration with the United Nations Forum on Forests on issues related to forest biological diversity and encourages practical cooperation at the level of the respective secretariats;
6. *Recognizes* the need to establish cooperation with the United Nations Permanent Forum for Indigenous Issues, in particular on matters relevant to Article 8(j) and related provisions;
7. *Invites* the Food and Agriculture Organization of the United Nations to continue its close working relationships with the Executive Secretary and to extend its cooperation on those relevant areas identified in the decisions of the current meeting under the item on agricultural biological diversity, in particular on the International Treaty on Plant Genetic Resources for Food and Agriculture;
8. *Urges* Parties to take steps to harmonize policies and programmes, at the national level, among the various multilateral environmental agreements and relevant regional initiatives, with a view to optimising policy coherence, synergies and efficiency in their implementation, at the national, regional and international levels.

Cooperation with the United Nations Convention on Climate Change and the Convention to Combat Desertification

9. *Welcomes* the activities being undertaken with the United Nations Framework Convention on Climate Change, including its Kyoto Protocol, and *requests* the Subsidiary Body on Scientific, Technical and Technological Advice and the Executive Secretary to continue to cooperate with the United Nations Framework Convention on Climate Change, including its Kyoto Protocol, and the Intergovernmental Panel on Climate Change (IPCC) on relevant issues such as dry and sub-humid lands, agricultural biological diversity, forest biological diversity, marine and coastal biological diversity, especially coral reefs, and incentive measures and impacts of measures envisaged under the Kyoto Protocol with a view to maximizing synergies between these processes;
10. *Recognizes* that there is a need to take immediate actions under the Convention on Biological Diversity and the United Nations Framework Convention on Climate Change to reduce and mitigate the impacts of climate change on the biological diversity of coral reefs and their associated socio-economic effects;
11. *Welcomes* the conclusions of the sixth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice of the Convention on Biological Diversity and the Subsidiary Body for Scientific and Technological Advice of the United Nations Framework Convention on Climate Change regarding cooperation among the United Nations Framework Convention on Climate Change, the United Nations Convention to Combat Desertification and the Convention on Biological Diversity;

12. *Welcomes further* the establishment of the joint liaison group among the United Nations Framework Convention on Climate Change, the United Nations Convention to Combat Desertification and the Convention on Biological Diversity and *urges* the joint liaison group to become fully operational in order to facilitate cooperation between the conventions both at national and international levels;

13. *Takes note* of the terms of reference of the joint liaison group of the secretariats of the Convention on Biological Diversity, the United Nations Convention to Combat Desertification and the United Nations Framework Convention on Climate Change, and the proposed programme of work agreed upon at the fifteenth session of the Subsidiary Body for Scientific and Technological Advice of the United Nations Framework Convention on Climate Change and *encourages* further coordinated work, especially on issues relating to the national level;

14. *Invites* Parties to provide views to the Executive Secretary on the need for further enhanced cooperation between the Subsidiary Body for Scientific and Technological Advice of the United Nations Framework Convention on Climate Change and the Subsidiary Body on Scientific, Technical and Technological Advice of the Convention on Biological Diversity, including suggestions for specific actions by 30 May 2002.

Cooperation with the Convention on Wetlands (Ramsar, Iran, 1971)

15. *Welcomes and endorses* the third joint work plan (2002–2006) between the Convention on Biological Diversity and the Convention on Wetlands (Ramsar, Iran, 1971);¹³⁰

16. *Notes* that the third joint work plan includes a range of cooperative actions in relation to several ecosystem themes and cross-cutting issues of the Convention on Biological Diversity, as well as proposing actions to harmonize institutional processes, and *requests* the Subsidiary Body on Scientific, Technical and Technological Advice and the Executive Secretary to take these actions fully into consideration in furthering the respective programmes of work for these areas.

Cooperation with the Convention on the Conservation of Migratory Species of Wild Animals

17. *Welcomes and endorses* the joint work programme between the Convention on Biological Diversity and the Convention on the Conservation of Migratory Species of Wild Animals;¹³¹

18. *Notes* that the joint work programme between the Convention on Biological Diversity and the Convention on Migratory Species includes a range of cooperative actions in relation to several ecosystem themes and cross-cutting issues of the Convention on Biological Diversity, as well as proposing actions to harmonize institutional processes, and *requests* the Subsidiary Body on Scientific, Technical and Technological Advice and the Executive Secretary to take these actions fully into consideration in furthering the respective programmes of work for these areas;

130 UNEP/CBD/COP/6/INF/14.

131 UNEP/CBD/COP/6/INF/15.

19. *Recognizes* migratory species as a unique globally important component of biological diversity under the Convention on Migratory Species, and *further recognizes* that the conservation and sustainable use of migratory species need to be undertaken in their migratory range and through cooperative actions.;
20. *Invites* the Secretariat of the Convention on Migratory Species and Parties to that Convention, to compile and disseminate through the clearing-house mechanism of the Convention on Biological Diversity case-studies on migratory species and their habitats, relevant to thematic areas and cross-cutting issues under the Convention on Biological Diversity;
21. *Invites* the Executive Secretary to generate, in collaboration with the Secretariat of the Convention on Migratory Species and relevant organizations, guidance for the integration of migratory species into the national biodiversity strategies and action plans and ongoing and future programmes of work under the Convention on Biological Diversity;
22. *Urges* Parties to report through their national reports on the extent to which they address migratory species at the national level, and on their cooperation with other range States;
23. *Recognizes* the Convention on Migratory Species as the lead partner in conserving and sustainably using migratory species over their entire range and *also recognizes* that the Convention on Migratory Species provides an international legal framework through which range States can cooperate on migratory species issues.

Cooperation with the Convention on International Trade in Endangered Species of Wild Fauna and Flora

24. *Invites* the secretariats of the Convention on International Trade in Endangered Species of Wild Fauna and Flora and the Convention on Biological Diversity to continue to cooperate and coordinate activities with a view to facilitating the exchange of relevant information and experience and enhancing synergies in areas of mutual interest.

Cooperation with the World Trade Organization

25. *Reaffirms* the need to promoting increased mutual supportiveness of trade and environment agreements in achieving sustainable development, as stressed in decision IV/15 of the fourth meeting of the Conference of the Parties, and reiterated in the Cartagena Protocol on Biosafety and the Doha Ministerial Declaration of the World Trade Organization adopted on 14 November 2001;
26. *Notes* the Doha Ministerial Declaration, which welcomes a continued cooperation by the World Trade Organization with United Nations Environment Programme and other intergovernmental environmental organizations, and encourages efforts to promote cooperation between the World Trade Organization and relevant international environmental and developmental organizations;
27. *Recognizes* the importance of cooperation with the World Trade Organization with regard to matters that are relevant to the Cartagena Protocol on Biosafety and

in preparing for the implementation of the Protocol, emphasizes the need to ensure mutual supportiveness with the relevant agreements under the World Trade Organization, in particular with the Agreement on Sanitary and Phytosanitary Measures and the Agreement on Technical Barriers to Trade, with a view to achieving sustainable development;

28. *Welcomes* the practice established between the Executive Secretary and the World Trade Organization to exchange information regarding developments under the Intergovernmental Committee for the Cartagena Protocol on Biosafety;

29. *Requests* the Executive Secretary to apply to the World Trade Organization for an observer status and to represent the Convention on Biological Diversity in the meetings of the Committee on Sanitary and Phytosanitary Measures and the Committee on Technical Barriers to Trade;

30. *Further requests* the Executive Secretary to renew the application to the World Trade Organization for observer status in the Council for the Agreement on Trade-related Aspects of Intellectual Property Rights.

Cooperation with the International Plant Protection Convention

31. *Welcomes* the recommendations of the Open-ended Working Group of the Interim Commission on Phytosanitary Measures on Specifications for an International Standard for Phytosanitary Measures on Living Modified Organisms, in particular to include expertise on the provisions and implementation of the Cartagena Protocol on Biosafety and on the requirement for consistency with the Protocol;

32. *Requests* the Executive Secretary to continue to maintain close cooperation with the Interim Commission on Phytosanitary Measures of the International Plant Protection Convention as regards the development of standards for plant pest risk analysis involving living modified organisms;

33. *Encourages* Parties to the Convention on Biological Diversity and Governments participating in the International Plant Protection Convention process to include experts on the Cartagena Protocol on Biosafety and the Convention on Biological Diversity in their delegations to meetings under the International Plant Protection Convention;

34. *Urges* the Interim Commission on Phytosanitary Measures to ensure that the international standards to be developed for the purpose of phytosanitary measures regarding living modified organisms are in harmony with the objective and all relevant requirements of the Cartagena Protocol on Biosafety.

Cooperation with the World Intellectual Property Organization

35. *Recognizes* the leading role of the Convention on Biological Diversity in international biological diversity issues and the role of the World Intellectual Property Organization as the lead specialized agency to address intellectual property rights, and *emphasizes* continued cooperation between the Convention and the Organization;

36. *Encourages* the Executive Secretary to pursue, in accordance with paragraph 17 of decision IV/9, the Memorandum of Understanding between the secretariat of the Convention and the World Intellectual Property Organization with a view to enhancing cooperation between the Convention and the Organization on intellectual property issues arising from the implementation of the Convention such as those in access and benefit-sharing and Article 8(j) and related provisions;
37. *Invites* the World Intellectual Property Organization to address, as a matter of priority, the invitation extended to it under paragraph 4 of its decision VI/24 C, on the role of intellectual property rights in the implementation of access and benefit-sharing arrangements;
38. *Encourages* the World Intellectual Property Organization to take into account the objectives and principles of the Convention on Biological Diversity when dealing with issues related to access and benefit-sharing and traditional knowledge;
39. *Invites* the World Intellectual Property Organization to further strengthen the complementarity of its work programme with that of the Convention on intellectual property issues arising from access and benefit-sharing and Article 8(j) and related provisions and to provide appropriate information on these issues with a view to enhancing mutual supportiveness in the relevant work programmes that fall within the respective mandates of the Convention and the Organization.

DECISION VI/21 | Annex to The Hague Ministerial Declaration of the Conference of the Parties to the Convention on Biological Diversity

The Conference of the Parties,

Recalling its decision V/27 on the contribution of the Convention on Biological Diversity to the ten-year review of progress achieved since the United Nations Conference on Environment and Development,

Noting the outcome of the third meeting of the Commission on Sustainable Development acting as the Preparatory Committee for the World Summit on Sustainable Development,

Convinced that the World Summit on Sustainable Development should be an excellent opportunity to mobilize more political will and resources to promote the implementation of the Convention on Biological Diversity and reinvigorate the global commitment to sustainable development,

Deeply concerned that, despite many successful and continuing efforts of the international community since the entry into force of the Convention and the fact that some progress has been made, the condition of biodiversity in the world's major ecosystems continues to deteriorate, almost without exception and often at an accelerating rate,

Recalling resolution 55/199 of the United Nations General Assembly on the ten-year review of progress achieved in the implementation of the outcome of the

United Nations Conference on Environment and Development which invited, *inter alia*, conventions related to the Conference to participate fully in the ten-year review of progress achieved in the implementation of Agenda 21,

Noting with appreciation the outcomes of the International Conference on Financing for Development which took place in Monterrey, Mexico, in March 2002,

1. *Welcomes* the contribution of the Executive Secretary to the preparations for the World Summit on Sustainable Development;
2. *Adopts* the annexed contribution to the World Summit on Sustainable Development and *requests* the President of the Conference of the Parties to transmit this contribution from the Conference of the Parties to the World Summit on Sustainable Development, as well as prior to and on the occasion of the fourth preparatory committee meeting to be held in Bali, Indonesia;
3. *Requests* the Executive Secretary to continue to participate actively in the preparatory process for the World Summit on Sustainable Development, and in the Summit itself, with a view to ensuring that the objectives of the Convention, particularly those relating to poverty eradication and sustainable development; are duly reflected in its outcome, and to report to the seventh meeting of the Conference of the Parties accordingly;
4. *Encourages* Governments to promote partnership initiatives for biodiversity programmes involving the public and private sectors and other major stakeholders to be included in the outcome of the World Summit on Sustainable Development;
5. *Encourages* Governments to involve national focal points for the Convention on Biological Diversity in the World Summit on Sustainable Development process, and other major stakeholders, including non-governmental organizations, to participate in that process, and *invites* developed countries to provide support to that end through appropriate channels;
6. *Requests* the President of the Conference of the Parties, in close cooperation with the Bureau and the Executive Secretary, to analyse the outcome of the World Summit on Sustainable Development as it relates to the Convention process and to report thereon to the Conference of the Parties at its seventh meeting.

ANNEX

CONTRIBUTION FROM THE CONFERENCE OF THE PARTIES TO THE CONVENTION ON BIOLOGICAL DIVERSITY TO THE WORLD SUMMIT ON SUSTAINABLE DEVELOPMENT

A. Introduction: the Convention on Biological Diversity and Agenda 21

1. The maintenance of biodiversity is a necessary condition for sustainable development and as such constitutes one of the great challenges of the modern era.
2. The rate of biodiversity loss is increasing at an unprecedented rate, threatening the very existence of life as it is currently understood.

3. Addressing the major threats to biodiversity will require long-term and fundamental changes in the way resources are used and benefits are distributed. Achieving this adjustment will require broad-based action among a wide range of actors.
4. The importance of the biodiversity challenge was universally acknowledged at the United Nations Conference on Environment and Development, which met in Rio de Janeiro in 1992, and through the adoption of the Convention on Biological Diversity.
5. In becoming Parties to the Convention, States have committed themselves to undertaking national, regional and international measures aimed at achieving its three objectives: the conservation of biological diversity; the sustainable use of its components; and the fair and equitable sharing of benefits arising out of the utilization of genetic resources.
6. The Conference of the Parties has met six times and, on each occasion, through its decisions has taken steps to translate the general provisions of the Convention into practical action. This process has initiated national biodiversity strategies and action plans in over 100 countries, raised awareness about biodiversity and led to the adoption of the Cartagena Protocol on Biosafety, a treaty that provides an international regulatory framework for the safe transfer, handling and use of living modified organisms resulting from modern biotechnology.

B. Experience gained and lessons learned in implementing the Convention on Biological Diversity

7. The last ten years have clearly demonstrated that the Convention is the principal global instrument relevant to achieving the goals set out in chapter 15 of Agenda 21 titled “Conservation of Biological Diversity.” During that period the Convention has realized significant achievements:

- The Cartagena Protocol on Biosafety was adopted by an extraordinary meeting of the Conference of the Parties in Montreal on 29 January 2000;
- National biodiversity strategies and action plans have been developed by over 100 Parties to the Convention and are under active implementation;
- A clearing-house mechanism has been established and operationalized to promote and facilitate technical and scientific cooperation amongst Parties;
- Public awareness of the importance of biodiversity and of the objectives of the Convention has been raised considerably in many countries;
- A Global Biodiversity Outlook which provides a general view on the status of biodiversity, the main pressures contributing to its loss, and the state of implementation of the Convention has been prepared and widely circulated;
- Indigenous and local communities have been effectively involved in the Convention process;
- A Strategic Plan for the Convention has been adopted; and
- The Global Environment Facility as the institutional structure operating the financial mechanism of the Convention, other financial mechanisms, donors and international organizations have made significant contributions to the progress in the implementation of the Convention by Parties in the last decade, particularly through multi-stakeholder processes.

8. Notwithstanding these important achievements much still remains to be done.
9. The experience and lessons learnt from the work of the Convention also indicate several key areas where implementation of the Convention and of Agenda 21 can be mutually reinforcing. Such areas include:

AGENDA 21	CONVENTION ON BIOLOGICAL DIVERSITY
Promoting education, public awareness and training (chapter 36)	Public education and awareness (Article 13)
Environmentally sound management of biotechnology (chapter 16)	Cartagena Protocol on Biosafety
Recognizing and strengthening the role of indigenous people and their communities (chapter 26)	Traditional biodiversity knowledge (Article 8(j) and related provisions)
Financial resources and mechanisms (chapter 33)	Financial resources and mechanisms (Articles 20 and 21)
Integrating environment and development in decisions making (chapter 8)	National biodiversity planning and integration into plans, programmes and policies (Article 6)
Promoting sustainable agriculture and rural development (chapter 14)	Work programme on agricultural biological diversity
Combating deforestation (chapter 11)	Work programme on forest biological diversity
Protection of oceans, all kinds of seas, including enclosed and semi-enclosed seas, and coastal areas and the protection, rational use and development of their living resources (chapter 17)	Work programme on marine and coastal biological diversity
Global action for women towards sustainable and equitable development (chapter 24)	Traditional biodiversity-related knowledge (Article 8(j) and related provisions); Sustainable Use of Components of Biological Diversity (Articles 10(c) and 10(d))

10. The most important lesson of the last ten years is that the objectives of the Convention will be impossible to meet until consideration of biodiversity is fully integrated into other sectors. The need to mainstream the conservation and sustainable use of biological resources across all sectors of the national economy, the society and the policy-making framework is a complex challenge at the heart of the Convention.

11. While many countries have made some start in this, notably in those sectors most immediately associated with biodiversity such as forestry, fisheries and agriculture, much more needs to be done, particularly in areas that traditionally are economically and politically dominant such as industry, trade and transport. Even in those sectors where a start has been made in incorporating the consideration of biodiversity into decision-making, more cross-sectoral integration is needed, for example consideration of the impacts of forestry, agriculture or aquaculture on sustainable use of inland water biodiversity, of fishing on marine and coastal biodiversity, or of land-use change on forest or dry-land biodiversity.

12. At the global level, what is needed above all is for other international regimes to take into consideration the concerns of this Convention.

13. The experience of integration has been mixed. On some issues there have been encouraging advances, albeit slower than desired. In others no headway has been made.

14. Another key lesson of the last ten years is the need for leadership in setting the international agenda on biodiversity. Leadership is required in order to ensure that a wide range of stakeholders involved in achieving the aims of the Convention work in harmony. Leadership is required in order to ensure that other sectors effectively consider the aims of the Convention in their activities. Leadership is required in order to ensure that conflicts over uses are minimized. Leadership is required in order to ensure that in the work of the World Summit on Sustainable Development in addressing the needs of the poor and promoting sustainable development, due account is taken of the role of biological diversity.

15. Although the Convention has raised public awareness of biological diversity, of the goods and services it provides, and of the threats that human activities pose to its long-term viability, it is widely recognized that more needs to be done if the aims of the Convention are to be realized. A key need in this regard is increasing stakeholder involvement in implementation of the Convention at international, regional and national levels.

16. The world's poor, particularly the rural poor, are often expected to bear much of the cost of maintaining biodiversity, for example in the form of foregone benefits of land conversion when areas are set aside for the protection of unique or threatened ecosystems or species. Unless they are fully involved in decision-making and benefit-sharing, it is unlikely that long-term solutions to the problem of biodiversity loss can be found. In developing mechanisms to ensure such involvement, it is vital that issues of gender and social structure are properly addressed. Already, there is a growing number of rural communities, especially in developing countries, who have begun to address their poverty issues through innovative approaches to the sustainable use of their biological resources, demonstrating their effectiveness. In this context, it should be ensured that such initiatives are promoted, communicated and supported, as they represent practical means to address the three objectives of the Convention.

17. Biotechnology is a rapidly evolving technology that provides both challenges and opportunities for developing countries. As a knowledge-intensive, rather than a capital-intensive industry, biotechnology provides promising opportunities for developing countries to establish internationally competitive industries and gain market share. The application of this technology and the types of regulatory measures put in place are major policy issues that will receive increasing attention in the coming decade. Chapter 16 of Agenda 21 sets out a basic framework for the sustainable management of this technology. The Cartagena Protocol on Biosafety is one of the principal global instruments for implementing this framework and provides an important opportunity for many developing countries to gain access to information and technology. In order for this opportunity to materialize, early ratification is required to enable the Protocol to enter into force and its institutions

and procedures to be effectively established. There is also need to encourage Parties to take measures to accomplish their obligations as provided for in Article 16 of the Convention, in order to ensure the transfer of environmentally sound and safe technology to developing countries.

18. Completing and adopting national biodiversity strategies and action plans is clearly a priority for all those countries that have not yet done so. For others, implementation of completed strategies and action plans is a high priority. Biodiversity strategies and action plans should be integral parts of national sustainable development strategies and, for those countries eligible for external assistance, they should be central to funding strategies and programming.

19. Donor institutions have made great strides in recognizing the importance of incorporating environmental considerations into their plans, programmes and strategies. The Global Environment Facility as one of the donor institutions has contributed to the realization of these objectives. Nevertheless much more remains to be done, in particular with regard to mainstreaming biodiversity and treating it as an integrating factor, and not a subject to be treated separately from other development concerns. Donor countries could ensure, for example through the Development Assistance Committee of the Organisation for Economic Co-operation and Development, that their development assistance priorities are supportive of the Convention's objectives. The World Bank's Comprehensive Development Framework and Poverty Reduction Strategies offer the possibility for ensuring that the National Biodiversity Strategies and Action Plans and National Strategies for Sustainable Development of its borrowers become central to its overall lending. IMF stabilization and structural adjustment programmes could place more importance on national investments in environmental management and critically examine budget cuts for such measures.

20. Donors of all types should commit to increasing funding for projects that directly address biodiversity. However, there is also a pressing need for donors to review the way in which such projects are funded. Most problems relating to the maintenance and sustainable use of biodiversity are not amenable to the "quick fix" solutions, and it is often clearly unrealistic to expect local sustainability of activities at the end of a three- or five-year project. Although there is increasing awareness of this in the international community, many donors still appear to be wedded to short-term project cycles. The long-term impact of this approach may be actively counter-productive and it is probable that longer-term commitments involving smaller annual disbursements may be more effective than spending larger amounts of money over a shorter period. Donors should also ensure that biodiversity planning processes are country-driven and not donor-driven, in order to increase their effectiveness and the prospects for sustainability at the end of the funding period.

21. The proposed strengthening of the role of United Nations resident coordinators, contained in the Secretary-General's reform plan, will create the opportunity to provide harmonized and synergistic support by United Nations agencies to national implementation of the Convention through the country-level United Nations Development Assistance Framework. The current process of decentrali-

sation from headquarters to regional centres offers the United Nations Development Programme the opportunity to ensure that regional and field office staff are familiar with the objectives and programmes of the Convention, and actively seek to identify with Governments opportunities for integrating these into its full range of development activities (from policy to operations) for simultaneous poverty reduction and environmental protection.

22. The Convention has 183 Parties, making it one of the most inclusive multi-lateral agreements in any field. However membership is not universal. There is a small number of countries that have not yet ratified the Convention. Achieving the objectives of the Convention requires action on a global scale, and it is important that all countries make the commitment to work together for its implementation.

C. Ideas and proposals for the way forward for the further implementation of Agenda 21

23. In light of the foregoing and in order to assist in the further implementation of the Convention on Biological Diversity and of Agenda 21, the Conference of the Parties invites the World Summit on Sustainable Development to:

- (a) Reaffirm that the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources are essential to achieving sustainable human development in the twenty-first century and that implementing the objectives of the Convention will require policy coherence between all relevant instruments and processes, renewed political will on the part of Governments, and a renewed commitment to cooperation and to providing the resources and technology required;
- (b) Reaffirm further that biological diversity is an essential part of the national resource base and its value for sustainable development needs to be underlined while addressing other specific challenges such as poverty alleviation, unsustainable production and consumption patterns, and globalization;
- (c) Recognize the important contribution that community-based sustainable management of biological resources can make to the alleviation of poverty and the achievement of conservation and sustainable use objectives;
- (d) Acknowledge that the Convention on Biological Diversity is the principal International instrument for setting the global agenda and priorities of biological diversity and for achieving the goals of chapter 15 of Agenda 21 (Conservation of biological diversity) and that its Cartagena Protocol on Biosafety is one of the principal global instruments for achieving the goals of chapter 16 of Agenda 21 (Environmentally sound management of biotechnology), and calling on Member States to take concrete measures to ensure the effective implementation of their provisions;
- (e) Acknowledge the need to foster partnerships and linkages with other biodiversity-related conventions, urge biodiversity-related conventions, agreements and programmes to conclude cooperative arrangements with the Convention

- on Biological Diversity for fostering such partnerships and reaffirm the leading role of the Convention in such cooperative arrangements;
- (f) Urge Member States who have not yet done so to become Parties to the Convention on Biological Diversity and its Cartagena Protocol on Biosafety;
 - (g) Urge Member States and all relevant stakeholders to make further efforts to incorporate and mainstream the objectives of the Convention into relevant national sectoral or cross-sectoral plans, programmes and policies and to recall that the conservation of sustainable use of biological diversity is a cross-cutting issue;
 - (h) Urge Member States to actively promote policy coherence in national positions under different international instruments and processes;
 - (i) Stress the importance of investing in programmes of public education and awareness as the principal way of engendering support for the changes in behaviour necessary at all levels of society in all countries if sustainable development is to be achieved, and the inclusion of promotion of the aims of the Convention in such programmes, and the role of information sharing in facilitating the implementation of the Convention;
 - (j) Stress the importance of increasing the active participation by all stakeholders in the implementation of Agenda 21 and of the Convention, in particular, in the elaboration, implementation and evaluation of national biodiversity strategies and action plans;
 - (k) Urge Member States to collaborate and actively promote the joint implementation of Agenda 21 and the Convention on Biological Diversity at the international, regional and national levels;
 - (l) Urge the United Nations, its programmes, related organizations and specialized agencies to take the opportunities offered by the proposed enhanced role of the United Nations resident coordinator contained in the reform plan of the Secretary-General and by the process of decentralization within the Organization, to provide harmonized and synergistic support at the national level to implementation of the Convention, including through national United Nations Development Assistance Frameworks;
 - (m) Invite Member States and international organizations to renew their commitments to leveraging and providing the necessary financial resources, promoting the transfer of technology and cooperation, and building capacities in order to facilitate more effective implementation of the Convention, in particular through the full replenishment of the Global Environment Facility and securing additional financial resources from the private sector.

DECISION VI/22 | Forest biological diversity

The Conference of the Parties

Expert group meetings and other inter-sessional meetings

1. *Welcomes* the report of the Ad Hoc Technical Expert Group on Forest Biological Diversity established by the Conference of the Parties at its fifth meeting,¹³² and *takes note* of the assessment of status and trends of, and major threats to, forest biological diversity contained in the report;
2. *Expresses its gratitude* to the Government of Canada and to the Government of the United Kingdom for their financial support to the work of the Ad Hoc Technical Expert Group on Forest Biological Diversity, and to the other Governments and international organizations for the participation of their representatives;
3. *Also expresses its gratitude* to the Co-Chairs, the experts and the Secretariat of the Convention on Biological Diversity for their work regarding the Ad Hoc Technical Expert Group on Forest Biological Diversity;
4. *Welcomes* the report of the Workshop on Forests and Biological Diversity, held in Accra from 28 to 30 January 2002¹³³ and *takes note* of the recommendations of the Workshop for an effective collaboration on forests and biodiversity among the Convention on Biological Diversity, the United Nations Forum on Forests, and their partners contained in the report;
5. *Expresses its gratitude* to the Government of Ghana for hosting the Workshop on Forests and Biological Diversity and the Government of the Netherlands for its financial support, and to the other Governments and international organizations for the participation of their representatives;
6. *Expresses its gratitude* to the Co-Chairs, the experts and the Secretariats of the Convention on Biological Diversity and the United Nations Forum on Forests for their work regarding the Workshop;
7. *Welcomes* the report of the first meeting of the Ad Hoc Technical Expert Group on Biological Diversity and Climate Change, held in Helsinki from 21 to 25 January 2002,¹³⁴ and *expresses its gratitude* to the Government of Finland for hosting the workshop and the Government of Switzerland for financial support, and to the Co-Chairs and the experts;
8. *Takes note* of the report of the Expert Meeting on Harmonization of Forest-related Definitions,¹³⁵ held in Rome from 23 to 25 January 2002, under the auspices of the Food and Agriculture Organization of the United Nations, the Intergovernmental Panel on Climate Change, the Center for International Forestry Research, and other partners;
9. *Welcomes* the establishment of the liaison group of the secretariats of the Convention on Biological Diversity, the United Nations Convention to Combat Deser-

132 UNEP/CBD/SBSTTA/7/INF/3.

133 UNEP/CBD/COP/6/INF/7.

134 UNEP/CBD/COP/6/INF/6.

135 UNEP/CBD/COP/6/INF/26.

tification and the United Nations Framework Convention on Climate Change and *encourages* the activities of the group in promoting complementarity and synergies in their activities on forests and forest ecosystems.

Expanded programme of work

Noting that the elements for an expanded programme of work on forest biological diversity developed by the Subsidiary Body on Scientific, Technical and Technological Advice, as annexed to its recommendation VII/6, constitute a comprehensive set of goals, objectives and activities required for the conservation of forest biodiversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising from the utilization of forest genetic resources,

Underlining the sovereign rights and responsibilities of countries over their forests and the biodiversity within them;

10. *Adopts* the expanded programme of work on forest biological diversity as contained in the annex to the present decision;

11. *Recognizes* that Parties should implement the expanded programme of work on forest biological diversity in the context of their national priorities and needs. Activities implemented domestically by Parties will be prioritized based on country and regionally specific needs, national determination, legislation, circumstances and priorities concerning forest-related issues, and their national forest and biodiversity strategies. Inclusion of an activity in the work programme does not mean relevance of that activity to all Parties;

12. *Invites* Parties, other Governments and relevant organizations to take note of the information pertaining to potential actors, timeframes, performance measures and indicators of progress contained in the note by the Executive Secretary on the subject;¹³⁶

13. *Expresses the need* for action to ensure conservation of biological diversity, the sustainable use of its components, and fair and equitable sharing of the benefits arising out of utilization of genetic resources, and arising from the utilization of traditional knowledge, innovations and practices from indigenous and local communities, in accordance with Article 8(j) and related provisions, of all types of forests, considering the need for urgent action for forests that are ecologically significant and/or most important for biological diversity on national and regional scales and according to national priorities, where forest biodiversity loss or threats of loss are significant or of great concern, and in areas with greatest potential for conservation, sustainable use and benefit-sharing;

14. *Recognizes* that all the activities in the work programme are important, though not equally for all Parties, and as a package of mainly nationally prioritized activities, will contribute significantly to advancing the Convention's objectives as stated in Article 1 of the Convention;

15. *Recognizes* the important role of international and regional organizations and processes in supporting Parties in their implementation of the work programme,

¹³⁶ UNEP/CBD/COP/6/INF/9.

agrees that these organizations and processes are important in the implementation of the programme of work, and *invites* their participation in its implementation;

16. *Urges* donors and the international community to contribute through financing and technology transfer to country-identified or regionally-identified priorities for forest biodiversity, with an understanding of the impact of scarce resources on the effective implementation of the objectives of the Convention;

17. *Agrees* that the availability of new and additional financial resources from public, private, domestic or international sources, with the transfer of technology and capacity-building is necessary to facilitate the effective implementation of the expanded work programme by developing countries, in particular the least developed and small island developing States among them, and in countries with economies in transition;

18. *Recognizes* that the work programme contains a number of activities that call for regional and international actions and collaboration and *encourages* Parties, other Governments and international and regional organizations and processes to collaborate on the implementation of regional and international activities;

19. *Requests* the Executive Secretary to initiate the following actions addressing some initial focus areas which are identified as important first steps towards the implementation of regional and international activities of the expanded programme of work, which should facilitate or complement national implementation. The initiation of these actions should not delay implementation of other activities within the expanded work programme at international, regional or national level:

(a) *Ecosystem approach*. In collaboration with the Coordinator and Head of Secretariat of the United Nations Forum on Forests to:

- (i) Carry out a comparative study to clarify the conceptual basis of the ecosystem approach in relation to the concept of sustainable forest management with adequate consideration for regional conditions;
- (ii) Undertake a synthesis of case-studies on the ecosystem approach provided to the Convention on Biological Diversity by Parties;
- (iii) Invite the Collaborative Partnership on Forests members to provide a discussion paper, drawing on concrete national or regional experiences and inter-sessional meetings for consideration by the Convention on Biological Diversity.

The study should evaluate the link between the concepts in their application and the differences and similarities with a view to improve the conservation of biological diversity, sustainable use of its components, and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, taking an integrated approach, and in accordance with Article 8(j) and related provisions. The study should be reported to and provide recommendations to the Subsidiary Body on Scientific, Technical and Technological Advice for consideration as part of its work on the ecosystem approach and to the United Nations Forum on Forests at its fourth session for information;

- (b) *Collaboration with other bodies/enabling environment.* In collaboration with the Coordinator and Head of the Secretariat of the United Nations Forum on Forests, Collaborative Partnership on Forests members, and other relevant bodies, institutions and processes to undertake an assessment of the relationship between the proposals for action of the Intergovernmental Panel on Forests/Intergovernmental Forum on Forests and the activities of the expanded programme of work on forest biological diversity. The purpose of this assessment is to enable better implementation of common objectives in the context of national forest programmes and national biodiversity strategies and action plans. The assessment should consider, *inter alia*, the existing national forest programmes and national biodiversity strategies and action plans, and the way countries promote their implementation in an integrated manner. This should lead to more effective and cost-efficient implementation, with better synergies between sectors concerned with the conservation and sustainable use of forest biological diversity. This assessment should be reported to the Subsidiary Body on Scientific, Technical and Technological Advice and to the United Nations Forum on Forests at its fourth session for information and be disseminated through the clearing-house mechanism ;
- (c) *Cross-sectoral integration.* To compile best practices available to promote and support integrated approaches to reduce negative impacts and enhance positive impacts of other sectoral policies on forest biological diversity with a view to developing a tool kit for building capacity in integrated approaches and planning. The best practices and proposed components of the tool kit should be made available to Parties;
- (d) *Protected areas.* To collaborate with the United Nations Forum on Forests, IUCN and other relevant member of the Collaborative Partnership on Forests, and other relevant bodies, institutions and processes, non-governmental organizations, indigenous and local communities, and other relevant stakeholders to prepare and hold an international workshop on protected areas as a measure to conserve and sustainably use forest biological diversity. Results of regional workshops or international workshops, including the IFF International Experts Meeting on Forest Protected Areas (March 1999 in Puerto Rico) as well as the World Parks Congress scheduled for September 2003, on this subject should be taken into account. The purpose of the international workshop on protected areas is to exchange current knowledge and experience on opportunities and challenges to establishing and ensuring long-term sustainability of protected forest areas. Participants from Parties and other Governments should include senior officials from forest and environment ministries, the decision makers and other stakeholders. This workshop should provide recommendations for the further implementation of activities relevant to protected forest areas in the work programme (element 1, goal 3, objective 3), and should be held for three days just prior to the ninth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice, to report to the Subsidiary Body at its ninth meeting under the agenda item on protected areas;
- (e) *Forest law enforcement and related trade.* In collaboration with Collaborative Partnership on Forests members and relevant bodies, to develop at least two

case-studies from each region, with voluntary participation by countries, on the effects on forest biological diversity of insufficient forest law enforcement. The studies and resulting report would address, *inter alia* the following issues:

- (i) Assessment of the unauthorized harvesting of forest biodiversity on:
 - (a) Fauna (including bushmeat) and flora;
 - (b) Indigenous and local communities;
 - (c) Revenue loss, at the national and local level;
- (ii) Identify the relationship between consumption in consumer countries and unauthorized harvesting activities, including through international trade, noting the decisions and pending work of International Tropical Timber Organization, and identifying and analysing how market access measures can be used to support conservation of forest biodiversity, sustainable use of its components, and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, and also identifying and analysing market access obstacles for legally-obtained forest biodiversity products;

The resulting report should be submitted to the seventh meeting of the Conference of the Parties for its consideration. The report should include recommendations for further implementation of the relevant areas of the work programme (element 1, goal 4, objective 2 and element 2, goal 1, objective 4), and should be provided for use by the liaison group on non-timber forest resources agreed in paragraph 42 of the present decision;

- (f) *Sustainable use/benefit-sharing*. In collaboration with United Nations Forum on Forests and Collaborative Partnership on Forests members, and other relevant bodies including indigenous peoples organizations, institutions and processes to compile a report, with recommendations, addressing the management of forest biological diversity, sustainable use to derive products and services, and benefit-sharing. The purpose of this report is to help implement the activities under element 1, goal 4, objective 1 of the programme of work, by looking at how Parties consider long-term sustainability and conservation of forest biological diversity in the context of the commerce and related harvesting of forest products. The report should be based on information provided by Parties and members of the Collaborative Partnership on Forests and should cover *inter alia* sustainable use and management of forests, including by indigenous and local communities, planning and modelling tools, criteria and indicators, economic valuation of forest biodiversity goods and services, monitoring unsustainable use, needs of indigenous and local communities and information pertaining to the consideration of the needs of future generations. This report should be submitted to the Subsidiary Body on Scientific, Technical and Technological Advice for consideration as part of its work on sustainable use and to the United Nations Forum on Forests at its fourth session for information;
- (g) *Servicing capacity-building*. The Executive Secretary shall provide through the clearing-house mechanism a service for Parties, including through an Internet portal, to seek and provide support and partnerships in order to facilitate

implementation of the expanded work programme on forest biodiversity. To this end, the Executive Secretary shall encourage Parties to communicate their national priorities and shall invite other Governments, regional and international organizations, and non-governmental organizations to support the programme of work through capacity-building, technology transfer and provision of financial resources;

20. *Invites* Parties, other Governments and funding organizations to provide adequate and timely financial support to facilitate the international and regional actions. These actions should not prejudice the financing and support for other international and regional actions in the work programme including projects by Parties and other Governments in the context of their national priorities;

21. *Requests* Parties to report on progress in implementing relevant objectives and related activities of the expanded programme of work on forest biological diversity, through their national reports, starting with the third national report, bearing in mind the national reporting cycles of Parties;

22. *Requests* the Executive Secretary, in collaboration with Collaborative Partnership on Forests members, to develop a format for the section on implementation of the expanded work programme on forest biological diversity in the third and subsequent national reports, and to consider the need to minimize the reporting burden on Parties by taking into account reporting under the United Nations Forum on Forests and other international mechanisms;

23. *Requests* the Executive Secretary in consultation with the Subsidiary Body on Scientific, Technical and Technological Advice and the clearing-house mechanism focal points and using appropriate mechanisms, to identify and/or foster partners, partnerships, and regional and international cooperative initiatives to undertake or support implementation activities under the programme of work;

24. *Requests* the Executive Secretary to compile information on the implementation of the programme of work, including information on the actors involved in the implementation, disseminate this through the clearing-house mechanism, and provide progress reports on implementation to the Subsidiary Body on Scientific, Technical and Technological Advice at each meeting;

25. *Requests* the Subsidiary Body on Scientific, Technical and Technological Advice to review implementation of the programme of work, with a view to identifying appropriate amendments that will further implementation of the Convention in relation to forest biological diversity, and to report thereon to Conference of the Parties at its eighth meeting;

26. *Agrees* to establish an ad hoc technical expert group to provide advice to the Executive Secretary and to the Subsidiary Body on Scientific, Technical and Technological Advice in the review of the implementation of the programme of work, with the following terms of reference:

(a) *Tasks:*

- (i) To provide advice on the way in which the review of the implementation of the programme of work would be undertaken;

- (ii) To provide technical input to the review of the implementation of the programme of work;
 - (iii) To provide scientific and technical information on successes, challenges and obstacles to implementation of the programme of work;
 - (iv) To provide information on the effects of the types of scientific and technical measures taken and tools used in implementing the programme of work;
- (b) *Duration.* The work of the group will be completed before the eighth meeting of the Conference of the Parties, and its duration should not exceed two years;
- (c) *Membership.* In appointing members in accordance with the *modus operandi*, the Executive Secretary is requested to ensure geographical balance and representation of indigenous peoples;

27. *Agrees* that a voluntary thematic national report will be called for in relation to implementation of the programme of work on forest biological diversity by Parties, to elicit information on:

- (a) Priority actions that Parties have identified under the programme of work;
- (b) Successes in implementing the programme of work;
- (c) Challenges and impediments to implementing these priority actions and, as appropriate, the programme of work;

and *requests* the Executive Secretary to prepare a format for that thematic national report for approval by the Bureau of the Conference of the Parties, after consultation with the national focal points and the Bureau of the Subsidiary Body on Scientific, Technical and Technological Advice, and urges Parties to submit the thematic national report by the seventh meeting of the Conference of the Parties to the Convention.

National level

28. *Urges* Parties and other Governments to incorporate relevant objectives and related activities of the programme of work into their national biodiversity strategies and action plans and national forest programmes and promote compatibility and complementarity between these plans/programmes and other related initiatives;

29. *Invites* Parties to undertake national-level implementation and to coordinate their work relating to forest biological diversity at an international level, particularly in respect of work relating to the Convention on Biological Diversity, the United Nations Forum on Forests, as well as other relevant bodies, and to achieve greater integration and collaboration between their implementing agencies at the national level through, for example, joint strategies or policies, and coordinating committees at political and/or technical levels;

30. *Urges* Parties and other governments to address the effectiveness of forest and forest-related laws and their enforcement and implementation of policies and related trade as a matter of urgency, recognizing the negative impacts on biodiversity in the absence of these actions;

31. *Recognizes* the important role that indigenous and local communities can play in the implementation of the programme of work and, in addition, *encourages* the development of community-based approaches for the conservation and sustainable use of forest biodiversity, integrating traditional forest-related knowledge and benefit-sharing considerations, in accordance with Article 8(j) and related provisions of the Convention on Biological Diversity;
32. *Urges* Parties to recognize in particular the vital role that women in indigenous and local communities play in the sustainable use and conservation of forest biological diversity, especially but not limited to the sustainable use and conservation of non-timber resources, and values;
33. *Encourages* Parties and other Governments to develop closer collaboration for the conservation and sustainable use of transboundary forest ecosystems and populations of species;
34. *Recognizes* existing criteria and indicators for sustainable forest management including forest biological diversity at the national and regional levels, and *agrees* that these should be applied where criteria and indicators are needed for the purposes of the expanded work programme, and recognizes the need for further development and selection of criteria and indicators for the assessment of the status and trends of forest biological diversity at the national and regional levels.

Collaboration on specific issues

Noting that both the Convention on Biological Diversity and the United Nations Forum on Forests have important and complementary roles in addressing the problem of forest biological diversity loss, that collaboration between the United Nations Forum on Forests and the Convention on Biological Diversity can strengthen their ability to support and guide immediate and effective action by governments and other bodies, and that such collaboration will also facilitate the integration of forest biodiversity considerations in national development programmes, which will be vital for effective implementation of the Convention on Biological Diversity,

Recognizing that there are many other bodies addressing issues of relevance to forest biodiversity (for example, other members of the Collaborative Partnership on Forests including in particular the United Nations Framework Convention on Climate Change and the United Nations Convention to Combat Desertification), and collaboration with these bodies is also important,

35. *Invites* Parties to foster cooperation and synergies between the expanded work programme on forest biological diversity under the Convention on Biological Diversity and the Multi-Year Programme of Work and Plan of Action of the United Nations Forum on Forests;

36. *Requests* the Secretariat of the Convention on Biological Diversity, as a member of the Collaborative Partnership on Forests, to continue its active support for and participation in the work of the United Nations Forum on Forests and the Collaborative Partnership on Forests in their promotion of the management, conservation and sustainable development of all types of forests and in the strengthening of the political commitment to this end;

37. *Requests* the Executive Secretary to implement collaborative actions for selected items in the expanded programme of work on forest biological diversity, in collaboration with the Coordinator and Head of the Secretariat of the United Nations Forum on Forests, and taking into account the need for effective collaboration on forests and biological diversity among the Convention on Biological Diversity, the United Nations Forum on Forests, and their partners, recognizing the work done by the Workshop on Forests and Biological Diversity held in Accra from 28 to 30 January 2002;¹³⁷

38. *Invites* the members of the Collaborative Partnership on Forests to support the implementation of the expanded programme of work on forest biological diversity, recognizing that the Collaborative Partnership on Forests provides a mechanism for enhancing collaboration on activities addressing common goals of the Convention on Biological Diversity and the United Nations Forum on Forests;

39. *Urges* the Collaborative Partnership on Forests to consider the Secretariat of the Convention on Biological Diversity to be the focal point for forest biological diversity within the Collaborative Partnership on Forests, in addition to its role as the focal point for traditional forest-related knowledge, and *requests* the Secretariat of the Convention on Biological Diversity, in collaboration with the Collaborative Partnership on Forests members, *inter alia*:

- (a) To identify the proposals for action of the Intergovernmental Panel on Forests/Intergovernmental Forum on Forests directly related to the conservation of forest biological diversity, sustainable use of its components, and fair and equitable sharing of the benefits arising from genetic resources;
- (b) To identify the relationship between these proposals for action and the expanded work programme; and
- (c) To facilitate coordination and cooperation of Collaborative Partnership on Forests members in the implementation;

40. *Also invites* the United Nations Framework Convention on Climate Change, the Intergovernmental Panel on Climate Change, the International Geosphere-Biosphere Programme, in the context of its global change and terrestrial ecosystems global transect programme, and the Millennium Ecosystem Assessment to enhance collaboration in research and monitoring activities on forest biological diversity and climate change, and explore possibilities of establishing an international network to monitor and assess the impact of climate change on forest biological diversity;

41. *Further invites* the Ad Hoc Technical Expert Group on Biological Diversity and Climate Change to consider issues related to interlinkages between biological diversity and climate change in the report of the Ad Hoc Technical Expert Group on Forest Biological Diversity and the note by the Executive Secretary on consideration of specific threats to forest biological diversity, prepared for the seventh meeting of the Subsidiary Body on Scientific, Technical and Technological Advice,¹³⁸ as well as the outcome of the sixth meeting of the Conference of the Parties with respect to forest biological diversity, including the expanded programme of work on forest biological diversity;

137 UNEP/CBD/COP/6/INF/7.

138 UNEP/CBD/SBSTTA/7/7.

42. *Requests* the Executive Secretary, on the basis of goal 4, objective 2, of programme element 1 for an expanded work programme on forest biological diversity, to establish a liaison group on non-timber forest resources, including members of the Collaborative Partnership on Forests, the Secretariat of the Convention on International Trade in Endangered Species of Wild Fauna and Flora, IUCN, and other relevant organizations. On the basis of the work of the liaison group, the Subsidiary Body on Scientific, Technical and Technological Advice will prepare recommendations on this matter for consideration by the Conference of the Parties at its seventh meeting;

43. *Invites* members of the Collaborative Partnership on Forests and its network to explore possibilities for enhancing the integration of non-timber forest resources in the forest inventory and management, and to report on progress to the Subsidiary Body on Scientific, Technical and Technological Advice prior to the seventh meeting of the Conference of the Parties;

44. *Invites* the Food and Agriculture Organization of the United Nations, the International Tropical Timber Organization and the Global Fire Monitoring Center, as well as other relevant organizations, to include forest biodiversity in their assessments of fire impacts; to explore possibilities for a joint work programme with the Convention on Biological Diversity, including, *inter alia*, fire impact assessments, development of guidelines on fire management, and community-based approaches to fire prevention and management; and to report on progress to the Subsidiary Body on Scientific, Technical and Technological Advice prior to the seventh meeting of the Conference of the Parties;

45. *Requests* the Executive Secretary to transmit the report of the Ad Hoc Technical Expert Group on Forest Biological Diversity to the United Nations Framework Convention on Climate Change and the United Nations Convention to Combat Desertification and their bodies, to the Intergovernmental Panel on Climate Change, and to ensure follow-up through the liaison group between the Convention on Biological Diversity, the United Nations Convention to Combat Desertification and United Nations Framework Convention on Climate Change.

ANNEX

EXPANDED PROGRAMME OF WORK ON FOREST BIOLOGICAL DIVERSITY

In undertaking this expanded programme of work, Parties, Governments, international and regional organizations and processes, civil society organizations and other relevant bodies and all relevant implementers are invited to take into account the following considerations:

- (a) The need to focus on key priorities for sustainable use of forest resources and the equitable sharing of benefits;
- (b) The need to facilitate adequate participation of indigenous and local communities and the need to respect their rights and interests;
- (c) The need for urgent conservation action for forests that are ecologically significant and/or most important for biological diversity on national and regional

scales, in accordance with national priorities, where forest biodiversity loss or threats of loss are significant or of great concern, but also to work to enhance conservation in all types of forests, both within and outside protected areas;

- (d) The need to achieve synergies and avoid duplications between the work of the key international instruments and bodies, such as the Secretariat of the Convention on Biological Diversity, and the other members of the Collaborative Partnership on Forests;
- (e) The need to ensure capacity-building and the provision of adequate financial, human and technical resources to allow implementation of the work programme by all relevant stakeholders;
- (f) The need to ensure that relevant activities be effectively incorporated into national and subnational forest and biological diversity strategies and programmes;
- (g) The need for clarification of the links between the ecosystem approach and sustainable forest management.

PROGRAMME ELEMENT 1: CONSERVATION, SUSTAINABLE USE AND BENEFIT-SHARING

GOAL 1: To apply the ecosystem approach to the management of all types of forests.

OBJECTIVE 1: *Develop practical methods, guidelines, indicators and strategies to apply the ecosystem approach adapted to regional differences to forests both inside and outside protected forest areas as well as both in managed and unmanaged forests.*

Activities

- (a) Clarify the conceptual basis of the ecosystem approach in relation to sustainable forest management.
- (b) Develop guidance for applying the ecosystem approach in forest ecosystems.
- (c) Identify key structural and functional ecosystem elements to be used as indicators for decision-making and develop decision—support tools on a hierarchy of scales.
- (d) Develop and implement guidance to help the selection of suitable forest management practices for specific forest ecosystems.
- (e) Develop and implement appropriate mechanisms for the participation of all stakeholders in ecosystem-level planning and management.
- (f) Develop an informal international network of forest areas for piloting and demonstrating the ecosystem approach and exchange related information through the clearing-house mechanism.
- (g) Hold workshops to train and familiarize decision makers and managers with the foundations, principles and modalities of the ecosystem approach.

- (h) Promote research and pilot projects to develop understanding of the functional linkages between forest biological diversity and agriculture with the aim of developing practices that could improve the relations between forest management and other land use methods. Promote assessment of functional linkages between mining, infrastructure and other development projects and forest biodiversity, and develop best practice, guidelines for such development projects to mitigate adverse impacts on forest biodiversity.
- (i) Promote activities that minimize the negative impacts of forest fragmentation on forest biodiversity, including afforestation, forest restoration, secondary forest and plantation management, and agroforestry, watershed management and land use planning aimed at providing a combination of economic and environmental goods and services to stakeholders.

GOAL 2: To reduce the threats and mitigate the impacts of threatening processes on forest biological diversity.

OBJECTIVE 1: *Prevent the introduction of invasive alien species that threaten ecosystems, and mitigate their negative impacts on forest biological diversity in accordance with international law.*

Activities

- (a) Reinforce, develop and implement strategies at regional and national level to prevent and mitigate the impacts of invasive alien species that threaten ecosystems, including risk assessment, strengthening of quarantine regulation, and containment or eradication programmes taking into account the guiding principles on invasive alien species if adopted at the sixth meeting of the Conference of the Parties.
- (b) Improve the knowledge of the impacts of invasive alien species on forest ecosystems and adjacent ecosystems.

OBJECTIVE 2: *Mitigate the impact of pollution such as acidification and eutrophication on forest biodiversity.*

Activities

- (a) Increase the understanding of the impact of pollution, e.g., acidification and eutrophication, and other pollutants (such as mercury and cyanide) on forest biodiversity; at genetic, species, ecosystem and landscape levels.
- (b) Support monitoring programmes that help evaluate the impacts of air, soil and water pollution on forest ecosystems, and address the impacts of changing environmental conditions on forest ecosystems.
- (c) Encourage the integration of forest biodiversity consideration into strategies and policies to reduce pollution.
- (d) To promote the reduction of pollution levels that adversely affect forest biodiversity and encourage forest management techniques that reduce the impacts of changing environmental conditions on forest ecosystems.

OBJECTIVE 3: *Mitigate the negative impacts of climate change on forest biodiversity.*

Activities

Taking into account the work of the Ad Hoc Technical Expert Group on Climate Change and Biodiversity:

- (a) Promote monitoring and research on the impacts of climate change on forest biological diversity and investigate the interface between forest components and the atmosphere.
- (b) Develop coordinated response strategies and action plans at global, regional and national levels.
- (c) Promote the maintenance and restoration of biodiversity in forests in order to enhance their capacity to resist to, and recover from and adapt to climate change.
- (d) Promote forest biodiversity conservation and restoration in climate change mitigation and adaptation measures.
- (e) Assess how the conservation and sustainable use of forest biological diversity can contribute to the international work relating to climate change.

OBJECTIVE 4: *To prevent and mitigate the adverse effects of forest fires and fire suppression.*

Activities

- (a) Identify policies, practices and measures aimed at addressing the causes and reducing impacts on forest biological diversity resulting from human-induced uncontrolled/unwanted fires, often associated with land clearing and other land use activities.
- (b) Promote understanding of the role of human-induced fires on forest ecosystems and on species, and of the underlying causes.
- (c) Develop and promote the use of fire management tools for maintaining and enhancing forest biological diversity, especially when there has been a shift in fire regimes.
- (d) To promote practices of fire prevention and control to mitigate the impacts of unwanted fires on forest biological diversity.
- (e) Promote development of systems for risk assessment and early warning, monitoring and control, and enhance capacity for prevention and post-fire forest biodiversity restoration at the community, national and regional levels.
- (f) To advise on fire-risk prediction systems, surveillance, public education and other methods to minimise human-induced uncontrolled/unwanted fires.
- (g) Develop strategies to avoid the negative effects of sectoral programmes and policies which could induce uncontrolled forest fires.

- (h) Develop prevention plans against devastating fires and integrate them into national plans targeting the biological diversity of forests.
- (i) Develop mechanisms, including early warning systems, for exchange of information related to the causes of forest biodiversity loss, including fires, pests and diseases, and invasive species.

OBJECTIVE 5: *To mitigate effects of the loss of natural disturbances necessary to maintain biodiversity in regions where these no longer occur.*

Activities

- (a) Develop and promote management methods that restore or mimic natural disturbances such as fire, wind-throw and floods.

OBJECTIVE 6: *To prevent and mitigate losses due to fragmentation and conversion to other land uses.*

Activities

- (a) Encourage the creation of private reserves and private conservation methods where appropriate, respecting the rights and interests of indigenous and local communities.
- (b) Establish ecological corridors on a national and regional basis.
- (c) Promote cost-benefit analysis of development projects that might lead to the conversion of forest into other land uses incorporating the impacts on forest biological diversity.
- (d) Implement policies, practices and measures aimed at addressing the causes and reducing impacts on forest biological diversity resulting from human-induced uncontrolled clearing or other uncontrolled land-use activities.

GOAL 3: To protect, recover and restore forest biological diversity.

OBJECTIVE 1: *Restore forest biological diversity in degraded secondary forests and in forests established on former forestlands and other landscapes, including in plantations.*

Activities

- (a) Promote the implementation of systems and practices for restoration in accordance with the ecosystem approach.
- (b) Promote restoration of forest biological diversity with the aim to restore ecosystem services.
- (c) Create and improve where appropriate international, regional and national databases and case-studies on the status of degraded forests, deforested, restored and afforested lands.

OBJECTIVE 2: *Promote forest management practices that further the conservation of endemic and threatened species.*

Activities

- (a) Determine status and conservation needs of endemic or threatened species and the impacts of current forest management practices on these species.
- (b) Develop and implement conservation strategies for endemic and threatened species for global or regional application, and practical systems of adaptive management at national level.

OBJECTIVE 3: *Ensure adequate and effective protected forest area networks.*

Activities

- (a) Assess the comprehensiveness, representativeness and adequacy of protected areas relative to forest types and identify gaps and weaknesses.
- (b) Establish (in accordance with Article 8(j)) with the full participation and with respect for the rights of indigenous and local communities, and other relevant stakeholders, comprehensive, adequate, biologically and geographically representative and effective networks of protected areas.
- (c) Establish, in a similar manner, restoration areas to complement the network of protected areas where needed.
- (d) Revise in a similar manner and ensure the comprehensiveness, adequacy, representativeness and efficacy of existing protected area networks.
- (e) Assess the efficacy of protected forest areas for the conservation of biological diversity.
- (f) Ensure that relevant protected areas are managed to maintain and enhance their forest biodiversity components, services and values.

GOAL 4: To promote the sustainable use of forest biological diversity.

OBJECTIVE 1: *Promote sustainable use of forest resources to enhance the conservation of forest biological diversity.*

Activities

- (a) Support activities of indigenous and local communities involving the use of traditional forest-related knowledge in biodiversity management.
- (b) Develop, support and promote programmes and initiatives that address the sustainable use of timber and non-timber forest products.
- (c) Support regional cooperation and work on sustainable use of timber and non-timber forest products and services, including through technology transfer and capacity-building within and between regions.
- (d) Improve forest management and planning practices that incorporate socio-economic and cultural values to support and facilitate sustainable use.

- (e) Promote cooperative work on the sustainable use of forest products and services and its relation to biodiversity conservation with the other members of the Collaborative Partnership on Forests.
- (f) Encourage implementation of voluntary third-party credible forest certification schemes that take into consideration relevant forest biodiversity criteria and that would be audited, taking into consideration indigenous and local community rights and interests.
- (g) Set up demonstration sites that would illustrate forest conservation and on-ground delivery of goods and services through sustainable forest management, which are also representative of various types of forest, themes and regional needs, through case-studies.
- (h) Facilitate and support a responsible private sector committed to sustainable harvesting practices and compliance with domestic laws through effective development and enforcement of laws on sustainable harvesting of timber and non-timber resources.

OBJECTIVE 2: *Prevent losses caused by unsustainable harvesting of timber and non-timber forest resources.*

Activities

- (a) Establish a liaison group with an associated workshop to facilitate development of a joint work plan with relevant members of the Collaborative Partnership on Forests to bring harvesting of non-timber forest products (NTFPs), with a particular focus on bush meat, to sustainable levels. This group should have a proportionate regional representation, giving special consideration to subregions where bush meat is a major issue and representation of relevant organizations such as the Convention on International Trade in Endangered Species of Wild Fauna and Flora. The mandate of this group is to:
 - (i) Consult in a participatory manner with key stakeholders to identify and prioritize major issues pertaining the unsustainable harvesting of non-timber forest products, particularly of bushmeat and related products;
 - (ii) Provide advice on the development of policies, enabling legislation and strategies that promote sustainable use of, and trade in, non-timber forest products, particularly bushmeat and related products;
 - (iii) Provide advice on appropriate alternative sustainable livelihood technologies and practices for the affected communities;
 - (iv) Provide advice on appropriate monitoring tools.
- (b) Promote projects and activities that encourage the use and supply of alternative sources of energy to prevent forest degradation due to the use of firewood by local communities.
- (c) Develop any necessary legislation for the sustainable management and harvesting of non-timber forest resources.

- (d) Solicit input from Parties, other countries and relevant organizations on ways and means to encourage and assist importing countries to prevent the entry of unsustainably harvested forest resources, which are not covered by the Convention on International Trade in Endangered Species of Wild Fauna and Flora, and consider this information as a basis for further steps on this issue.

OBJECTIVE 3: *Enable indigenous and local communities to develop and implement adaptive community-management systems to conserve and sustainably use forest biological diversity.*

Activities

Taking into account the outcome of the Ad Hoc Open-ended Inter-sessional Working Group on Article 8(j) and Related Provisions of the Convention on Biological Diversity:

- (a) Strengthen the capacity of, and provide incentives for, indigenous and local communities to generate opportunities for sustainable use of forest biodiversity and for access to markets;
- (b) Strengthen the capacity of indigenous and local communities to resolve land rights and land use disputes in order to sustainably manage forest biodiversity;
- (c) Encourage the conservation and sustainable use of forest biological diversity by indigenous and local communities through their development of adaptive management practices, using as appropriate traditional forest-related knowledge;
- (d) Provide incentives for the maintenance of cultural diversity as an instrument to enhance forest biological diversity;
- (e) Develop and implement education and awareness programmes on traditional uses of forest biological diversity in accordance with Article 8(j);
- (f) Create an environment that fosters respect, and stimulates, preserves and maintains traditional knowledge related to forest biological diversity, innovations and practices of indigenous and local communities.

OBJECTIVE 4: *Develop effective and equitable information systems and strategies and promote implementation of those strategies for in situ and ex situ conservation and sustainable use of forest genetic diversity, and support countries in their implementation and monitoring.*

Activities

- (a) Develop, harmonize and assess the diversity of forest genetic resources, taking into consideration the identification of key functional/keystone species populations, model species and genetic variability at the deoxyribonucleic acid (DNA) level.
- (b) Select, at a national level, the most threatened forest ecosystems based on the genetic diversity of their priority species and populations and develop an appropriate action plan in order to protect the genetic resources of the most threatened forest ecosystems.

- (c) Improve understanding of patterns of genetic diversity and its conservation *in situ*, in relation to forest management, landscape-scale forest change and climate variations.
- (d) Provide guidance for countries to assess the state of their forest genetic resources, and to develop and evaluate strategies for their conservation, both *in situ* and *ex situ*.
- (e) Develop national legislative, administrative policy measures on access and benefit-sharing on forest genetic resources, taking into account the provisions under Articles 8(j), 10(c), 15, 16 and 19 of the Convention on Biological Diversity and in conformity with future decisions of the Conference of the Parties, as appropriate.
- (f) Monitor developments in new biotechnologies and ensure their applications are compatible with the objectives of the Convention on Biological Diversity with respect to forest biological diversity, and develop and enforce regulations for controlling the use of genetically modified organisms (GMOs) when appropriate.
- (g) Develop a holistic framework for the conservation and management of forest genetic resources at national, subregional and global levels.
- (h) Implement activities to ensure adequate and representative *in situ* conservation of the genetic diversity of endangered, overexploited and narrow endemic forest species and complement the *in situ* conservation with adequate *ex situ* conservation of the genetic diversity of endangered, overexploited and narrow endemic species and species of economic potential.

GOAL 5: Access and benefit-sharing of forest genetic resources.

OBJECTIVE 1: *Promote the fair and equitable sharing of benefits resulting from the utilization of forest genetic resources and associated traditional knowledge.*

Activities

Based on the Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization, as adopted by the Conference of the Parties at its sixth meeting:¹³⁹

- (a) Establish mechanisms to facilitate the sharing of benefits at local, national, regional and global levels.
- (b) Strengthen capacity of indigenous and local communities to negotiate benefit-sharing arrangements.
- (c) Promote dissemination of information about benefit-sharing experiences through the clearing-house mechanism and appropriate means at the local level.

139 See decision VI/24 A.

PROGRAMME ELEMENT 2: INSTITUTIONAL AND SOCIO-ECONOMIC ENABLING ENVIRONMENT

GOAL 1: Enhance the institutional enabling environment.

OBJECTIVE 1: *Improve the understanding of the various causes of forest biological diversity losses.*

Activities

- (a) Each Party to carry out, in a transparent and participatory way, thorough analysis of local, regional, national and global direct and underlying causes of losses of forest biological diversity. A distinction should be made between broad socio-economic causes such as demographic growth and more specific causes such as institutional weaknesses and market or policy failures.
- (b) Each Party on the basis of the above analysis to implement their recommendations.
- (c) Parties to report through the clearing-house mechanism of the Secretariat on successful experiences involving control and mitigation of the underlying causes of deforestation, which would make it possible to understand lessons learned.

OBJECTIVE 2: *Parties, Governments and organizations to integrate biological diversity conservation and sustainable use into forest and other sector policies and programmes.*

Activities

- (a) Parties to formulate appropriate policies and adopt sets of priority targets for forest biological diversity to be integrated into national forest programmes, national sustainable development strategies, poverty reduction strategy papers, related non-forest programmes and national biological diversity strategies and action plans. Ensure that there is coherence and direct interaction between the different programmes.
- (b) Seek ways of streamlining reporting between the different forest-related processes, in order to improve the understanding of forest quality change and improve consistency in reporting on sustainable forest management.
- (c) Develop a set of indicators that might be used in assessing progress in implementing the national biodiversity strategies and action plans and relevant work programmes;
- (d) Donor bodies and other financial institutions to incorporate forest biological diversity and sustainable use principles and targets into forest and related programmes, including watershed management, land-use planning, energy, transport, infrastructure development, education and agriculture, mineral exploitation, and tourism.
- (e) Seek to harmonize policies at regional and subregional levels in the area of forest biological diversity.

- (f) Develop strategies for effective enforcement of sustainable forest management and protected area regulations, including adequate resourcing and involvement of indigenous and local communities.
- (g) Parties and donor bodies to develop and implement, strategies, in particular national financing strategies in the framework of national biodiversity strategies and action plans and national forest programmes, and provide adequate financial, human and technical resources.
- (h) Encourage the Executive Secretary to coordinate and seek synergies between Convention on Biological Diversity, the United Nations Forum on Forests and the members of the Collaborative Partnership on Forests, including establishment of memoranda of understanding, as appropriate, between the Convention on Biological Diversity and the other members of the Collaborative Partnership on Forests, and recommend such an memorandum of understanding with the International Tropical Timber Organization and the United Nations Framework Convention on Climate Change as a first step.
- (i) Increase emphasis on capacity-building, research and training, public education and awareness, access to and transfer of information and technology, technical and scientific cooperation, with focus on capacities required to address forest biodiversity-related issues.

OBJECTIVE 3: Parties and Governments to develop good governance practices, review and revise and implement forest and forest-related laws, tenure and planning systems, to provide a sound basis for conservation and sustainable use of forest biological diversity.

Activities

- (a) Develop appropriate measures and regulations to secure a permanent forest area sufficient to allow for the conservation and sustainable use of forest biological diversity.
- (b) Seek to resolve land tenure and resource rights and responsibility, in consultation with all relevant stakeholders including for indigenous and local communities, in order to promote the conservation and sustainable use of forest biodiversity.
- (c) Encourage Parties and countries to ensure that forest and forest-related laws adequately and equitably incorporate the provisions of the Convention on Biological Diversity and the decisions of the Conference of the Parties.
- (d) Implement effective measures to protect traditional knowledge and values in forest laws and planning tools.
- (e) Develop legislation, administrative or policy measures on access and benefit-sharing for forest genetic resources, taking into account the draft Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization.
- (f) Invite Parties, Governments and other relevant organizations to submit case-studies and research on the role of performance bonds in forest concessions,

in the conservation and sustainable use of forest biological diversity; and request the Secretariat to make these available.

- (g) Parties, Governments and relevant stakeholders to develop mechanisms and processes to work toward good governance to promote conservation and sustainable use of forest biological diversity.
- (h) Develop and apply environmental and socio-economic impact assessment methods as appropriate prior to land-conversion decisions.

OBJECTIVE 4: *Promote forest law enforcement and address related trade.*

Activities

- (a) Invite Parties, Governments and relevant organizations to provide information on a voluntary basis to enable a better comprehension of the effects of unsustainable harvesting, exploitation of other forest resources and associated trade, as well as on the underlying causes, on forest biological diversity. On the basis of dissemination of this information countries may decide to take relevant measures such as enforcement actions.
- (b) Evaluate and reform, as required, legislation to include clear definition of illegal activities and to establish effective deterrents.
- (c) Develop methods and build capacity for effective law enforcement.
- (d) Develop codes of conduct for sustainable forest practices in logging companies and the wood-processing sector to improve biodiversity conservation.
- (e) Encourage and support the development and implementation of tracking and chain-of-custody systems for forest products to seek to ensure that these products are legally harvested.
- (f) Invite Governments and relevant organizations to develop and forward to the Secretariat case-studies and research on the impacts of unsustainable timber and non-timber harvesting and related trade.

GOAL 2: Address socio-economic failures and distortions that lead to decisions that result in loss of forest biological diversity.

OBJECTIVE 1: *Mitigate the economic failures and distortions that lead to decisions that result in loss of forest biological diversity.*

Activities

- (a) Develop mechanisms to ensure that monetary and non-monetary costs and benefits of forest biodiversity management are equitably shared between stakeholders at all levels.
- (b) Develop, test and disseminate methods for valuing forest biological diversity and other forest ecosystem goods and services and for incorporating these values into forest planning and management, including through stakeholder analysis and mechanisms for transferring costs and benefits.

- (c) Incorporate forest biological diversity and other forest values into national accounting systems and seek to estimate such figures for subsistence economies.
- (d) Elaborate and implement economic incentives promoting forest biological diversity conservation and sustainable use.
- (e) Eliminate or reform perverse incentives, in particular subsidies that result in favouring unsustainable use or loss of forest biological diversity.
- (f) Provide market and other incentives for the use of sustainable practices, develop alternative sustainable income generation programmes and facilitate self-sufficiency programmes of indigenous and local communities.
- (g) Develop and disseminate analyses of the compatibility of current and predicted production and consumption patterns with respect to the limits of forest ecosystem functions and production.
- (h) Seek to promote national laws and policies and international trade regulations are compatible with conservation and sustainable use of forest biological diversity.
- (i) Increase knowledge on monetary and non-monetary cost-benefit accounting for forest biodiversity evaluation.

GOAL 3: Increase public education, participation, and awareness.

OBJECTIVE 1: *Increase public support and understanding of the value of forest biological diversity and its goods and services at all levels.*

Activities

- (a) Increase broad-based awareness of the value of forest biological diversity through international, national and local public awareness campaigns.
- (b) Promote consumer awareness about sustainably produced forest products.
- (c) Increase awareness amongst all stakeholders of the potential contribution of traditional forest-related knowledge to conservation and sustainable use of forest biological diversity.
- (d) Develop awareness of the impact of forest-related production and consumption patterns on the loss of forest biological diversity and the goods and services it provides.
- (e) Increase awareness of the value of forest biological diversity amongst public authorities and decision makers through specific information and training actions.
- (f) Implement effective measures to recognize, respect, protect and maintain traditional forest-related knowledge and values in forest-related laws and forest planning tools, in accordance with Article 8(j) and related provisions of the Convention on Biological Diversity.
- (g) Develop awareness of the value of forest biological diversity among forestry workers, owners of forest land, logging contractors, and consulting firms.

PROGRAMME ELEMENT 3: KNOWLEDGE, ASSESSMENT AND MONITORING

GOAL 1: To characterize and to analyse from forest ecosystem to global scale and develop general classification of forests on various scales in order to improve the assessment of status and trends of forest biological diversity.

OBJECTIVE 1: *Review and adopt a harmonized global to regional forest classification system, based on harmonized and accepted forest definitions and addressing key forest biological diversity elements.*

Activities

- (a) Review and adopt a minimum forest classification for forest types, compatible with remote sensing technologies, that includes broad indicators of biodiversity that can be taken into account in all international and regional forest-related programmes, plans and activities.
- (b) Adapt frequency of forest resource inventory at regional and global scales, where resources permit, preferably at least every ten years.
- (c) Review and contribute (from the biodiversity point of view) to standard forest definitions in cooperation with the United Nations Forum on Forests and the Collaborative Partnership on Forests to be used in global and regional reporting to the scale of forest types.

OBJECTIVE 2: *Develop national forest classification systems and maps (using agreed international standards and protocols to enable regional and global synthesis).*

Activities

- (a) Review existing national forest ecosystem classification systems and maps.
- (b) Develop and apply national forest ecosystem classification systems and maps that include key components of forest biological diversity to be used in assessment reports on forest types including socio-economic and cultural aspects.
- (c) Use adapted technology, for example geographic information system, to develop a baseline for assessing levels of deforestation and impacts on biodiversity.

OBJECTIVE 3: *To develop, where appropriate, specific forest ecosystems surveys in priority areas for conservation and sustainable use of forest biodiversity.*

Activities

To identify and prioritize relevant areas to carry out these surveys.

GOAL 2: Improve knowledge on and methods for the assessment of the status and trends of forest biological diversity, based on available information.

OBJECTIVE 1: *Advance the development and implementation of international, regional and national criteria and indicators based on key regional, subregional and national measures within the framework of sustainable forest management.*

Activities

- (a) Advance the development and implementation of international, regional and national criteria and indicators based on key measures within the framework of sustainable forest management.
- (b) Develop and select international, regional and national criteria and where appropriate quantifiable, indicators for forest biological diversity, taking into account, as appropriate, existing work and processes on criteria and indicators on sustainable forest management, as well as the knowledge held by indigenous and local communities. Such criteria and indicators should be used for assessment reporting at least 10-year intervals.

GOAL 3: Improve understanding of the role of forest biodiversity and ecosystem functioning.

OBJECTIVE 1: *Conduct key research programmes on the role of forest biodiversity and ecosystem functioning.*

Activities

- (a) Develop and support focused research to improve understanding of the relationship between forest biological diversity and ecosystem functioning, taking into account forest ecosystem components, structure, functions and processes to improve predictive capability.
- (b) Develop and support research to understand critical thresholds of forest biological diversity loss and change, paying particular attention to endemic and threatened species and habitats including forest canopies.
- (c) Develop and apply forest ecosystem restoration techniques to address biodiversity loss at the ecosystem level.
- (d) Develop and support research on impact of current forest management practices for forest biodiversity within forests and on adjacent land.

GOAL 4: Improve the infrastructure for data and information management for accurate assessment and monitoring of global forest biological diversity.

OBJECTIVE 1: *Enhance and improve the technical capacity at the national level to monitor forest biological diversity, benefiting from the opportunities offered through the clearing-house mechanism, and to develop associated databases as required on a global scale.*

Activities

- (a) Develop and implement a strategy and a plan of action and facilitate transfer of technology to provide infrastructure and training in developing countries, in order to monitor forest biological diversity and develop associated databases.

DECISION VI/23 | Alien species that threaten ecosystems, habitats or species**The Conference of the Parties***I. Status and trends**

1. *Notes* the report on the status, impacts and trends of alien species that threaten ecosystems, habitats and species;¹⁴⁰

II. Guiding Principles for the implementation of Article 8(h)

Recognizing that invasive alien species represent one of the primary threats to biodiversity, especially in geographically and evolutionary isolated ecosystems, such as small island developing States, and that risks may be increasing due to increased global trade, transport, tourism and climate change,

Reaffirming that full and effective implementation of Article 8(h) is a priority,

2. *Notes* the consideration by the Subsidiary Body on Scientific, Technical and Technological Advice of the scientific and technical matters relevant to the Guiding Principles;

3. *Notes* that some non-scientific and technical matters have been identified for its consideration along with options for addressing those matters;

4. *Having considered* these options, *adopts* the Guiding Principles annexed to the present decision;

5. *Urges* Parties, other Governments and relevant organizations to promote and implement the Guiding Principles.

III. Relevant international instruments

Acknowledging the contribution to the implementation of Article 8(h) of existing international instruments, such as the International Plant Protection Convention, and relevant international organizations such as the Office International des Epiphytotes, the regional plant protection organizations, the Food and Agriculture Organization of the United Nations, the International Maritime Organization, the World Health Organization and other international organizations that develop relevant standards and agreements,

Noting, however, in the light of the review of the efficiency and efficacy of existing legal instruments applicable to invasive alien species,¹⁴¹ that there are certain gaps and inconsistencies in the international regulatory framework from the perspective of the threats of invasive alien species to biological diversity,

6. *Recommends* that Parties to the Convention on Biological Diversity and other Governments, as appropriate, consider ratifying the revised International

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* One representative entered a formal objection during the process leading to the adoption of this decision and underlined that he did not believe the Conference of the Parties could legitimately adopt a motion or a text with a formal objection in place. A few representatives expressed reservations regarding the procedure leading to the adoption of the decision. See UNEP/CBD/COP/6/20, paras. 294–324. This footnote applies to all references to decision VI/23 in this Handbook.

Plant Protection Convention, and *calls on* Parties, Governments, and relevant organizations to actively work to enhance the implementation of the International Plant Protection Convention;

7. *Urges* the International Maritime Organization to complete the preparation of an international instrument to address the environmental damage caused by the introduction of harmful aquatic organisms in ballast water and to develop as a matter of urgency, mechanisms to minimize hull-fouling as an invasion pathway, and *calls on* Governments and relevant organizations to urgently act to ensure full implementation;

8. *Invites* the International Plant Protection Convention, the Office International des Epizooties, the Food and Agriculture Organization of the United Nations, the International Maritime Organization, the World Health Organization and other relevant international instruments and organizations, as they elaborate further standards and agreements, or revise existing standards and agreements, including for risk assessment/analysis, to consider incorporating criteria related to the threats to biological diversity posed by invasive alien species; and *invites further* such instruments and organizations to report on any such ongoing, planned, or potential initiatives;

9. *Requests* the Subsidiary Body on Scientific, Technical and Technological Advice and other international organizations such as the Global Invasive Species Programme to identify and explore, in light of the inter-sessional work referred to in recommendation VI/4 A of the Subsidiary Body, further specific gaps and inconsistencies in the international regulatory framework (including binding and non-binding instruments as well as instruments at the regional level and standards) from a technical perspective of the threats of invasive alien species to biological diversity, including consideration of various pathways for the transmission of invasive alien species, and to report back to the Conference of the Parties at its seventh meeting, taking into account further relevant information arising from the implementation of the present decision.

IV. Other options

Reaffirming the importance of national and regional invasive alien species strategies and action plans, and of international collaboration to address the threats to biodiversity of invasive alien species and the need for funding as a priority to implement existing strategies,

Noting the range of measures¹⁴² and the need to strengthen national capacities and international collaboration.

A. NATIONAL INVASIVE ALIEN SPECIES STRATEGIES AND ACTION PLANS

10. *Urges* Parties and other Governments, in implementing the Guiding Principles, and when developing, revising and implementing national biodiversity strategies and action plans to address the threats posed by invasive alien species, to:

(a) Identify national needs and priorities;

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- (b) Create mechanisms to coordinate national programmes;
- (c) Review, in the light of the Guiding Principles, relevant policies, legislation and institutions to identify gaps, inconsistencies and conflicts, and, as appropriate, adjust or develop policies, legislation and institutions;
- (d) Enhance cooperation between the various sectors, including the private sector that might provide pathways or vectors for the unintended transfer of invasive alien species, in order to improve prevention, early detection, eradication and/or control of invasive alien species, and in particular, ensure communication between focal points of respective relevant international instruments;
- (e) Promote awareness of the threats to biological diversity and related ecosystem goods and services posed by invasive alien species and of the means to address such threats, among policy makers at all levels of government, and in the private sector; quarantine, customs and other border officials; and the general public;
- (f) Facilitate the involvement of all stakeholder groups, including in particular indigenous and local communities, and the private sector, as well as all levels of government, in national invasive alien species strategies and action plans, and in decisions related to the use of alien species that may be invasive;
- (g) Collaborate with trading partners and neighbouring countries, regionally, and with other countries, as appropriate, in order to address threats of invasive alien species to biological diversity in ecosystems that cross international boundaries, to migratory species, and to address matters of common interest;

11. *Urges* existing regional organizations and networks to work cooperatively to actively support the development and implementation of invasive alien species strategies and action plans, and to develop regional strategies where appropriate;

12. *Encourages* Parties and other Governments, in undertaking this work and, in particular, when developing priority actions, to consider the need to:

- (a) Develop capacity to use risk assessment/analysis to address threats of invasive alien species to biological diversity, and incorporate such methodologies in environmental impact assessments, and strategic environmental assessments, as appropriate and relevant;
- (b) Develop financial measures, and other policies and tools, to promote activities to reduce the threat of invasive alien species;
- (c) When necessary, develop recommendations and strategies to take account of effects of alien species on populations and naturally occurring genetic diversity;
- (d) Incorporate invasive alien species considerations into national biodiversity strategies and action plans and into sectoral and cross-sectoral policies, strategies and plans, taking into account the ecosystem approach, and in order to ensure full implementation of the national invasive alien species strategies and action plans as called for in paragraph 6 of decision V/8 of the Conference of the Parties;

13. *Notes* the technical information developed by the Executive Secretary, the Subsidiary Body on Scientific, Technical and Technological Advice and the Global Inva-

sive Species Programme and commends this information to Parties for use in national implementation of Article 8(h) and *requests* the Executive Secretary to ensure that the technical information developed within the Convention on Biological Diversity is readily available to Parties in an appropriate form, including through technical publications and the clearing-house mechanism;

14. *Urges* the Global Invasive Species Programme and other relevant organizations to evaluate known and potential pathways for the introduction of invasive alien species and identify opportunities to minimize incursions and manage risks, and:

- (a) Provide advice to Governments and organizations on actions to be taken at national and regional levels; and
- (b) Provide recommendations to the Conference of the Parties at its seventh meeting on actions to be taken at the international level;

B. INTERNATIONAL COOPERATION

15. *Urges* Parties, Governments, multilateral organizations and other relevant bodies to consider the potential effects of global change on the risk of invasive alien species to biodiversity, and related ecosystem goods and services and, in particular:

- (a) *Invites* the United Nations Framework Convention on Climate Change to consider this matter when it considers measures for adaptation to and mitigation of climate change in particular with respect to the lifestyles of indigenous and local communities;
- (b) *Invites* the World Trade Organization, through its Committee on Trade and the Environment, to take this matter into account when considering the impacts of trade and trade liberalization;
- (c) *Invites* the Food and Agriculture Organization of the United Nations, the World Health Organization, the United Nations Development Programme, the United Nations Environment Programme, the World Bank and other development agencies to take this matter into account when considering the impacts of land-use change, agriculture, aquaculture, forestry, health and development policies and activities;

16. *Invites* the Convention on the Conservation of Migratory Species of Wild Animals, the Convention on Wetlands (Ramsar, Iran, 1971), the Convention on the Conservation of European Wildlife and Natural Habitats, the Convention on International Trade in Endangered Species of Wild Fauna and Flora, the World Heritage Convention, and the Man and the Biosphere Programme of the United Nations Educational, Scientific and Cultural Organization, in collaboration with relevant organizations, to promote further the implementation of Article 8(h) within their mandates, through, *inter alia*, the development of guidance, best practices and pilot projects that address the threats of invasive alien species to particular sites or habitats, including means to enhance the capacity of ecosystems to resist or recover from alien species invasions;

17. *Invites* international organizations to develop financial and other measures for the promotion of activities aiming to reduce the harmful effects of invasive alien species;

18. *Acknowledges* the contribution of the Global Invasive Species Programme to the sixth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice, particularly the provision of technical advice and therefore:

- (a) *Welcomes* phase II of the Global Invasive Species Programme and *urges* Parties, countries and other organizations to support the work of the Global Invasive Species Programme to minimize the spread and impact of invasive alien species, and consider the Global Strategy on Invasive Alien Species when developing national plans and regional strategies;
- (b) *Recommends* continuing cooperation with the Global Invasive Species Programme and *requests* the Executive Secretary to explore the development of arrangements for this further cooperation;

19. *Endorses* the international cooperative initiative on invasive alien species on islands, developed by the Government of the New Zealand, the Invasive Species Specialist Group, and the Global Invasive Species Programme, and *calls on* the Global Environment Facility, Parties, Governments and relevant organizations to support and participate in these initiatives;

20. *Invites* the International Maritime Organization, the Global Invasive Species Programme, the Food and Agriculture Organization of the United Nations, and the Convention on Wetlands (Ramsar, Iran, 1971) to work together to develop an international cooperative initiative to address impediments to the management of marine alien species, particularly to address technical problems related to the identification and control of marine invasions;

21. *Welcomes* the initiative of the Council of Europe in the framework of the Bern Convention to help the implementation of Article 8(h), including the development of a European Strategy on Invasive Alien Species;

22. *Also welcomes* the "I3N" (Inter-American Biodiversity Information Network (IABIN) Invasives Information Network) initiative on invasive alien species, and *calls on* the Global Environment Facility, Parties, Governments and relevant organizations to support and participate in these initiatives;

23. *Welcomes* the initiative of the Interim Commission on Phytosanitary Measures and the secretariat of the International Plant Protection Convention to develop closer relationships to the Convention on Biological Diversity and its work;

C. ASSESSMENT, INFORMATION AND TOOLS

24. *Urges* Parties, Governments and relevant organizations, at the appropriate level, with the support of relevant international organizations to promote and carry out, as appropriate, research and assessments on:

- (a) The characteristics of invasive species and the vulnerability of ecosystems and habitats to invasion by alien species, and the impact of climate change on these parameters;¹⁴³
- (b) The impact of alien species on biological diversity;

143 As distinct from the direct effects of climate change on species distribution.

- (c) Analysis of the importance of various pathways for the introduction of invasive alien species;
- (d) The socio-economic implications of invasive alien species particularly the implications for indigenous and local communities;
- (e) The development of environmentally benign methods to control and eradicate invasive alien species, including measures for use in quarantine and to control fouling of ship hulls;
- (f) The costs and benefits of the use of biocontrol agents to control and eradicate invasive alien species;
- (g) Means to enhance the capacity of ecosystems to resist or recover from alien species invasions;
- (h) Priorities for taxonomic work through, *inter alia*, the Global Taxonomy Initiative;¹⁴⁴
- (i) Criteria for assessing risks from introduction of alien species to biological diversity at the genetic, species and ecosystem levels;
- (j) The use of the traditional knowledge of indigenous and local communities in the development and implementation of measures to address invasive alien species, in accordance with Article 8(j) of the Convention;

25. *Decides* that the clearing-house mechanism will be used to facilitate scientific and technical cooperation on the topics listed under paragraph 24 above, in order to enhance the ability of the clearing-house mechanism to promote and facilitate scientific and technical cooperation, and *welcomes* the Global Invasive Species Programme as an international thematic focal point for alien species under the clearing-house mechanism, and calls on Parties, countries and relevant organizations to contribute to the creation and maintenance of the global information network, in particular to:

- (a) Ensure effective international cooperation and expertise sharing;
- (b) Provide information to assist countries to perform effective risk analysis;
- (c) Provide information on potential pathway of alien invasive species; and
- (d) Provide support for management and control efforts, particularly for locating technical support for rapid response activities;

26. *Requests* the Executive Secretary in cooperation with the Global Invasive Species Programme and other relevant organizations to:

- (a) Compile information on topics listed in paragraph 24 above, in collaboration with relevant organizations;
- (b) Identify the key scientific, technical and public awareness impediments to implementation of priority actions at the national and regional levels;
- (c) Develop, in partnership with relevant Parties, countries and relevant organizations, solutions to those impediments;

144 See decision VI/8.

- (d) Disseminate those solutions to Parties and regional organizations; and
- (e) Develop a joint programme of work through the Global Invasive Species Programme partnership network among the Convention on Biological Diversity, the Convention on Wetlands (Ramsar, Iran, 1971), the International Maritime Organization, the International Plant Protection Convention and other relevant bodies;

27. *Urges* Parties, Governments and relevant organizations, at the appropriate level, to develop and make available technical tools and related information to support efforts for the prevention, early detection, monitoring, eradication and/or control of invasive alien species and to support public awareness-raising and environmental education to the extent possible;

28. *Requests* the Executive Secretary, within the availability of resources and in collaboration with relevant organizations, to support the development and dissemination of technical tools and related information on the prevention, early detection, monitoring, eradication and/or control of invasive alien species through, *inter alia*:

- (a) Compilation and dissemination of case-studies submitted by Parties, other Governments and organizations, best practices and lessons learned, drawing upon, as appropriate, tools listed in information document UNEP/CBD/SBSTTA/6/INF/3 and the “Toolkit” compiled by the Global Invasive Species Programme;¹⁴⁵
- (b) Further compilation and preparation of anthologies of existing terminology used in international instruments relevant to invasive alien species, and to develop, and update as necessary, a non-legally binding list of terms most commonly used;
- (c) Compilation and making available lists of procedures for risk assessment/analysis and pathway analysis which may be relevant in assessing the risks of invasive alien species to biodiversity, habitats and ecosystems;
- (d) Identification and inventory of existing expertise relevant to the prevention, early detection and warning, eradication and/or control of invasive alien species, and restoration of invaded ecosystems and habitats, which may be made available to other countries, including the roster of experts for the Convention on Biological Diversity;
- (e) Development of databases and facilitated access to such information for all countries including repatriation of information to source countries, through, *inter alia*, the clearing-house mechanism;
- (f) Development of systems for reporting new invasions of alien species and the spread of alien species into new areas;

29. *Requests* the Executive Secretary to take appropriate actions to ensure that invasive alien species considerations are fully integrated into thematic work programmes of the Convention and when reporting on the thematic work programmes

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to report specifically on how the threats and impacts of invasive alien species will be addressed;

30. *Notes* that, in implementing this decision, Parties, Governments, the Subsidiary Body on Scientific, Technical and Technological Advice, the Executive Secretary and relevant organizations are referred to annex II of the report of the liaison group meeting on invasive alien species.¹⁴⁶

V. Activities and capacity-building

31. *Requests* the Executive Secretary to explore means to facilitate capacity enhancement for eradication work on alien species on continents and islands;

32. Given the constraints to implementation of Article 8(h) identified in the assessment of second national reports with respect to cross-cutting issues¹⁴⁷ and *urges* the Executive Secretary to use the clearing-house mechanism to provide an on-line educational programme;

33. *Requests* the Executive Secretary, in collaboration with the Global Invasive Species Programme, the Global Environment Facility, the Food and Agriculture Organization of the United Nations and the Organisation for Economic Co-operation and Development, to identify a mechanism(s) for providing Parties with access to financial support for rapidly responding to new incursions by alien species, and report to the Conference of the Parties at its seventh meeting on progress to establish that mechanism(s);

34. *Urges* bilateral donors and other funding sources to provide, as an urgent priority funding for the development and implementation, at national and regional levels, of the invasive alien species strategies and action plans called for in paragraph 6 of decision V/8 and with a particular priority for those strategies and actions related to geographically and evolutionarily isolated ecosystems, and to developing countries and countries with economies in transition, paying particular attention to the needs of the least developed countries and small island developing States, including needs related to capacity-building.

ANNEX

GUIDING PRINCIPLES FOR THE PREVENTION, INTRODUCTION AND MITIGATION OF IMPACTS OF ALIEN SPECIES THAT THREATEN ECOSYSTEMS, HABITATS OR SPECIES

Introduction

This document provides all Governments and organizations with guidance for developing effective strategies to minimize the spread and impact of invasive alien species. While each country faces unique challenges and will need to develop context-specific solutions, the Guiding Principles give governments clear direction and a set of goals to aim toward. The extent to which these Guiding Principles can be

¹⁴⁶ UNEP/CBD/SBSTTA/6/INF/7.

¹⁴⁷ UNEP/CBD/COP/6/INF/10.

implemented ultimately depends on available resources. Their purpose is to assist governments to combat invasive alien species as an integral component of conservation and economic development. Because these 15 principles are non-binding, they can be more readily amended and expanded through the Convention on Biological Diversity's processes as we learn more about this problem and its effective solutions.

According to Article 3 of the Convention on Biological Diversity, States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.

It should be noted that in the Guiding Principles below, the terms listed in footnote 148 are used.¹⁴⁸

Also, while applying these Guiding Principles, due consideration must be given to the fact that ecosystems are dynamic over time and so the natural distribution of species might vary without involvement of a human agent.

A. General

GUIDING PRINCIPLE 1: PRECAUTIONARY APPROACH

Given the unpredictability of the pathways and impacts on biological diversity of invasive alien species, efforts to identify and prevent unintentional introductions as well as decisions concerning intentional introductions should be based on the precautionary approach, in particular with reference to risk analysis, in accordance with the guiding principles below. The precautionary approach is that set forth in principle 15 of the 1992 Rio Declaration on Environment and Development and in the preamble of the Convention on Biological Diversity.

The precautionary approach should also be applied when considering eradication, containment and control measures in relation to alien species that have become established. Lack of scientific certainty about the various implications of an invasion should not be used as a reason for postponing or failing to take appropriate eradication, containment and control measures.

148 The following definitions are used: (i) "alien species" refers to a species, subspecies or lower taxon, introduced outside its natural past or present distribution; includes any part, gametes, seeds, eggs, or propagules of such species that might survive and subsequently reproduce; (ii) "invasive alien species" means an alien species whose introduction and/or spread threaten biological diversity (for the purposes of the present guiding principles, the term "invasive alien species" shall be deemed the same as "alien invasive species" in decision V/8 of the Conference of the Parties to the Convention on Biological Diversity); (iii) "introduction" refers to the movement by human agency, indirect or direct, of an alien species outside of its natural range (past or present). This movement can be either within a country or between countries or areas beyond national jurisdiction; (iv) "intentional introduction" refers to the deliberate movement and/or release by humans of an alien species outside its natural range; (v) "unintentional introduction" refers to all other introductions which are not intentional, and (vi) "establishment" refers to the process of an alien species in a new habitat successfully producing viable offspring with the likelihood of continued survival; (vii) "risk analysis" refers to: (1) the assessment of the consequences of the introduction and of the likelihood of establishment of an alien species using science-based information (i.e., risk assessment), and (2) to the identification of measures that can be implemented to reduce or manage these risks (i.e., risk management), taking into account socio-economic and cultural considerations.

GUIDING PRINCIPLE 2: THREE-STAGE HIERARCHICAL APPROACH

1. Prevention is generally far more cost-effective and environmentally desirable than measures taken following introduction and establishment of an invasive alien species.
2. Priority should be given to preventing the introduction of invasive alien species, between and within States. If an invasive alien species has been introduced, early detection and rapid action are crucial to prevent its establishment. The preferred response is often to eradicate the organisms as soon as possible (principle 13). In the event that eradication is not feasible or resources are not available for its eradication, containment (principle 14) and long-term control measures (principle 15) should be implemented. Any examination of benefits and costs (environmental, economic and social) should be done on a long-term basis.

GUIDING PRINCIPLE 3: ECOSYSTEM APPROACH

Measures to deal with invasive alien species should, as appropriate, be based on the ecosystem approach, as described in decision V/6 of the Conference of the Parties.

GUIDING PRINCIPLE 4: THE ROLE OF STATES

1. In the context of invasive alien species, States should recognize the risk that activities within their jurisdiction or control may pose to other States as a potential source of invasive alien species, and should take appropriate individual and cooperative actions to minimize that risk, including the provision of any available information on invasive behaviour or invasive potential of a species.
2. Examples of such activities include:
 - (a) The intentional transfer of an invasive alien species to another State (even if it is harmless in the State of origin); and
 - (b) The intentional introduction of an alien species into their own State if there is a risk of that species subsequently spreading (with or without a human vector) into another State and becoming invasive;
 - (c) Activities that may lead to unintentional introductions, even where the introduced species is harmless in the state of origin.
3. To help States minimize the spread and impact of invasive alien species, States should identify, as far as possible, species that could become invasive and make such information available to other States.

GUIDING PRINCIPLE 5: RESEARCH AND MONITORING

In order to develop an adequate knowledge base to address the problem, it is important that States undertake research on and monitoring of invasive alien species, as appropriate. These efforts should attempt to include a baseline taxonomic study of biodiversity. In addition to these data, monitoring is the key to early detection of new invasive alien species. Monitoring should include both targeted and general surveys, and benefit from the involvement of other sectors, including local communities. Research on an invasive alien species should include a thorough identification

of the invasive species and should document: (a) the history and ecology of invasion (origin, pathways and time-period); (b) the biological characteristics of the invasive alien species; and (c) the associated impacts at the ecosystem, species and genetic level and also social and economic impacts, and how they change over time.

GUIDING PRINCIPLE 6: EDUCATION AND PUBLIC AWARENESS

Raising the public's awareness of the invasive alien species is crucial to the successful management of invasive alien species. Therefore, it is important that States should promote education and public awareness of the causes of invasion and the risks associated with the introduction of alien species. When mitigation measures are required, education and public-awareness-oriented programmes should be set in motion so as to engage local communities and appropriate sector groups in support of such measures.

B. Prevention

GUIDING PRINCIPLE 7: BORDER CONTROL AND QUARANTINE MEASURES

1. States should implement border controls and quarantine measures for alien species that are or could become invasive to ensure that:
 - (a) Intentional introductions of alien species are subject to appropriate authorization (principle 10);
 - (b) Unintentional or unauthorized introductions of alien species are minimized.
2. States should consider putting in place appropriate measures to control introductions of invasive alien species within the State according to national legislation and policies where they exist.
3. These measures should be based on a risk analysis of the threats posed by alien species and their potential pathways of entry. Existing appropriate governmental agencies or authorities should be strengthened and broadened as necessary, and staff should be properly trained to implement these measures. Early detection systems and regional and international coordination are essential to prevention.

GUIDING PRINCIPLE 8: EXCHANGE OF INFORMATION

1. States should assist in the development of an inventory and synthesis of relevant databases, including taxonomic and specimen databases, and the development of information systems and an interoperable distributed network of databases for compilation and dissemination of information on alien species for use in the context of any prevention, introduction, monitoring and mitigation activities. This information should include incident lists, potential threats to neighbouring countries, information on taxonomy, ecology and genetics of invasive alien species and on control methods, whenever available. The wide dissemination of this information, as well as national, regional and international guidelines, procedures and recommendations such as those being compiled by the Global Invasive Species Programme should also be facilitated through, *inter alia*, the clearing-house mechanism of the Convention on Biological Diversity.

2. The States should provide all relevant information on their specific import requirements for alien species, in particular those that have already been identified as invasive, and make this information available to other States.

GUIDING PRINCIPLE 9: COOPERATION, INCLUDING CAPACITY-BUILDING

Depending on the situation, a State's response might be purely internal (within the country), or may require a cooperative effort between two or more countries. Such efforts may include:

- (a) Programmes developed to share information on invasive alien species, their potential uneasiness and invasion pathways, with a particular emphasis on cooperation among neighbouring countries, between trading partners, and among countries with similar ecosystems and histories of invasion. Particular attention should be paid where trading partners have similar environments;
- (b) Agreements between countries, on a bilateral or multilateral basis, should be developed and used to regulate trade in certain alien species, with a focus on particularly damaging invasive species;
- (c) Support for capacity-building programmes for States that lack the expertise and resources, including financial, to assess and reduce the risks and to mitigate the effects when introduction and establishment of alien species has taken place. Such capacity-building may involve technology transfer and the development of training programmes;
- (d) Cooperative research efforts and funding efforts toward the identification, prevention, early detection, monitoring and control of invasive alien species.

C. Introduction of species

GUIDING PRINCIPLE 10: INTENTIONAL INTRODUCTION

1. No first-time intentional introduction or subsequent introductions of an alien species already invasive or potentially invasive within a country should take place without prior authorization from a competent authority of the recipient State(s). An appropriate risk analysis, which may include an environmental impact assessment, should be carried out as part of the evaluation process before coming to a decision on whether or not to authorize a proposed introduction to the country or to new ecological regions within a country. States should make all efforts to permit only those species that are unlikely to threaten biological diversity. The burden of proof that a proposed introduction is unlikely to threaten biological diversity should be with the proposer of the introduction or be assigned as appropriate by the recipient State. Authorization of an introduction may, where appropriate, be accompanied by conditions (e.g., preparation of a mitigation plan, monitoring procedures, payment for assessment and management, or containment requirements).

2. Decisions concerning intentional introductions should be based on the precautionary approach, including within a risk analysis framework, set forth in principle 15 of the 1992 Rio Declaration on Environment and Development, and the preamble of the Convention on Biological Diversity. Where there is a threat of

reduction or loss of biological diversity, lack of sufficient scientific certainty and knowledge regarding an alien species should not prevent a competent authority from taking a decision with regard to the intentional introduction of such alien species to prevent the spread and adverse impact of invasive alien species.

GUIDING PRINCIPLE 11: UNINTENTIONAL INTRODUCTIONS

1. All States should have in place provisions to address unintentional introductions (or intentional introductions that have become established and invasive). These could include statutory and regulatory measures and establishment or strengthening of institutions and agencies with appropriate responsibilities. Operational resources should be sufficient to allow for rapid and effective action.
2. Common pathways leading to unintentional introductions need to be identified and appropriate provisions to minimize such introductions should be in place. Sectoral activities, such as fisheries, agriculture, forestry, horticulture, shipping (including the discharge of ballast waters), ground and air transportation, construction projects, landscaping, aquaculture including ornamental aquaculture, tourism, the pet industry and game-farming, are often pathways for unintentional introductions. Environmental impact assessment of such activities should address the risk of unintentional introduction of invasive alien species. Wherever appropriate, a risk analysis of the unintentional introduction of invasive alien species should be conducted for these pathways.

D. Mitigation of impacts

GUIDING PRINCIPLE 12: MITIGATION OF IMPACTS

Once the establishment of an invasive alien species has been detected, States, individually and cooperatively, should take appropriate steps such as eradication, containment and control, to mitigate adverse effects. Techniques used for eradication, containment or control should be safe to humans, the environment and agriculture as well as ethically acceptable to stakeholders in the areas affected by the invasive alien species. Mitigation measures should take place in the earliest possible stage of invasion, on the basis of the precautionary approach. Consistent with national policy or legislation, an individual or entity responsible for the introduction of invasive alien species should bear the costs of control measures and biological diversity restoration where it is established that they failed to comply with the national laws and regulations. Hence, early detection of new introductions of potentially or known invasive alien species is important, and needs to be combined with the capacity to take rapid follow-up action.

GUIDING PRINCIPLE 13: ERADICATION

Where it is feasible, eradication is often the best course of action to deal with the introduction and establishment of invasive alien species. The best opportunity for eradicating invasive alien species is in the early stages of invasion, when populations are small and localized; hence, early detection systems focused on high-risk entry points can be critically useful while post-eradication monitoring may be nec-

essary. Community support is often essential to achieve success in eradication work, and is particularly effective when developed through consultation. Consideration should also be given to secondary effects on biological diversity.

GUIDING PRINCIPLE 14: CONTAINMENT

When eradication is not appropriate, limiting the spread (containment) of invasive alien species is often an appropriate strategy in cases where the range of the organisms or of a population is small enough to make such efforts feasible. Regular monitoring is essential and needs to be linked with quick action to eradicate any new outbreaks.

GUIDING PRINCIPLE 15: CONTROL

Control measures should focus on reducing the damage caused as well as reducing the number of the invasive alien species. Effective control will often rely on a range of integrated management techniques, including mechanical control, chemical control, biological control and habitat management, implemented according to existing national regulations and international codes.

DECISION VI/24 | Access and benefit-sharing as related to genetic resources

A. Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization

The Conference of the Parties

1. *Takes note* of the report of the Ad Hoc Open-ended Working Group on Access and Benefit-sharing;¹⁴⁹
2. *Takes note* also of the work done by the group convened by the Executive Secretary to develop elements of a draft decision on the use of terms in paragraph 6 of the Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefit Arising out of their Utilization;
3. *Decides to* adopt the Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefit Arising out of their Utilization as annexed to the present decision;
4. *Invites* Parties and Governments to use the Guidelines when developing and drafting legislative, administrative or policy measures on access and benefit-sharing, and contracts and other arrangements under mutually agreed terms for access and benefit-sharing;
5. *Invites* Parties and relevant organizations to provide financial and technical assistance to support developing countries, in particular least developed countries,

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small islands developing states, as well as countries with economies in transition, in implementing the Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefit Arising out of their Utilization;

6. *Recognizes* that the Guidelines are a useful first step of an evolutionary process in the implementation of relevant provisions of the Convention related to access to genetic resources and benefit-sharing;

7. *Decides* to keep under review the implementation of the guidelines and consider the need for their further refinement on the basis of, *inter alia*, relevant work under the Convention, including work on Article 8(j) and related provisions;

8. *Decides* to reconvene the Ad Hoc Open-ended Working Group on Access and Benefit-sharing to advise the Conference of the Parties on:

- (a) Use of terms, definitions and/or glossary, as appropriate;
- (b) Other approaches as set out in decision VI/24 B;
- (c) Measures, including consideration of their feasibility, practicality and costs, to support compliance with prior informed consent of the Contracting Party providing such resources and mutually agreed terms on which access was granted in Contracting Parties with users of genetic resources under their jurisdiction;
- (d) Its consideration of any available reports or progress reports arising from the present decision;
- (e) Needs for capacity-building identified by countries to implement the Guidelines.

The Working Group will submit its report to the Conference of the Parties at its seventh meeting;

9. *Requests* the Executive Secretary to invite Parties, Governments and relevant international organizations to submit information on the issues referred to in paragraphs 8(a), (b), (c) and (e) above, and to make this information available to the Open-ended Working Group on Access and Benefit-sharing and through the clearing-house mechanism;

10. *Requests* the Ad Hoc Open-ended Working Group on Article 8(j) and Related Provisions to consider the Guidelines as relevant to its ongoing work.

ANNEX

BONN GUIDELINES ON ACCESS TO GENETIC RESOURCES AND FAIR AND EQUITABLE SHARING OF THE BENEFITS ARISING OUT OF THEIR UTILIZATION

I. General Provisions

A. KEY FEATURES

1. These Guidelines may serve as inputs when developing and drafting legislative, administrative or policy measures on access and benefit-sharing with particular reference to provisions under Articles 8(j), 10(c), 15, 16 and 19; and contracts and other arrangements under mutually agreed terms for access and benefit-sharing.

2. Nothing in these Guidelines shall be construed as changing the rights and obligations of Parties under the Convention on Biological Diversity.
3. Nothing in these Guidelines is intended to substitute for relevant national legislation.
4. Nothing in these Guidelines should be interpreted to affect the sovereign rights of States over their natural resources.
5. Nothing in these Guidelines, including the use of terms such as “provider,” “user,” and “stakeholder,” should be interpreted to assign any rights over genetic resources beyond those provided in accordance with the Convention.
6. Nothing in these Guidelines should be interpreted as affecting the rights and obligations relating to genetic resources arising out of the mutually agreed terms under which the resources were obtained from the country of origin.
7. The present Guidelines are voluntary and were prepared with a view to ensuring their:
 - (a) *Voluntary nature*: they are intended to guide both users and providers of genetic resources on a voluntary basis;
 - (b) *Ease of use*: to maximize their utility and to accommodate a range of applications, the Guidelines are simple;
 - (c) *Practicality*: the elements contained in the guidelines are practical and are aimed at reducing transaction costs;
 - (d) *Acceptability*: the Guidelines are intended to gain the support of users and providers;
 - (e) *Complementarity*: the Guidelines and other international instruments are mutually supportive;
 - (f) *Evolutionary approach*: the Guidelines are intended to be reviewed and accordingly revised and improved as experience is gained in access and benefit-sharing;
 - (g) *Flexibility*: to be useful across a range of sectors, users and national circumstances and jurisdictions, guidelines should be flexible;
 - (h) *Transparency*: they are intended to promote transparency in the negotiation and implementation of access and benefit-sharing arrangements.

B. USE OF TERMS

8. The terms as defined in Article 2 of the Convention shall apply to these Guidelines. These include: biological diversity, biological resources, biotechnology, country of origin of genetic resources, country providing genetic resources, *ex situ* conservation, *in situ* conservation, genetic material, genetic resources, and *in situ* conditions.

C. SCOPE

9. All genetic resources and associated traditional knowledge, innovations and practices covered by the Convention on Biological Diversity and benefits arising from the commercial and other utilization of such resources should be covered by the guidelines, with the exclusion of human genetic resources.

D. RELATIONSHIP WITH RELEVANT INTERNATIONAL REGIMES

10. The guidelines should be applied in a manner that is coherent and mutually supportive of the work of relevant international agreements and institutions. The guidelines are without prejudice to the access and benefit-sharing provisions of the FAO International Treaty for Plant Genetic Resources for Food and Agriculture. Furthermore, the work of the World Intellectual Property Organization (WIPO) on issues of relevance to access and benefit-sharing should be taken into account. The application of the guidelines should also take into account existing regional legislation and agreements on access and benefit-sharing.

E. OBJECTIVES

11. The objectives of the Guidelines are the following:

- (a) To contribute to the conservation and sustainable use of biological diversity;
- (b) To provide Parties and stakeholders with a transparent framework to facilitate access to genetic resources and ensure fair and equitable sharing of benefits;
- (c) To provide guidance to Parties in the development of access and benefit-sharing regimes;
- (d) To inform the practices and approaches of stakeholders (users and providers) in access and benefit-sharing arrangements;
- (e) To provide capacity-building to guarantee the effective negotiation and implementation of access and benefit-sharing arrangements, especially to developing countries, in particular least developed countries and small island developing States among them;
- (f) To promote awareness on implementation of relevant provisions of the Convention on Biological Diversity;
- (g) To promote the adequate and effective transfer of appropriate technology to providing Parties, especially developing countries, in particular least developed countries and small island developing States among them, stakeholders and indigenous and local communities;
- (h) To promote the provision of necessary financial resources to providing countries that are developing countries, in particular least developed countries and small island developing States among them, or countries with economies in transition with a view to contributing to the achievement of the objectives mentioned above;
- (i) To strengthen the clearing-house mechanism as a mechanism for cooperation among Parties in access and benefit-sharing;

- (j) To contribute to the development by Parties of mechanisms and access and benefit-sharing regimes that recognize the protection of traditional knowledge, innovations and practices of indigenous and local communities, in accordance with domestic laws and relevant international instruments;
- (k) To contribute to poverty alleviation and be supportive to the realization of human food security, health and cultural integrity, especially in developing countries, in particular least developed countries and small island developing States among them;
- (l) Taxonomic research, as specified in the Global Taxonomy Initiative, should not be prevented, and providers should facilitate acquisition of material for systematic use and users should make available all information associated with the specimens thus obtained.

12. The Guidelines are intended to assist Parties in developing an overall access and benefit-sharing strategy, which may be part of their national biodiversity strategy and action plan, and in identifying the steps involved in the process of obtaining access to genetic resources and sharing benefits.

II. Roles and Responsibilities in access and benefit-sharing pursuant to article 15 of the Convention on Biological Diversity

A. NATIONAL FOCAL POINT

13. Each Party should designate one national focal point for access and benefit-sharing and make such information available through the clearing-house mechanism. The national focal point should inform applicants for access to genetic resources on procedures for acquiring prior informed consent and mutually agreed terms, including benefit-sharing, and on competent national authorities, relevant indigenous and local communities and relevant stakeholders, through the clearing-house mechanism.

B. COMPETENT NATIONAL AUTHORITY(IES)

14. Competent national authorities, where they are established, may, in accordance with applicable national legislative, administrative or policy measures, be responsible for granting access and be responsible for advising on:

- (a) The negotiating process;
- (b) Requirements for obtaining prior informed consent and entering into mutually agreed terms;
- (c) Monitoring and evaluation of access and benefit-sharing agreements;
- (d) Implementation/enforcement of access and benefit-sharing agreements;
- (e) Processing of applications and approval of agreements;
- (f) The conservation and sustainable use of the genetic resources accessed;

- (g) Mechanisms for the effective participation of different stakeholders, as appropriate for the different steps in the process of access and benefit-sharing, in particular, indigenous and local communities;
- (h) Mechanisms for the effective participation of indigenous and local communities while promoting the objective of having decisions and processes available in a language understandable to relevant indigenous and local communities.

15. The competent national authority(ies) that have the legal power to grant prior informed consent may delegate this power to other entities, as appropriate.

C. RESPONSIBILITIES

16. Recognizing that Parties and stakeholders may be both users and providers, the following balanced list of roles and responsibilities provides key elements to be acted upon:

- (a) Contracting Parties which are countries of origin of genetic resources, or other Parties which have acquired the genetic resources in accordance with the Convention, should:
 - (i) Be encouraged to review their policy, administrative and legislative measures to ensure they are fully complying with Article 15 of the Convention;
 - (ii) Be encouraged to report on access applications through the clearing-house mechanism and other reporting channels of the Convention;
 - (iii) Seek to ensure that the commercialization and any other use of genetic resources should not prevent traditional use of genetic resources;
 - (iv) Ensure that they fulfil their roles and responsibilities in a clear, objective and transparent manner;
 - (v) Ensure that all stakeholders take into consideration the environmental consequences of the access activities;
 - (vi) Establish mechanisms to ensure that their decisions are made available to relevant indigenous and local communities and relevant stakeholders, particularly indigenous and local communities;
 - (vii) Support measures, as appropriate, to enhance indigenous and local communities' capacity to represent their interests fully at negotiations;
- (b) In the implementation of mutually agreed terms, users should:
 - (i) Seek informed consent prior to access to genetic resources, in conformity with Article 15, paragraph 5, of the Convention;
 - (ii) Respect customs, traditions, values and customary practices of indigenous and local communities;
 - (iii) Respond to requests for information from indigenous and local communities;
 - (iv) Only use genetic resources for purposes consistent with the terms and conditions under which they were acquired;

- (v) Ensure that uses of genetic resources for purposes other than those for which they were acquired, only take place after new prior informed consent and mutually agreed terms are given;
 - (vi) Maintain all relevant data regarding the genetic resources, especially documentary evidence of the prior informed consent and information concerning the origin and the use of genetic resources and the benefits arising from such use;
 - (vii) As much as possible endeavour to carry out their use of the genetic resources in, and with the participation of, the providing country;
 - (viii) When supplying genetic resources to third parties, honour any terms and conditions regarding the acquired material. They should provide this third party with relevant data on their acquisition, including prior informed consent and conditions of use and record and maintain data on their supply to third parties. Special terms and conditions should be established under mutually agreed terms to facilitate taxonomic research for non-commercial purposes;
 - (ix) Ensure the fair and equitable sharing of benefits, including technology transfer to providing countries, pursuant to Article 16 of the Convention arising from the commercialization or other use of genetic resources, in conformity with the mutually agreed terms they established with the indigenous and local communities or stakeholders involved;
- (c) Providers should:
- (i) Only supply genetic resources and/or traditional knowledge when they are entitled to do so;
 - (ii) Strive to avoid imposition of arbitrary restrictions on access to genetic resources.
- (d) Contracting Parties with users of genetic resources under their jurisdiction should take appropriate legal, administrative, or policy measures, as appropriate, to support compliance with prior informed consent of the Contracting Party providing such resources and mutually agreed terms on which access was granted. These countries could consider, *inter alia*, the following measures:
- (i) Mechanisms to provide information to potential users on their obligations regarding access to genetic resources;
 - (ii) Measures to encourage the disclosure of the country of origin of the genetic resources and of the origin of traditional knowledge, innovations and practices of indigenous and local communities in applications for intellectual property rights;
 - (iii) Measures aimed at preventing the use of genetic resources obtained without the prior informed consent of the Contracting Party providing such resources;
 - (iv) Cooperation between Contracting Parties to address alleged infringements of access and benefit-sharing agreements;
 - (v) Voluntary certification schemes for institutions abiding by rules on access and benefit-sharing;

- (vi) Measures discouraging unfair trade practices;
- (vii) Other measures that encourage users to comply with provisions under subparagraph 16(b) above.

III. Participation of Stakeholders

17. Involvement of relevant stakeholders is essential to ensure the adequate development and implementation of access and benefit-sharing arrangements. However, due to the diversity of stakeholders and their diverging interests, their appropriate involvement can only be determined on a case-by-case basis.

18. Relevant stakeholders should be consulted and their views taken into consideration in each step of the process, including:

- (a) When determining access, negotiating and implementing mutually agreed terms, and in the sharing of benefits;
- (b) In the development of a national strategy, policies or regimes on access and benefit-sharing.

19. To facilitate the involvement of relevant stakeholders, including indigenous and local communities, appropriate consultative arrangements, such as national consultative committees, comprising relevant stakeholder representatives, should be made.

20. The involvement of relevant stakeholders should be promoted by:

- (a) Providing information, especially regarding scientific and legal advice, in order for them to be able to participate effectively;
- (b) Providing support for capacity-building, in order for them to be actively engaged in various stages of access and benefit-sharing arrangements, such as in the development and implementation of mutually agreed terms and contractual arrangements.

21. The stakeholders involved in access to genetic resources and benefit-sharing may wish to seek the support of a mediator or facilitator when negotiating mutually agreed terms.

IV. Steps in the Access and Benefit-sharing Process

A. OVERALL STRATEGY

22. Access and benefit-sharing systems should be based on an overall access and benefit-sharing strategy at the country or regional level. This access and benefit-sharing strategy should aim at the conservation and sustainable use of biological diversity, and may be part of a national biodiversity strategy and action plan and promote the equitable sharing of benefits.

B. IDENTIFICATION OF STEPS

23. The steps involved in the process of obtaining access to genetic resources and sharing of benefits may include activities prior to access, research and development

conducted on the genetic resources, as well as their commercialization and other uses, including benefit-sharing.

C. PRIOR INFORMED CONSENT

24. As provided for in Article 15 of the Convention on Biological Diversity, which recognizes the sovereign rights of States over their natural resources, each Contracting Party to the Convention shall endeavour to create conditions to facilitate access to genetic resources for environmentally sound uses by other Contracting Parties and fair and equitable sharing of benefits arising from such uses. In accordance with Article 15, paragraph 5, of the Convention on Biological Diversity, access to genetic resources shall be subject to prior informed consent of the contracting Party providing such resources, unless otherwise determined by that Party.

25. Against this background, the Guidelines are intended to assist Parties in the establishment of a system of prior informed consent, in accordance with Article 15, paragraph 5, of the Convention.

1. Basic principles of a prior informed consent system

26. The basic principles of a prior informed consent system should include:

- (a) Legal certainty and clarity;
- (b) Access to genetic resources should be facilitated at minimum cost;
- (c) Restrictions on access to genetic resources should be transparent, based on legal grounds, and not run counter to the objectives of the Convention;
- (d) Consent of the relevant competent national authority(ies) in the provider country. The consent of relevant stakeholders, such as indigenous and local communities, as appropriate to the circumstances and subject to domestic law, should also be obtained.

2. Elements of a prior informed consent system

27. Elements of a prior informed consent system may include:

- (a) Competent authority(ies) granting or providing for evidence of prior informed consent;
- (b) Timing and deadlines;
- (c) Specification of use;
- (d) Procedures for obtaining prior informed consent;
- (e) Mechanism for consultation of relevant stakeholders;
- (f) Process.

Competent authority(ies) granting prior informed consent

28. Prior informed consent for access to *in situ* genetic resources shall be obtained from the Contracting Party providing such resources, through its competent national authority(ies), unless otherwise determined by that Party.

29. In accordance with national legislation, prior informed consent may be required from different levels of Government. Requirements for obtaining prior informed consent (national/provincial/local) in the provider country should therefore be specified.

30. National procedures should facilitate the involvement of all relevant stakeholders from the community to the government level, aiming at simplicity and clarity.

31. Respecting established legal rights of indigenous and local communities associated with the genetic resources being accessed or where traditional knowledge associated with these genetic resources is being accessed, the prior informed consent of indigenous and local communities and the approval and involvement of the holders of traditional knowledge, innovations and practices should be obtained, in accordance with their traditional practices, national access policies and subject to domestic laws.

32. For *ex situ* collections, prior informed consent should be obtained from the competent national authority(ies) and/or the body governing the *ex situ* collection concerned as appropriate.

Timing and deadlines

33. Prior informed consent is to be sought adequately in advance to be meaningful both for those seeking and for those granting access. Decisions on applications for access to genetic resources should also be taken within a reasonable period of time.

Specification of use

34. Prior informed consent should be based on the specific uses for which consent has been granted. While prior informed consent may be granted initially for specific use(s), any change of use including transfer to third parties may require a new application for prior informed consent. Permitted uses should be clearly stipulated and further prior informed consent for changes or unforeseen uses should be required. Specific needs of taxonomic and systematic research as specified by the Global Taxonomy Initiative should be taken into consideration.

35. Prior informed consent is linked to the requirement of mutually agreed terms.

Procedures for obtaining prior informed consent

36. An application for access could require the following information to be provided, in order for the competent authority to determine whether or not access to a genetic resource should be granted. This list is indicative and should be adapted to national circumstances:

- (a) Legal entity and affiliation of the applicant and/or collector and contact person when the applicant is an institution;
- (b) Type and quantity of genetic resources to which access is sought;
- (c) Starting date and duration of the activity;
- (d) Geographical prospecting area;

- (e) Evaluation of how the access activity may impact on conservation and sustainable use of biodiversity, to determine the relative costs and benefits of granting access;
- (f) Accurate information regarding intended use (e.g., taxonomy, collection, research, commercialization);
- (g) Identification of where the research and development will take place;
- (h) Information on how the research and development is to be carried out;
- (i) Identification of local bodies for collaboration in research and development;
- (j) Possible third party involvement;
- (k) Purpose of the collection, research and expected results;
- (l) Kinds/types of benefits that could come from obtaining access to the resource, including benefits from derivatives and products arising from the commercial and other utilization of the genetic resource;
- (m) Indication of benefit-sharing arrangements;
- (n) Budget;
- (o) Treatment of confidential information.

37. Permission to access genetic resources does not necessarily imply permission to use associated knowledge and *vice versa*.

Process

38. Applications for access to genetic resources through prior informed consent and decisions by the competent authority(ies) to grant access to genetic resources or not shall be documented in written form.

39. The competent authority could grant access by issuing a permit or licence or following other appropriate procedures. A national registration system could be used to record the issuance of all permits or licences, on the basis of duly completed application forms.

40. The procedures for obtaining an access permit/licence should be transparent and accessible by any interested party.

D. MUTUALLY AGREED TERMS

41. In accordance with Article 15, paragraph 7, of the Convention on Biological Diversity, each Contracting Party shall “take legislative, administrative or policy measures, as appropriate (...) with the aim of sharing in a fair and equitable way the results of research and development and the benefits arising from the commercial and other utilization of genetic resources with the Contracting Party providing such resources. Such sharing shall be upon mutually agreed terms.” Thus, guidelines should assist Parties and stakeholders in the development of mutually agreed terms to ensure the fair and equitable sharing of benefits.

1. Basic requirements for mutually agreed terms

42. The following principles or basic requirements could be considered for the development of mutually agreed terms:

- (a) Legal certainty and clarity;
- (b) Minimization of transaction costs, by, for example:
 - (i) Establishing and promoting awareness of the Government's and relevant stakeholders' requirements for prior informed consent and contractual arrangements;
 - (ii) Ensuring awareness of existing mechanisms for applying for access, entering into arrangements and ensuring the sharing of benefits;
 - (iii) Developing framework agreements, under which repeat access under expedited arrangements can be made;
 - (iv) Developing standardized material transfer agreements and benefit-sharing arrangements for similar resources and similar uses (see appendix I for suggested elements of such an agreement);
- (c) Inclusion of provisions on user and provider obligations;
- (d) Development of different contractual arrangements for different resources and for different uses and development of model agreements;
- (e) Different uses may include, *inter alia*, taxonomy, collection, research, commercialization;
- (f) Mutually agreed terms should be negotiated efficiently and within a reasonable period of time;
- (g) Mutually agreed terms should be set out in a written agreement.

43. The following elements could be considered as guiding parameters in contractual agreements. These elements could also be considered as basic requirements for mutually agreed terms:

- (a) Regulating the use of resources in order to take into account ethical concerns of the particular Parties and stakeholders, in particular indigenous and local communities concerned;
- (b) Making provision to ensure the continued customary use of genetic resources and related knowledge;
- (c) Provision for the use of intellectual property rights include joint research, obligation to implement rights on inventions obtained and to provide licences by common consent;
- (d) The possibility of joint ownership of intellectual property rights according to the degree of contribution.

2. Indicative list of typical mutually agreed terms

44. The following provides an indicative list of typical mutually agreed terms:

- (a) Type and quantity of genetic resources, and the geographical/ecological area of activity;

- (b) Any limitations on the possible use of the material;
- (c) Recognition of the sovereign rights of the country of origin;
- (d) Capacity-building in various areas to be identified in the agreement;
- (e) A clause on whether the terms of the agreement in certain circumstances (e.g., change of use) can be renegotiated;
- (f) Whether the genetic resources can be transferred to third parties and conditions to be imposed in such cases, e.g., whether or not to pass genetic resources to third parties without ensuring that the third parties enter into similar agreements except for taxonomic and systematic research that is not related to commercialization;
- (g) Whether the knowledge, innovations and practices of indigenous and local communities have been respected, preserved and maintained, and whether the customary use of biological resources in accordance with traditional practices has been protected and encouraged;
- (h) Treatment of confidential information;
- (i) Provisions regarding the sharing of benefits arising from the commercial and other utilization of genetic resources and their derivatives and products.

3. Benefit-sharing

45. Mutually agreed terms could cover the conditions, obligations, procedures, types, timing, distribution and mechanisms of benefits to be shared. These will vary depending on what is regarded as fair and equitable in light of the circumstances.

Types of benefits

46. Examples of monetary and non-monetary benefits are provided in appendix II to these Guidelines.

Timing of benefits

47. Near-term, medium-term and long-term benefits should be considered, including up-front payments, milestone payments and royalties. The time-frame of benefit-sharing should be definitely stipulated. Furthermore, the balance among near-term, medium-term and long-term benefit should be considered on a case-by-case basis.

Distribution of benefits

48. Pursuant to mutually agreed terms established following prior informed consent, benefits should be shared fairly and equitably with all those who have been identified as having contributed to the resource management, scientific and/or commercial process. The latter may include governmental, non-governmental or academic institutions and indigenous and local communities. Benefits should be directed in such a way as to promote conservation and sustainable use of biological diversity.

Mechanisms for benefit-sharing

49. Mechanisms for benefit-sharing may vary depending upon the type of benefits, the specific conditions in the country and the stakeholders involved. The benefit-sharing mechanism should be flexible as it should be determined by the partners involved in benefit-sharing and will vary on a case-by-case basis.

50. Mechanisms for sharing benefits should include full cooperation in scientific research and technology development, as well as those that derive from commercial products including trust funds, joint ventures and licences with preferential terms.

V. Other Provisions**A. INCENTIVES**

51. The following incentive measures exemplify measures which could be used in the implementation of the guidelines:

- (a) The identification and mitigation or removal of perverse incentives, that may act as obstacles for conservation and sustainable use of biological diversity through access and benefit-sharing, should be considered;
- (b) The use of well-designed economic and regulatory instruments, directly or indirectly related to access and benefit-sharing, should be considered to foster equitable and efficient allocation of benefits;
- (c) The use of valuation methods should be considered as a tool to inform users and providers involved in access and benefit-sharing;
- (d) The creation and use of markets should be considered as a way of efficiently achieving conservation and sustainable use of biological diversity.

B. ACCOUNTABILITY IN IMPLEMENTING ACCESS AND BENEFIT-SHARING ARRANGEMENTS

52. Parties should endeavour to establish mechanisms to promote accountability by all stakeholders involved in access and benefit-sharing arrangements.

53. To promote accountability, Parties may consider establishing requirements regarding:

- (a) Reporting; and
- (b) Disclosure of information.

54. The individual collector or institution on whose behalf the collector is operating should, where appropriate, be responsible and accountable for the compliance of the collector.

C. NATIONAL MONITORING AND REPORTING

55. Depending on the terms of access and benefit-sharing, national monitoring may include:

- (a) Whether the use of genetic resources is in compliance with the terms of access and benefit-sharing;

- (b) Research and development process;
- (c) Applications for intellectual property rights relating to the material supplied.

56. The involvement of relevant stakeholders, in particular, indigenous and local communities, in the various stages of development and implementation of access and benefit-sharing arrangements can play an important role in facilitating the monitoring of compliance.

D. MEANS FOR VERIFICATION

57. Voluntary verification mechanisms could be developed at the national level to ensure compliance with the access and benefit-sharing provisions of the Convention on Biological Diversity and national legal instruments of the country of origin providing the genetic resources.

58. A system of voluntary certification could serve as a means to verify the transparency of the process of access and benefit-sharing. Such a system could certify that the access and benefit-sharing provisions of the Convention on Biological Diversity have been complied with.

E. SETTLEMENT OF DISPUTES

59. As most obligations arising under mutually agreed arrangements will be between providers and users, disputes arising in these arrangements should be solved in accordance with the relevant contractual arrangements on access and benefit-sharing and the applicable law and practices.

60. In cases where the access and benefit-sharing agreements consistent with the Convention on Biological Diversity and national legal instruments of the country of origin of genetic resources have not been complied with, the use of sanctions could be considered, such as penalty fees set out in contractual agreements.

F. REMEDIES

61. Parties may take appropriate effective and proportionate measures for violations of national legislative, administrative or policy measures implementing the access and benefit-sharing provisions of the Convention on Biological Diversity, including requirements related to prior informed consent and mutually agreed terms.

Appendix I **Suggested elements for material transfer agreements**

Material transfer agreements may contain wording on the following elements:

A. INTRODUCTORY PROVISIONS

1. Preambular reference to the Convention on Biological Diversity
2. Legal status of the provider and user of genetic resources
3. Mandate and/or general objectives of provider and, where appropriate, user of genetic resources.

B. ACCESS AND BENEFIT-SHARING PROVISIONS

1. Description of genetic resources covered by the material transfer agreements, including accompanying information
2. Permitted uses, bearing in mind the potential uses, of the genetic resources, their products or derivatives under the material transfer agreement (e.g. research, breeding, commercialization)
3. Statement that any change of use would require new prior informed consent and material transfer agreement
4. Whether intellectual property rights may be sought and if so under what conditions
5. Terms of benefit-sharing arrangements, including commitment to share monetary and non-monetary benefits
6. No warranties guaranteed by provider on identity and/or quality of the provided material
7. Whether the genetic resources and/or accompanying information may be transferred to third parties and if so conditions that should apply
8. Definitions
9. Duty to minimize environmental impacts of collecting activities.

C. LEGAL PROVISIONS

1. Obligation to comply with the material transfer agreement
2. Duration of agreement
3. Notice to terminate the agreement
4. Fact that the obligations in certain clauses survive the termination of the agreement
5. Independent enforceability of individual clauses in the agreement
6. Events limiting the liability of either party (such as act of God, fire, flood, etc.)
7. Dispute settlement arrangements
8. Assignment or transfer of rights
9. Assignment, transfer or exclusion of the right to claim any property rights, including intellectual property rights, over the genetic resources received through the material transfer agreement
10. Choice of law
11. Confidentiality clause
12. Guarantee.

Appendix II

Monetary and non-monetary benefits

1. Monetary benefits may include, but not be limited to:
 - (a) Access fees/fee per sample collected or otherwise acquired;
 - (b) Up-front payments;
 - (c) Milestone payments;
 - (d) Payment of royalties;
 - (e) Licence fees in case of commercialization;
 - (f) Special fees to be paid to trust funds supporting conservation and sustainable use of biodiversity;
 - (g) Salaries and preferential terms where mutually agreed;
 - (h) Research funding;
 - (i) Joint ventures;
 - (j) Joint ownership of relevant intellectual property rights.
2. Non-monetary benefits may include, but not be limited to:
 - (a) Sharing of research and development results;
 - (b) Collaboration, cooperation and contribution in scientific research and development programmes, particularly biotechnological research activities, where possible in the provider country;
 - (c) Participation in product development;
 - (d) Collaboration, cooperation and contribution in education and training;
 - (e) Admittance to *ex situ* facilities of genetic resources and to databases;
 - (f) Transfer to the provider of the genetic resources of knowledge and technology under fair and most favourable terms, including on concessional and preferential terms where agreed, in particular, knowledge and technology that make use of genetic resources, including biotechnology, or that are relevant to the conservation and sustainable utilization of biological diversity;
 - (g) Strengthening capacities for technology transfer to user developing country Parties, and where possible, in such Parties;
 - (h) Institutional capacity-building;
 - (i) Human and material resources to strengthen the capacities for the administration and enforcement of access regulations;
 - (j) Training related to genetic resources with the full participation of providing Parties, and where possible, in such Parties;
 - (k) Access to scientific information relevant to conservation and sustainable use of biological diversity, including biological inventories and taxonomic studies;

- (l) Contributions to the local economy;
- (m) Research directed towards priority needs, such as health and food security, taking into account domestic uses of genetic resources in provider countries;
- (n) Institutional and professional relationships that can arise from an access and benefit-sharing agreement and subsequent collaborative activities;
- (o) Food and livelihood security benefits;
- (p) Social recognition;
- (q) Joint ownership of relevant intellectual property rights.

B. OTHER APPROACHES, INCLUDING THE DEVELOPMENT OF AN ACTION PLAN FOR CAPACITY-BUILDING

The Conference of the Parties,

I. Capacity-building

Recognizing the need to assess ongoing capacity-building activities for access and benefit-sharing, in view of elaborating an action plan for capacity-building for access and benefit-sharing,

1. *Decides* to convene an Open-ended Expert Workshop on Capacity-building for Access to Genetic Resources and Benefit-sharing. The Workshop will be open to participation by representatives, including experts, nominated by Governments and regional economic integration organizations; as well as representatives of relevant intergovernmental organizations (including donor organizations), non-governmental organizations, and indigenous and local communities. The Workshop should further develop the draft elements for an Action Plan on Capacity-building for Access and Benefit-sharing annexed to the present decision;
2. *Requests* the Executive Secretary to make appropriate arrangements for the Workshop;
3. *Invites* Parties and indigenous and local communities to provide to the Executive-Secretary information regarding capacity-building needs, priorities and existing initiatives for capacity-building for access to genetic resources and benefit-sharing;
4. *Invites* relevant intergovernmental organizations, non-governmental organizations and the private sector to provide information regarding existing initiatives and activities for capacity-building for access to genetic resources and benefit-sharing;
5. *Welcomes* the complementary initiative of the United Nations Environment Programme to provide capacity-building to developing countries on access to genetic resources and benefit-sharing, and invites the United Nations Environment Programme to provide information to the Executive Secretary on its activities;
6. *Requests* the Executive Secretary to prepare a report for the workshop on capacity-building, providing a compilation of needs and priorities of countries, and ongoing capacity-building activities on access and benefit-sharing, with a view to

developing an action plan for capacity-building on access and benefit-sharing which responds to the needs of Parties, focuses on priority areas and also complements capacity-building efforts under way in the area of access and benefit-sharing;

7. *Invites* the financial mechanism and other relevant intergovernmental organizations to participate in the Workshop and to support the implementation of the Action Plan on Capacity-building for Access and Benefit-sharing;

8. *Requests* the Executive Secretary to establish a roster of experts on access to genetic resources and benefit-sharing;

9. *Urges* Parties, other Governments and relevant bodies when nominating their experts for inclusion in the roster to consider gender balance, involvement of representatives of indigenous and local communities, and a range of relevant disciplines and expertise.

II. Other approaches

10. *Recognizes* that a package of measures may be necessary to address the different needs of Parties and stakeholders in the implementation of access and benefit-sharing arrangements;

11. *Recognizes also* that other approaches could be considered to complement the Bonn Guideline, such as model contractual agreements, existing regional agreements and model laws on access to genetic resources and benefit-sharing;

12. *Requests* the Executive Secretary to compile information on existing complementary measures and approaches, and experiences with their implementation, and to disseminate such information to Parties and relevant stakeholders through, *inter alia*, the clearing-house mechanism of the Convention.

ANNEX

DRAFT ELEMENTS FOR AN ACTION PLAN FOR CAPACITY-BUILDING FOR ACCESS TO GENETIC RESOURCES AND BENEFIT-SHARING

1. Objective of the Action Plan

1. The objective of the Action Plan is to facilitate and support the development and strengthening of capacities for the effective implementation of the provisions of the Convention relating to access to genetic resources and benefit-sharing at the local, national, subregional, regional and international levels.

2. To achieve the objective, the Action Plan will provide a framework for identifying country and stakeholder needs, priorities, mechanisms of implementation and sources of funding.

2. Key areas requiring capacity-building

3. The following key areas, which require capacity-building initiatives, should be considered in a flexible and transparent manner, based on a demand-driven approach, taking into account the different situations, needs, capabilities and stages of devel-

opment of each country and should avoid duplication of efforts between various capacity-building initiatives:

- (a) Strengthening of relevant institutions;
- (b) Assessment, inventory and monitoring of biological resources, and traditional knowledge including taxonomic capacity, within the context of the Global Taxonomy Initiative;
- (c) Valuation of genetic resources and market information, including production and marketing strategies;
- (d) Inventory and case-studies of existing legislative measures and development of appropriate legislation, including *sui generis* systems;
- (e) Development of information systems, and information management and exchange, linked with the clearing-house mechanism of the Convention;
- (f) Development and strengthening capacities of indigenous and local communities for participation in decision making and implementation;
- (g) Public education and awareness focusing on relevant stakeholders;
- (h) Human resources development and training at all levels, including legal drafting skills for development of access to genetic resources and benefit-sharing measures;
- (i) Funding and resource management;
- (j) Contract negotiation skills for all relevant stakeholders, in particular indigenous and local communities;
- (k) Means for the protection of traditional knowledge associated with genetic resources;
- (l) Scientific and technical areas, including technology transfer relevant to access to and use of genetic resources and benefit-sharing;
- (m) Development of instruments, tools, and indicators to monitor and assess the implementation of capacity-building for access to genetic resources and benefit-sharing at all stages.

3. Processes

4. The following processes and measures should be undertaken:
 - (a) Awareness raising for the issues at stake and identification of capacity needs at the local, national, subregional, and regional levels, taking into account, as appropriate, the work of the Global Environment Facility on national capacity self-assessment;
 - (b) Integration of capacity-building for access to genetic resources and benefit-sharing within the framework of national biodiversity strategies and other related initiatives and strategies;
 - (c) Prioritization at the local, national, and regional levels of the key areas;

- (d) Sequencing of actions, including timelines for the operation of capacity-building for access to genetic resources and benefit-sharing;
- (e) Identification of existing and planned capacity-building initiatives at the local, national, subregional and regional levels, both public and private, and their coverage including by:
 - (i) National sources;
 - (ii) Bilateral sources;
 - (iii) Regional sources;
 - (iv) Multilateral agencies;
 - (v) Other international sources;
 - (vi) Other stakeholders, in particular indigenous and local communities;
- (f) Enhancing synergies and coordination of capacity-building initiatives;
- (g) Establishment of indicators for monitoring capacity-building implementation.

4. Means of implementation

5. The following mechanisms could be used for the implementation of capacity-building measures for access to genetic resources and benefit-sharing:

- (a) Development of appropriate national regulatory framework;
- (b) Scientific and technical cooperation among Parties, and between Parties and relevant multilateral agencies and other organizations through, *inter alia*, the clearing-house mechanism of the Convention;
- (c) Information exchange, through the clearing-house mechanism of the Convention, the use of the internet, databases, CD-ROMs, hard copies and workshops;
- (d) Identification and dissemination of case-studies and best practices;
- (e) Regional and subregional collaborative arrangements;
- (f) Coordination between multilateral and bilateral donors and other organizations;
- (g) Development of model agreements and codes of conduct for specific uses, users and sectors;
- (h) Training workshops;
- (i) Full and effective involvement and participation of all relevant stakeholders, in particular indigenous and local communities taking into account the tasks defined within the programme of work on the implementation of Article 8(j) and related provisions of the Convention;
- (j) Funding through the Global Environment Facility and other donors;
- (k) The participation of the private sector as provider of capacity-building in specific areas, for example through collaborative research, transfer of technology and funding;
- (l) The Global Taxonomy Initiative;

- (m) The roster of experts on access to genetic resources and benefit-sharing to be established under the Convention;
- (n) National focal points and competent national authorities.

5. Coordination

6. In view of the multiplicity of actors undertaking capacity-building initiatives for access to genetic resources and benefit-sharing, mutual information and coordination should be promoted in order to avoid duplication of effort and to identify existing gaps in coverage. Initiatives for coordination should be encouraged at all levels.
7. The Conference of the Parties should encourage voluntary submissions by Parties and Governments and relevant international organizations on steps taken, including by donors, towards the implementation of capacity-building measures, to be accessible through the clearing-house mechanism of the Convention.
8. Parties may consider including in their national reports information on the implementation of capacity-building measures on access to genetic resources and benefit-sharing.

C. ROLE OF INTELLECTUAL PROPERTY RIGHTS IN THE IMPLEMENTATION OF ACCESS AND BENEFIT-SHARING ARRANGEMENTS

The Conference of the Parties

1. *Invites* Parties and Governments to encourage the disclosure of the country of origin of genetic resources in applications for intellectual property rights, where the subject matter of the application concerns or makes use of genetic resources in its development, as a possible contribution to tracking compliance with prior informed consent and the mutually agreed terms on which access to those resources was granted;
2. *Also invites* Parties and Governments to encourage the disclosure of the origin of relevant traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biological diversity in applications for intellectual property rights, where the subject matter of the application concerns or makes use of such knowledge in its development;
3. *Requests* the Executive Secretary, with the help of other international and inter-governmental organizations such as the World Intellectual Property Organization and through the Ad Hoc Open-ended Inter-sessional Working Group on Article 8(j) and Related Provisions of the Convention, where appropriate, to undertake further information gathering and analysis with regard to:
 - (a) Impact of intellectual property regimes on access to and use of genetic resources and scientific research;
 - (b) Role of customary laws and practices in relation to the protection of genetic resources and traditional knowledge, innovations and practices, and their relationship with intellectual property rights;

- (c) Consistency and applicability of requirements for disclosure of country of origin and prior informed consent in the context of international legal obligations;
 - (d) Efficacy of country of origin and prior informed consent disclosures in assisting the examination of intellectual property rights applications and the re-examination of intellectual property rights granted;
 - (e) Efficacy of country of origin and prior informed consent disclosures in monitoring compliance with access provisions;
 - (f) Feasibility of an internationally recognized certificate of origin system as evidence of prior informed consent and mutually agreed terms; and
 - (g) Role of oral evidence of prior art in the examination, granting and maintenance of intellectual property rights;
4. *Invites* the World Intellectual Property Organization to prepare a technical study, and to report its findings to the Conference of the Parties at its seventh meeting, on methods consistent with obligations in treaties administered by the World Intellectual Property Organization for requiring the disclosure within patent applications of, *inter alia*:
- (a) Genetic resources utilized in the development of the claimed inventions;
 - (b) The country of origin of genetic resources utilized in the claimed inventions;
 - (c) Associated traditional knowledge, innovations and practices utilized in the development of the claimed inventions;
 - (d) The source of associated traditional knowledge, innovations and practices; and
 - (e) Evidence of prior informed consent;
5. *Requests* the Executive Secretary to collect, compile and disseminate information on the matters specified in paragraphs 3 and 4 above, including through the clearing-house mechanism of the Convention and other appropriate means;
6. *Invites* Parties and Governments to submit case-studies that they consider relevant to the issues specified in paragraphs 3 and 4; and
7. *Requests* the Executive Secretary to gather information and prepare a report on national and regional experiences;
8. *Invites* other relevant international organizations (such as the Food and Agriculture Organization of the United Nations, the United Nations Conference on Trade and Development, the World Intellectual Property Organization, the World Trade Organization, and the United Nations Commission on Human Rights), as well as regional organizations, Parties and Governments to contribute to the further study and analysis of the issues specified in paragraphs 3 and 4;
9. *Encourages* the World Intellectual Property Organization to make rapid progress in the development of model intellectual property clauses which may be considered for inclusion in contractual agreements when mutually agreed terms are under negotiation;
10. *Recognizes* the importance of the work being undertaken by the World Intellectual Property Organization on international models and encourage the World

Intellectual Property Organization to also consider means by which Parties could collaborate to protect traditional knowledge for further consideration by the Conference of the Parties;

11. *Urges* the World Intellectual Property Organization to provide to the Conference of the Parties with the results of its deliberations of relevance to access to genetic resources and benefit-sharing related to traditional knowledge;

12. *Encourages* Parties to facilitate the participation of indigenous and local communities and other relevant stakeholders in the various forums, in particular the World Intellectual Property Organization, the Convention on Biological Diversity, the World Trade Organization, the United Nations Conference on Trade and Development and regional forums, as well as in the preparation of national strategies, policies, regulatory frameworks and legislation related to access to genetic resources and benefit-sharing, from a very early stage;

13. *Requests* the Executive Secretary to compile information, and to make it available through the clearing-house mechanism of the Convention and other means, on the principles, legal mechanisms and procedures for obtaining prior informed consent of indigenous and local communities under national access regimes for genetic resources, and also on assessments of the effectiveness of such mechanisms and procedures, and *requests* Parties to provide such information to assist the Executive Secretary.

D. OTHER ISSUES RELATING TO ACCESS AND BENEFIT-SHARING

The Conference of Parties,

The relationship between the Agreement on Trade-related Aspects of Intellectual Property Rights of the World Trade Organization and the Convention on Biological Diversity

Noting that the provisions of the Agreement on Trade-related Aspects of Intellectual Property Rights of the World Trade Organization and the Convention on Biological Diversity are interrelated,

Noting also that the relationship between the Agreement on Trade-related Aspects of Intellectual Property Rights and the Convention on Biological Diversity is being examined by the Council for Trade-related Aspects of Intellectual Property Rights, in conformity with Article 19 of the Doha WTO Ministerial Declaration, adopted in November 2001,

Noting further that the Convention Secretariat has still not been granted observer status on the Council for Trade-related Aspects of Intellectual Property Rights, notwithstanding the official request of the Executive Secretary to the Director-General of the World Trade Organization in a letter dated 4 July 2000,

1. *Requests* the Executive Secretary of the Convention to renew the application for observer status on the Council for Trade-related Aspects of Intellectual Property Rights, and to report back to the Conference of Parties on his efforts;

2. *Requests* the Executive Secretary to follow discussions and developments in the Committee on Trade and Environment of the World Trade Organization and the Council for Trade-related Aspects of Intellectual Property Rights regarding the relationship between the Agreement on Trade-related Aspects of Intellectual Property Rights and the Convention.

Cooperation with other relevant intergovernmental organizations

3. *Acknowledges* relevant work being carried out by other intergovernmental organisations, such as the World Intellectual Property Organization, the World Trade Organization, the Union for the Protection of New Varieties of Plants, the United Nations Conference on Trade and Development, and the Food and Agriculture Organization of the United Nations, on issues related to access to genetic resources and benefit-sharing;

4. *Requests* the Executive Secretary to further collaborate with the above relevant organisations to ensure mutual supportiveness and avoid duplication of work;

5. *Recognizes* the important role that the International Treaty on Plant Genetic Resources for Food and Agriculture will have, in harmony, with the Convention, for facilitated access to plant genetic resources for food and agriculture and for the fair and equitable sharing of benefits arising out of their utilization and *refers* to decision VI/6, on the International Treaty on Plant Genetic Resources for Food and Agriculture.

Information related to access and benefit-sharing arrangements

Recognizing that access to information is an essential instrument in the development of national capacity for dealing with access and benefit-sharing arrangements and important in enhancing the necessary bargaining power of stakeholders in access and benefit-sharing arrangements,

Noting that, since the adoption of the Convention, an increasing number of Parties have developed national/regional regimes on access and benefit-sharing and that Parties and stakeholders could learn from sharing their respective experiences relating to the development and implementation of access and benefit-sharing regimes,

Recognizing that the Secretariat of the Convention could assist in disseminating this information among Parties and stakeholders, *inter alia*, through strengthening of the clearing-house mechanism,

6. *Requests* Parties and relevant organizations, as appropriate, to make available to the Executive Secretary:

- (a) Detailed information on the measures adopted to implement access and benefit-sharing, including the text of any legislation or other measures developed to regulate access and benefit-sharing;
- (b) Case-studies on the implementation of access and benefit-sharing arrangements;
- (c) Other information, such as that listed in decision V/26, paragraph 12;

7. *Requests* the Executive Secretary to compile the information received and to make it available, through, *inter alia*, the clearing-house mechanism, including in hard copy and CD-ROM and relevant meetings under the Convention on Biological Diversity in order to facilitate access to this information by Parties and relevant stakeholders.

***Ex situ* collections acquired prior to the entry into force of the Convention and not addressed by the Commission on Genetic Resources for Food and Agriculture**

8. *Notes with appreciation* the report *International Review of the Ex Situ Plant Collections of the Botanic Gardens of the World: Reviewing the Plant Genetic Resource Collections of Botanic Gardens Worldwide*, prepared by Botanic Gardens Conservation International with the support of the Government of the United Kingdom and the Secretariat of the Convention on Biological Diversity.

DECISION VI/25 | National reports

The Conference of the Parties

1. *Welcomes* the second national reports and the thematic reports submitted by Parties in accordance with decision V/19;
2. *Urges* Parties that have not submitted a second national report to do so without further delay;
3. *Requests* the Executive Secretary to:
 - (a) Draw appropriate conclusions from the analysis of the second national reports and of the experiences of Parties in preparing national reports that can serve to facilitate the implementation of the Convention by Parties;
 - (b) Continue to identify, and analyse the reasons for Parties not being able to complete their national reports, with a view to facilitating the preparation of the third national reports;
 - (c) Make this information available through the clearing-house mechanism and other appropriate channels prior to the seventh meeting of the Conference of the Parties; and
 - (d) Prepare for the consideration of the Conference of the Parties at its seventh meeting a draft format for the third national reports that:
 - (i) Builds on the methodology and format used for the second national reports;
 - (ii) Includes questions on strategic goals and objectives established under the Strategic Plan;
 - (iii) Takes into account these conclusions and other available information on the experience of the process of national reporting;

- (iv) Focuses on allowing the Party to provide information on the experience of implementing its national biodiversity strategy and action plan and, in particular, the priority actions;
- (v) Frames questions in a direct way, such that the format is not overly complex and promotes the consultative processes involving all relevant stakeholders recommended in decision V/19;
- (vi) Facilitates the identification of obstacles and impediments to implementation encountered by the Party;
- (vii) Requests Parties to provide information on financial resources they have made available to other Parties for the purposes of implementing the Convention, where relevant, and on financial resources they have received from other Parties and financial institutions, where relevant;

4. *Invites* Parties to submit thematic reports on mountain ecosystems, protected areas or areas where special measures need to be taken to conserve biological diversity, and transfer of technology and technology cooperation in accordance with the formats prepared by the Executive Secretary, which should identify priorities in national biodiversity strategies and action plans, impediments to implementation, and existing and potential areas of cooperation and capacity-building, and aim to support the work of the Subsidiary Body on Scientific, Technical and Technological Advice;

5. *Requests* the Global Environment Facility, as the institutional structure operating the financial mechanism, to continue to provide, in a timely manner, support to eligible countries for the preparation of national reports;

6. *Welcomes* the publication of the Global Biodiversity Outlook and *decides* that the Global Biodiversity Outlook should continue to be prepared as a periodic report on biological diversity and implementation of the Convention, and be made available in all official United Nations languages;

7. *Decides* that the second edition of the Global Biodiversity Outlook should be prepared for publication in 2004, drawing upon information contained in the second national reports, the thematic reports on the items for in-depth consideration at its sixth and seventh meetings, and on the review of progress in the implementation of the Strategic Plan to be undertaken in 2003;

8. *Welcomes* the work of the United Nations Environment Programme on the harmonization of environmental reporting and encourages its continuation, whilst recognizing the need to ensure that this does not affect the ability of the Conference of the Parties to adjust national reporting procedures under the Convention in order to better meet the needs of Parties;

9. *Takes note of* the difficulty experienced by some developing countries and countries with economies in transition in accessing funding for preparing their second national reports, and *requests* the Secretariat of the Convention and the Global Environmental Facility to explore innovative funding modalities for facilitating the preparation of future national reports and thematic reports;

10. *Approves* the formats for thematic reports on mountain ecosystems, protected areas or areas where special measures need to be taken to conserve biological diversity, and transfer of technology and technology cooperation, as contained in annexes I to III below, with the respective deadlines for submission of 31 October 2002, 30 March 2003 and 30 March 2003.

ANNEX I FORMAT FOR THEMATIC REPORT ON MOUNTAIN ECOSYSTEMS

The following format for preparing a thematic report on mountain ecosystems is a series of questions designed to collect information from Contracting Parties to facilitate the consideration of relevant issues and programme of work at the seventh meeting of the Conference of the Parties. The responses to these questions will also assist with the assessment of the overall status of implementation of the Convention.

The questions are designed in a way to facilitate completion of the review. In most cases, optional answers are provided and only a tick in one or more boxes is required. Following the questions there is a box for further comments and information. Parties are invited to provide a more detailed response to the questions to which more than one answer is given. In particular, this box could be used to identify the priorities in the national strategies and action plans, successes and constraints in implementation and existing and potential areas of cooperation and capacity-building.

This information provided by Contracting Parties will not be used to rank performance between individual Contracting Parties.

In order to assist with the review and synthesis of the information in the reports, respondents are asked to ensure that the further information provided in the box is closely related to the preceding questions and is as succinct as possible. This is no set limit on length, but it is anticipated that Parties will be able to provide adequate and useful information in a few pages.

Contracting Parties are also invited to communicate any issues relevant to the provisions of the Convention that have not been addressed by the questions below. The Executive Secretary would also welcome any comments on the adequacy of the questions, and difficulties in completing these questions, and any recommendations on how these reporting guidelines and questions could be improved.

It is recommended that Contracting Parties involve a wide range of stakeholders in the preparation of the report, in order to ensure a participatory and transparent development of such a report. A box is provided to identify those stakeholders who have been involved in this process.

Contracting Parties are requested to submit their thematic reports on mountain ecosystems in this format to the Executive Secretary by 31 October 2002. Parties are requested to submit an original signed copy by post and an electronic copy on diskette or by electronic mail. An electronic version of this document will be sent to all national focal points and this will also be available from the website of the Convention at:

<<http://www.biodiv.org>>

Completed thematic reports and any comments should be sent to:

The Executive Secretary
Secretariat of the Convention on Biological Diversity
World Trade Center
393 St. Jacques Street, Suite 300
Montreal, Quebec, Canada, H2Y 1N9
FAX: 1-514-2886588
EMAIL: secretariat@biodiv.org

PLEASE PROVIDE THE FOLLOWING DETAILS ON THE ORIGIN OF THIS REPORT

Contracting Party

NATIONAL FOCAL POINT

Full name of the institution

Name and title of contact officer

Mailing address

Telephone

Fax

e-mail

CONTACT OFFICER FOR NATIONAL REPORT (IF DIFFERENT)

Name and title of contact officer

Mailing address

Telephone

Fax

e-mail

SUBMISSION

Signature of officer responsible for submitting national report

Date of submission

MOUNTAIN ECOSYSTEMS

1. What is the relative priority your country accords to the conservation and sustainable use of biological diversity in mountain ecosystems?

- a) High
 b) Medium
 c) Low

2. How does your country assess the resources available for conservation and sustainable use of biological diversity in mountain ecosystems, both domestic and international?

- a) Good
 b) Adequate
 c) Limiting
 d) Severely limiting

3. Has your country requested financial assistance from GEF for funding the activities for conservation and sustainable use of biological diversity in mountain ecosystems?

- a) No
 b) Yes, (please provide details)

ASSESSMENT, IDENTIFICATION AND MONITORING

4. Has your country undertaken any assessment of direct and underlying causes of degradation and loss of biological diversity of mountain ecosystems?

- a) No (please specify the reasons)

- b) Yes, (please specify major threats and their relative importance, as well as gaps)

- c) If Yes, please specify the measures your country has taken to control the causes of loss of mountain biodiversity

5. Has your country identified taxonomic needs for conservation and sustainable use of biological diversity of mountain ecosystems?

a) No, (please specify the reasons)

b) Yes, (please specify)

6. Has your country made any assessment of the vulnerability or fragility of the mountains in your country?

a) No, (please specify the reasons)

b) Yes, (please specify the results and observed impacts on mountain biodiversity)

7. Has your country made any assessment important for conservation of biological diversity of mountain ecosystems at the genetic, species and ecosystem levels? (You may wish to use the Annex I of the Convention for categories of biodiversity important for conservation)

a) No, please specify the reasons

b) Yes, some assessments or monitoring undertaken (please specify)

c) Yes, comprehensive assessments or monitoring programmes undertaken (please specify where results can be found, and opportunities and obstacles, if any)

REGULATORY AND INFORMATION SYSTEM AND ACTION PLAN

8. Has your country developed regulations, policies and programs for conservation and sustainable use of biological diversity in mountain ecosystems?

- a) No
- b) Yes, (please specify sectors)

9. Has your country applied the ecosystem approach (adopted at COP 5) in the conservation and sustainable use of biological diversity in mountain ecosystems?

- a) No
- b) Yes, (please provide some cases or examples)

10. Does your national biodiversity strategy and action plan cover mountain biological diversity?

- a) No, (please specify why)

- b) Yes, (please give some information on the strategy and plan, in particular on mountain biodiversity)

11. Has your country disseminated the relevant information concerning management practices, plans and programmes for conservation and sustainable use of components of biological diversity in mountain ecosystems?

- a) No
- b) Yes, (please provide details where information can be retrieved concerning management practices, plans and programmes)

COOPERATION

12. Has your country undertaken any collaboration with other Parties for conservation and sustainable use of biological diversity in mountain ecosystems at the regional level or within a range of mountains?

- a) No
- b) Yes, (please specify the objectives of this collaboration and achievements)

13. Has your country signed or ratified any regional or international treaty concerning mountains?

- a) No
- b) Yes, (please specify which treaty and provide as much as possible a report on the progress in the implementation of the treaties, including any major constraints in the implementation of the treaties)

RELEVANT THEMATIC AREAS AND CROSS-CUTTING ISSUES

14. Has your country taken account of mountain ecosystems while implementing thematic programmes of work on agricultural; inland waters; forest; and dry and sub-humid lands biological diversity?

- a) No
- b) Yes—but in only one or two thematic programmes of work
- c) Yes, included in all programmes of work
- d) If yes, please specify details

15. Has your country taken any measures to ensure that the tourism in mountains is sustainable?

- a) No, please specify why

- b) Yes, but in early stages of development (please specify the reasons)

c) In advanced stages of development (please specify the reasons)

d) Relatively comprehensive measures being implemented (please specify the reasons)

16. Has your country taken any measures to protect the traditional knowledge, innovations and practices of indigenous and local communities for conservation and sustainable use of biological diversity in mountain ecosystems?

a) No

b) Not relevant

c) Yes, but in early stages of policy or programme development

d) Yes, in advanced stages of development

e) Some programmes being implemented

f) Comprehensive programmes being implemented

17. Has your country developed any programmes for the protection of natural and cultural heritages in the mountains?

a) No

b) Yes, (please provide some information in the programmes)

18. Has your country established protected areas in mountains?

a) No

b) Yes, (please specify the percentage of mountains under protected areas out of total mountain areas in your country)

19. Has your country undertaken any activities to celebrate the International Year of Mountains and Eco-tourism?

a) No

b) Yes, (please specify)

CASE-STUDIES

Please provide case-studies made by your country in conservation and sustainable use of biological diversity in mountain ecosystems.

Further comments

ANNEX II
FORMAT FOR DETAILED THEMATIC REPORTS ON PROTECTED AREAS OR
AREAS WHERE SPECIAL MEASURES NEED TO BE TAKEN TO CONSERVE BIO-
LOGICAL DIVERSITY

The following format for preparing a thematic report on protected areas or areas where special measures need to be taken to conserve biological diversity is a series of questions designed to collect information from the Contracting Parties to facilitate the consideration of relevant thematic issues and programme of work at the seventh meeting of the Conference of the Parties. The responses to these questions will also assist with the assessment of the overall status of implementation of the Convention.

While designing questions, due consideration is given to the fact that the first and second national reports called for by the Conference of the Parties of the Convention have requested some information on protected areas, and some relevant organizations such as IUCN and UNESCO call for reports periodically and promote the information sharing in this field. The thematic report on protected areas will address those specific issues that will be of concern to SBSTTA and the Conference of the Parties to the Convention.

The questions are designed in a way to facilitate completion of the review. In most cases, optional answers are provided and circling the selected answer is required. Following the questions there is a box for further comments and information. Parties are invited to provide a more detailed response to the questions to which more than one answer is given. In particular, this box could be used to identify the priorities in the national strategies and action plans, successes and constraints in implementation and existing and potential areas of cooperation and capacity-building.

This information provided by Contracting Parties will not be used to rank performance between individual Contracting Parties.

In order to assist with the review and synthesis of the information in the reports, respondents are asked to ensure that the further information provided in the box is closely related the preceding questions and is as succinct as possible. This is no set limit on length, but it is anticipated that Parties will be able to provide adequate and useful information in a few pages.

Contracting Parties are also invited to communicate any issues relevant to the provisions of the Convention that have not been addressed by the questions below. The Executive Secretary would also welcome any comments on the adequacy of the questions, and difficulties in completing these questions, and any recommendations on how these reporting guidelines and questions could be improved.

It is recommended that Contracting Parties involve a wide range of stakeholders in the preparation of the report, in order to ensure a participatory and transparent development of such a report. A box is provided to identify those stakeholders who have been involved in this process.

Contracting Parties are requested to submit their thematic reports on protected areas in this format to the Executive Secretary by 30 March 2003. Parties are requested to submit an original signed copy by post and an electronic copy on

diskette or by electronic mail. An electronic version of this document will be sent to all national focal points and this will also be available from the website of the Convention at:

<<http://www.biodiv.org>>

Completed thematic reports and any comments should be sent to:

The Executive Secretary
Secretariat of the Convention on Biological Diversity
World Trade Center
393 St. Jacques Street, Suite 300
Montreal, Quebec, Canada, H2Y 1N9
FAX: 1-514-2886588
EMAIL: secretariat@biodiv.org

PLEASE PROVIDE THE FOLLOWING DETAILS ON THE ORIGIN OF THIS REPORT

Contracting Party

NATIONAL FOCAL POINT

Full name of the institution

Name and title of contact officer

Mailing address

Telephone

Fax

e-mail

CONTACT OFFICER FOR NATIONAL REPORT (IF DIFFERENT)

Name and title of contact officer

Mailing address

Telephone

Fax

e-mail

SUBMISSION

Signature of officer responsible for submitting national report

Date of submission

PROTECTED AREAS

SYSTEM OF PROTECTED AREAS

1. What is the relative priority afforded to development and implementation of a national system of protected areas in the context of other obligations arising from the Convention and COP Decisions?
 - a) High
 - b) Medium
 - c) Low
2. Is there a systematic planning process for development and implementation of a national system of protected areas?
 - a) No
 - b) In early stages of development
 - c) In advanced stages of development
 - d) Yes (please provide copies of relevant documents describing the process)
3. Is there an assessment of the extent to which the existing network of protected areas covers all areas that are identified as being important for the conservation of biological diversity?
 - a) No
 - b) An assessment is being planned for
 - c) An assessment is being undertaken
 - d) Yes (please provide copies of the assessments made)

REGULATORY FRAMEWORK

4. Is there a policy framework and/or enabling legislation in place for the establishment and management of protected areas?
 - a) No
 - b) In early stages of development
 - c) In advanced stages of development
 - d) Yes (please provide copies of relevant documents)

5. Have guidelines, criteria and targets been adopted to support selection, establishment and management of protected areas?
- a) No
 - b) In early stages of development
 - c) In advanced stages of development
 - d) Yes, (please provide copies of guidelines, criteria and targets)
6. Does the management of protected areas involve the use of incentive measures, for instance, of entrance fees for park visitors, or of benefit-sharing arrangements with adjacent communities and other relevant stakeholders?
- a) No
 - b) Yes, incentive measures implemented for some protected areas (please provide some examples)
-
-
- c) Yes, incentive measures implemented for all protected areas (please provide some examples)
-
-

MANAGEMENT APPROACH

7. Have the principal threats to protected areas and the biodiversity that they contain been assessed, so that programmes can be put in place to deal with the threats, their effects and to influence the key drivers?
- a) No
 - b) An assessment is being planned for
 - c) An assessment is in process
 - d) Yes, an assessment has been completed
 - e) Programmes and policies to deal with threats are in place (please provide basic information on threats and actions taken)
-
-

8. Are protected areas established and managed in the context of the wider region in which they are located, taking account of and contributing to other sectoral strategies?

- a) No
- b) Yes, in some areas
- c) Yes, in all areas (please provide details)

9. Do protected areas vary in their nature, meeting a range of different management objectives and/or being operated through differing management regimes?

- a) No, most areas are established for similar objectives and are under similar management regimes
- b) Many areas have similar objectives/management regimes, but there are also some exceptions
- c) Yes, protected areas vary in nature (please provide details)

10. Is there wide stakeholder involvement in the establishment and management of protected areas?

- a) No
- b) With some, but not all protected areas
- c) Yes, always (please provide details of experience)

11. Do protected areas established and managed by non-government bodies, citizen groups, private sector and individuals exist in your country, and are they recognized in any formal manner?

- a) No, they do not exist
- b) Yes, they exist, however are not formally recognized
- c) Yes, they exist and are formally recognized (please provide further information)

AVAILABLE RESOURCES

12. Are the human, institutional and financial resources available adequate for full implementation of the protected areas network, including for management of individual protected areas?

a) No, they are severely limiting (please provide basic information on needs and shortfalls)

b) No, they are limiting (please provide basic information on needs and shortfalls)

c) Available resources are adequate (please provide basic information on needs and shortfalls)

d) Yes, good resources are available

13. Has your country requested/received financial assistance from the Global Environment Facility or other international sources for establishment/management of protected areas?

a) No

b) Funding has been requested, but not received

c) Funding is currently being requested

d) Yes, funding has been received (please provide copies of appropriate documents)

ASSESSMENT

14. Have constraints to implementation and management of an adequate system of protected areas been assessed, so that actions can be initiated to deal with these constraints?

a) No

b) Yes, constraints have been assessed (please provide further information)

c) Yes, actions to deal with constraints are in place (please provide further information)

15. Is a programme in place or in development to regularly assess the effectiveness of protected areas management and to act on this information?

- a) No
- b) Yes, a programme is under development (please provide further information)
-

- c) Yes, a programme is in place (please provide further information)
-
-

16. Has any assessment been made of the value of the material and non-material benefits and services that protected areas provide?

- a) No
- b) An assessment is planned
- c) An assessment is in process
- d) Yes, an assessment has been made (please provide further information)
-
-

REGIONAL AND INTERNATIONAL COOPERATION

17. Is your country collaborating/communicating with neighbouring countries in the establishment and/or management of transboundary protected areas?

- a) No
- b) Yes, (please provide details)
-
-

18. Are key protected areas professionals in your country members of the IUCN World Commission on Protected Areas, thereby helping to foster the sharing of information and experience?

- a) No
- b) Yes
- c) Information is not available

ANNEX III

FORMAT FOR THEMATIC REPORT ON TRANSFER OF TECHNOLOGY AND TECHNOLOGY COOPERATION

The following format for preparing a thematic report on transfer of technology and technology cooperation is a series of questions based on those elements of relevant decisions adopted by the Conference of the Parties, the programmes of work adopted at previous meetings of the Conference of the Parties as well as the recommendations from the SBSTTA. The information submitted by the Parties will be compiled to facilitate the consideration of relevant issues at the seventh meeting of the Conference of the Parties. The responses to these questions will also assist with the assessment of the overall status of implementation of the Convention.

It should be noted that for the purpose of the Convention on Biological Diversity, technology here includes biotechnology. Technologies for transfer to other Contracting Parties are those that are relevant to the conservation and sustainable use of biological diversity or make use of genetic resources and do not cause damage to the environment. These technologies will be referred to in the questionnaire as “relevant technologies.” They include technologies and know-how relevant to the identification, characterization and monitoring of ecosystems, species and genetic resources; technologies appropriate for the *in situ* and *ex situ* conservation and for sustainable use of biological diversity and its components.

The questions are designed in a way to facilitate completion of the review. In some cases, optional answers are provided and only a tick in one or more boxes is required. In some cases, there is a box after the question for detailed comments and information. There is no limit to the extra pages for the information provided. The Parties are encouraged to provide information as succinct as possible.

This information provided by Contracting Parties will not be used to rank performance between individual Contracting Parties.

In order to assist with the review and synthesis of the information in the reports, respondents are asked to ensure that the further information provided in the box is closely related the preceding questions and is as succinct as possible. This is no set limit on length, but it is anticipated that Parties will be able to provide adequate and useful information in a few pages.

Contracting Parties are also invited to communicate any issues relevant to the provisions of the Convention that have not been addressed by the questions below. The Executive Secretary would also welcome any comments on the adequacy of the questions, and difficulties in completing these questions, and any recommendations on how these reporting guidelines and questions could be improved.

It is recommended that Contracting Parties involve a wide range of stakeholders in the preparation of the report, in order to ensure a participatory and transparent development of such a report. A box is provided to identify those stakeholders who have been involved in this process.

Contracting Parties are requested to submit their thematic reports on transfer of technology and technology cooperation in this format to the Executive Secretary by 30 March 2003. Parties are requested to submit an original signed copy by post and an electronic copy on diskette or by electronic mail. An electronic version of

this document will be sent to all national focal points and this will also be available from the website of the Convention at:

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PLEASE PROVIDE THE FOLLOWING DETAILS ON THE ORIGIN OF THIS REPORT

Contracting Party

NATIONAL FOCAL POINT

Full name of the institution

Name and title of contact officer

Mailing address

Telephone

Fax

e-mail

CONTACT OFFICER FOR NATIONAL REPORT (IF DIFFERENT)

Name and title of contact officer

Mailing address

Telephone

Fax

e-mail

SUBMISSION

Signature of officer responsible for submitting national report

Date of submission

TECHNOLOGY TRANSFER AND TECHNOLOGY COOPERATION INVENTORY AND ASSESSMENT

1. Has your country developed an inventory of existing technologies or category of technologies, including from indigenous and local communities, for the conservation and sustainable use of biological diversity and its components, in all the thematic areas and cross-cutting issues addressed by the Convention?

- a) No
- b) An inventory under development
- c) An inventory of some technologies available (please provide some details)

- d) Yes, a comprehensive inventory available (please provide details)

2. Has your country assessed the potential impacts of relevant technologies on biological diversity and their requirements for successful application?

- a) No
- b) Yes, (please give some examples)

3. Has your country carried out an assessment of the needs for relevant technologies?

- a) No (please specify the reasons)
- b) Yes, and please specify the needs met and the needs not met for existing technologies and for new technologies

IMPLEMENTATION OF SOME RELEVANT ARTICLES OF THE CONVENTION, RELEVANT DECISIONS ADOPTED AT THE PREVIOUS MEETINGS OF THE CONFERENCE OF THE PARTIES AND RECOMMENDATIONS OF THE SBSTTA

4. In implementing the thematic programmes of work adopted by previous meetings of COP, has your country achieved the outcomes identified in these programmes of work through technology transfer and technology cooperation? (Decisions II/10, III/11, IV/6, IV/7 and V/4)

- a) No
 - b) Yes, but only a few activities in some programs
 - c) Yes, and a wide range of activities in many programs of work
 - d) If yes, please specify these activities and programmes of work
-
-

5. Has your country undertaken technology cooperation with other Contracting Parties that lack the expertise and resources to assess the risks and minimize the negative impacts of introducing alien species? (Decision V/8)

- a) No
 - b) Yes, (please give details below (including types of technology transferred, actors involved, terms for transfer and means of access to technology)
-
-

6. Has your country taken any steps or measures to facilitate transfer of technology to and technology cooperation with other Parties to develop and/or strengthen their capacity to implement the policy, program and practice for sustainable use of biological diversity? (Decision V/24)

- a) No
 - b) Yes, (please specify detailed measures and steps)
-
-

7. Could you provide examples or illustrations of benefit-sharing contractual agreements which have included technology cooperation and technology transfer as benefits to be shared? (Article 15)

- a) No
- b) Yes

8. Has your Government taken measures, as appropriate, to ensure, as set out in the Article 16(3) that Contracting Parties providing genetic resources are provided access to and transfer of technology which makes use of those genetic resources?

(Article 16)

- a) No
- b) Yes, (please provide some details)

9. Have the taxonomic institutions in your country taken any initiatives in developing national priorities, both individually and regionally, in new technology? (decision IV/1)

- a) No
- b) Yes, in early stages of development
- c) Yes, in advanced stages of development
- d) Yes, some initiatives in place and some priorities identified
- e) Yes, comprehensive priorities identified

10. Has your country been involved in technology development and/or transfer for the maintenance and utilization of *ex situ* collections? (decision V/26)

- a) No
- b) Yes, please give details below (including types of technology transferred, actors involved, terms for transfer and means of access to technology)

11. Has the clearing-house mechanism in your country been further developed in order to assist in obtaining access to information concerning access to and transfer of technologies? (decision V/14)

- a) No
- b) Yes, (please provide some examples)

ROLE OF PUBLIC AND PRIVATE SECTORS IN TECHNOLOGY TRANSFER AND TECHNOLOGY

12. Do you know of any examples of technology partnerships between public research and development institutions from developing countries and private-sector firms from industrialized countries? If so, to what extent have these partnerships involved:

- a) The training of developing country scientists in the application of new technologies for the conservation and utilization of genetic resources
- b) Information exchange on new scientific exchange and technological advances
- c) Providing various technology components to developing country partner institutions
- d) Engaging in joint research and development?

13. Has your country taken any measures or developed any programs to encourage the private sector or the public-private partnership to develop and transfer technologies for the benefit of governments and institutions of developing countries, including South-South cooperation?

- a) No
 - b) Yes, (please give details)
-
-

14. Have any type of incentives been established in your country to encourage the participation of the private sector in conservation and sustainable use activities as a source of new technologies and potential financiers of conservation programmes?

- a) No
 - b) Yes, (please give details)
-
-

IMPACT OF INTELLECTUAL PROPERTY RIGHTS ON TECHNOLOGY TRANSFER AND TECHNOLOGY COOPERATION

15. Are the technologies your country has accessed or wishes to access in the public domain covered by intellectual property rights?

- a) Public domain
- b) Intellectual property rights
- c) Both

16. Have intellectual property rights been a limiting factor in acquiring technologies for the conservation and sustainable use of biological diversity?

- a) No
- b) Yes, (please provide an example and specify the following: the type of technology sought (hard or soft technology); the area to which it is to be applied (e.g. forest, marine, inland waters, agriculture, etc.))
-
-

CAPACITY-BUILDING FOR TECHNOLOGY TRANSFER AND TECHNOLOGY COOPERATION

17. Have adequate institutional structures been established and/or is adequate human capacity available to access relevant technologies, in your country?

- a) No
- b) Yes

18. What, if any, have been the limiting factors in implementing relevant technologies?

- a) Institutional capacity
- b) Human capacity
- c) Others, (please specify)
-
-

19. Does your country consider that access to information and training or lack thereof has been a limiting factor in access to and transfer of technology?

- a) No
- b) Yes, (please provide some examples)
-
-

20. Has your country been able to identify relevant technologies in specific areas for the conservation and sustainable use of biological diversity in your country?

- a) No
- b) Yes, (please give details)
-
-
-

21. Has your country developed national policy and established international and national institutions to promote technology cooperation, including through the development and strengthening of technical, human and institutional capabilities?

a) No (please specify the reasons)

b) Yes, (please give some details or examples)

22. Has your country established joint research programmes and joint ventures for the development of technologies relevant to the objectives of the Convention?

a) No

b) Yes, (please give some details or examples)

MEASURES FOR FACILITATING ACCESS TO AND TRANSFER OF TECHNOLOGY

23. Has your country established the mechanisms and/or measures to encourage and facilitate the transfer of technology to and technology cooperation with other Contracting Parties?

a) No

b) Yes, (please provide some details)

24. Has your country established channels for access to the technologies developed and applied for attaining the objectives of the Convention?

a) No

b) Yes, (please provide detailed information)

SUCCESS STORIES OF AND CONSTRAINTS TO TECHNOLOGY TRANSFER AND TECHNOLOGY COOPERATION

25. Has your country identified any success stories and opportunities of and constraints to transfer of technology and technology cooperation?

- a) No
- b) Yes, (please provide detailed information)

Further Comments

DECISION VI/26 | **Strategic Plan for the Convention on Biological Diversity**

The Conference of the Parties

1. *Takes note of* the conclusions of the Seychelles Workshop on the Strategic Plan¹⁵⁰ and the report of the Open-ended Inter-sessional Meeting on the Strategic Plan, National Reports and Implementation of the Convention on Biological Diversity;¹⁵¹
2. *Adopts* the text of the Strategic Plan for the Convention on Biological Diversity contained in the annex to the present decision;
3. *Urges* Parties, States, intergovernmental organizations and other organizations to review their activities, especially their national biodiversity strategies and action plans, where appropriate, in the light of the Strategic Plan for the Convention on Biological Diversity;
4. *Requests* the Executive Secretary to provide appropriate information to the Parties at an inter-sessional meeting for consideration of the future evaluation of progress in the implementation of the Convention and the Strategic Plan, in accordance with the relevant provisions of the Convention.

ANNEX

STRATEGIC PLAN FOR THE CONVENTION ON BIOLOGICAL DIVERSITY

1. In 2002, 10 years after the Convention on Biological Diversity was opened for signature, the Parties have developed this Strategic Plan in order to guide its further implementation at the national, regional and global levels.
2. The purpose is to effectively halt the loss of biodiversity so as to secure the continuity of its beneficial uses through the conservation and sustainable use of its components and the fair and equitable sharing of benefits arising from the use of genetic resources.

A. The issue

Biodiversity is the living foundation for sustainable development

3. Biodiversity—the variability within and among living organisms and the systems they inhabit—is the foundation upon which human civilization has been built. In addition to its intrinsic value, biodiversity provides goods and services that underpin sustainable development in many important ways, thus contributing to poverty alleviation. First, it supports the ecosystem functions essential for life on Earth, such as the provision of fresh water, soil conservation and climate stability. Second, it provides products such as food, medicines and materials for industry. Finally, biodiversity is at the heart of many cultural values.

150 UNEP/CBD/WS-StratPlan/5.

151 UNEP/CBD/COP/6/5.

The rate of loss is still accelerating

4. The rate of biodiversity loss is increasing at an unprecedented rate, threatening the very existence of life as it is currently understood. The maintenance of biodiversity is a necessary condition for sustainable development, and as such constitutes one of the great challenges of the modern era.

The threats must be addressed

5. Addressing the threats to biodiversity requires immediate and long-term fundamental changes in the way resources are used and benefits are distributed. Achieving these adjustments will require broad-based action among a wide range of actors.

The Convention is an essential instrument for achieving sustainable development

6. The importance of the biodiversity challenge was universally acknowledged at the United Nations Conference on Environment and Development, which met in Rio de Janeiro in 1992, and through the development of the Convention on Biological Diversity. In ratifying the Convention, the Parties have committed themselves to undertaking national and international measures aimed at its achieving three objectives: the conservation of biological diversity; the sustainable use of its components; and the fair and equitable sharing of benefits arising out of the utilization of genetic resources.

Achievements

7. Since the adoption of the Convention, the Conference of the Parties has met several times and, on each occasion, through its decisions has taken steps to translate the general provisions of the Convention into practical action. This process has initiated national action plans in over 100 countries, raised awareness about biodiversity and led to the adoption of the Cartagena Protocol on Biosafety, a landmark treaty which provides an international regulatory framework for the safe transfer, handling and use of any living modified organisms resulting from modern biotechnology.

The challenges

8. The implementation of the Convention on Biological Diversity has been impeded by many obstacles, as outlined in the appendix hereto. A fundamental challenge for the Convention lies in the broad scope of its three objectives. The need to mainstream the conservation and sustainable use of biological resources across all sectors of the national economy, the society and the policy-making framework is a complex challenge at the heart of the Convention. This will mean cooperation with many different actors, such as regional bodies and organizations. Integrated management of natural resources, based on the ecosystem approach, is the most effective way to promote this aim of the Convention.

9. The scope of the Convention means that the provision by developed country Parties of resources to implement the Convention is critical and essential.

10. The Strategic Plan can promote broad-based action by bringing about a convergence of actions around agreed goals and collective objectives.

B. Mission

11. Parties commit themselves to a more effective and coherent implementation of the three objectives of the Convention, to achieve by 2010 a significant reduction of the current rate of biodiversity loss at the global, regional and national level as a contribution to poverty alleviation and to the benefit of all life on earth.

C. Strategic goals and objectives

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

1.1 The Convention is setting the global biodiversity agenda.

1.2 The Convention is promoting cooperation between all relevant international instruments and processes to enhance policy coherence.

1.3 Other international processes are actively supporting implementation of the Convention, in a manner consistent with their respective frameworks.

1.4 The Cartagena Protocol on Biosafety is widely implemented.

1.5 Biodiversity concerns are being integrated into relevant sectoral or cross-sectoral plans, programmes and policies at the regional and global levels.

1.6 Parties are collaborating at the regional and subregional levels to implement the Convention.

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

2.1 All Parties have adequate capacity for implementation of priority actions in national biodiversity strategy and action plans.

2.2 Developing country Parties, in particular the least developed and the small island developing States amongst them, and other Parties with economies in transition, have sufficient resources available to implement the three objectives of the Convention.

2.3 Developing country Parties, in particular the least developed and the small island developing States amongst them, and other Parties with economies in transition, have increased resources and technology transfer available to implement the Cartagena Protocol on Biosafety.

2.4 All Parties have adequate capacity to implement the Cartagena Protocol on Biosafety.

2.5 Technical and scientific cooperation is making a significant contribution to building capacity.

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

3.1 Every Party has effective national strategies, plans and programmes in place to provide a national framework for implementing the three objectives of the Convention and to set clear national priorities.

3.2 Every Party to the Cartagena Protocol on Biosafety has a regulatory framework in place and functioning to implement the Protocol.

3.3 Biodiversity concerns are being integrated into relevant national sectoral and cross-sectoral plans, programmes and policies.

3.4 The priorities in national biodiversity strategies and action plans are being actively implemented, as a means to achieve national implementation of the Convention, and as a significant contribution towards the global biodiversity agenda.

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

4.1 All Parties are implementing a communication, education, and public awareness strategy and promoting public participation in support of the Convention.

4.2 Every Party to the Cartagena Protocol on Biosafety is promoting and facilitating public awareness, education and participation in support of the Protocol.

4.3 Indigenous and local communities are effectively involved in implementation and in the processes of the Convention, at national, regional and international levels.

4.4 Key actors and stakeholders, including the private sector, are engaged in partnership to implement the Convention and are integrating biodiversity concerns into their relevant sectoral and cross-sectoral plans, programmes and policies.

D. Review

12. The Strategic Plan will be implemented through the programmes of work of the Convention on Biological Diversity implementation of national biodiversity strategies and action plans, and other national, regional and international activities.

13. Better methods should be developed to objectively evaluate progress in the implementation of the Convention and the Strategic Plan.

Appendix

Obstacles to the implementation of the Convention on Biological Diversity

1. POLITICAL/SOCIETAL OBSTACLES

- (a) Lack of political will and support to implement the Convention on Biological Diversity
- (b) Limited public participation and stakeholder involvement
- (c) Lack of mainstreaming and integration of biodiversity issues into other sectors, including use of tools such as environmental impact assessments
- (d) Political instability
- (e) Lack of precautionary and proactive measures, causing reactive policies.

2. INSTITUTIONAL, TECHNICAL AND CAPACITY-RELATED OBSTACLES

- (a) Inadequate capacity to act, caused by institutional weaknesses
- (b) Lack of human resources
- (c) Lack of transfer of technology and expertise
- (d) Loss of traditional knowledge
- (e) Lack of adequate scientific research capacities to support all the objectives.

3. LACK OF ACCESSIBLE KNOWLEDGE/INFORMATION

- (a) Loss of biodiversity and the corresponding goods and services it provides not properly understood and documented
- (b) Existing scientific and traditional knowledge not fully utilized
- (c) Dissemination of information on international and national level not efficient
- (d) Lack of public education and awareness at all levels.

4. ECONOMIC POLICY AND FINANCIAL RESOURCES

- (a) Lack of financial and human resources
- (b) Fragmentation of GEF financing
- (c) Lack of economic incentive measures
- (d) Lack of benefit-sharing.

5. COLLABORATION/COOPERATION

- (a) Lack of synergies at the national and international levels
- (b) Lack of horizontal cooperation among stakeholders
- (c) Lack of effective partnerships
- (d) Lack of engagement of scientific community.

6. LEGAL/JURIDICAL IMPEDIMENTS

- (a) Lack of appropriate policies and laws.

7. SOCIO-ECONOMIC FACTORS

- (a) Poverty
- (b) Population pressure
- (c) Unsustainable consumption and production patterns
- (d) Lack of capacities for local communities.

8. NATURAL PHENOMENA AND ENVIRONMENTAL CHANGE

- (a) Climate change
- (b) Natural disasters.

DECISION VI/27 | Operations of the Convention

A. Implementation of the Convention, in particular, implementation of priority actions in national biodiversity strategies and action plans

The Conference of the Parties

1. *Stresses* that the development and implementation of national biodiversity strategies and action plans constitute the cornerstone of national implementation of the Convention;
2. *Urges* Parties to the Convention on Biological Diversity:
 - (a) To develop and adopt national biodiversity strategies and action plans, where they have not yet done so;
 - (b) To give priority to the integration of the conservation and sustainable use of biological diversity, as well as benefit-sharing, into relevant sectoral or cross-sectoral plans, programmes and policies, in accordance with Article 6 of the Convention;
 - (c) To identify priority actions in national biodiversity strategies and action plans and other relevant national strategies;
 - (d) To implement national biodiversity strategies and action plans; and to periodically revise them in the light of the experience of implementation;
 - (e) To establish national mechanisms or consultative processes, with particular regard, where appropriate, to the special needs of indigenous and local communities, for coordinating, implementing, monitoring, evaluating and periodically revising national biodiversity strategies and action plans;
 - (f) To identify constraints and impediments to implementation of national biodiversity strategies and action plans, and to reflect them in the national reports;

- (g) To make their national biodiversity strategies and action plans, including periodic revisions, available through their national clearing-house mechanism and the Convention website;
3. *Encourages* Parties to develop regional, subregional or bioregional mechanisms and networks to support implementation of the Convention including, as appropriate, through the development of regional or subregional biodiversity strategies and action plans, the identification of common constraints and impediments to implementation; and promotion of joint measures for addressing these;
 4. *Calls upon* multilateral, regional, bilateral and private donors and institutions able to support implementation of national and regional biodiversity strategies and action plans, in particular priority actions, to target such priority actions in an effective and coordinated manner within the framework of the Strategic Plan of the Convention;
 5. *Encourages* private foundations and other donors that provide funding in support of sustainable-development activities to support implementation of nationally-identified priority actions in national biodiversity strategies and action plans;
 6. *Requests* donor institutions and agencies to simplify, to the extent possible, their administrative procedures in order to expedite access by eligible countries to the financial resources needed to assist the implementation of the national biodiversity strategies and action plans;
 7. *Emphasizes* the importance of access to and transfer of technology and of technical and scientific cooperation in the implementation of national biodiversity strategies and action plans;
 8. *Transmits* to the Council of the Global Environment Facility its view that a strategic approach to capacity-building for the global environment at the national level is urgently needed and that promoting cross-convention synergies, national policy integration, national institutional development and cooperation among stakeholders in capacity-building activities is a priority in order to promote efficiency and quality, and *notes* the contribution of the preliminary results of the Capacity Development Initiative;
 9. *Encourages* Parties to avail themselves of the assistance available through the financial mechanism for preparation of a national capacity self-assessment;
 10. *Welcomes* the contribution to the implementation of national biodiversity strategies and action plans provided by the Biodiversity Planning Support Programme established by the United Nations Environment Programme and the United Nations Development Programme with core financial support from the Global Environment Facility and *requests* the agencies and partners involved to consider how regional support for biodiversity planning and capacity-building can be enhanced through core financial support by the Implementing Agencies;
 11. *Welcomes* the Biodiversity Service for the implementation of national biodiversity strategies and action plans in Central and Eastern Europe, established by the United Nations Environment Programme, IUCN, the European Centre for Nature Conservation and the Regional Environmental Centre and financially

supported by a number of donors, and *invites* Parties and intergovernmental and other organizations to review the operation of the Biodiversity Service and to benefit from its experience with a view to considering the establishment of regional capacity-building mechanisms to support the implementation of priority actions in national biodiversity strategies and action plans in other regions;

12. *Commends* the assessments of implementation carried out by Parties in the Central and Eastern Europe and Central American regions to the attention of Parties in other regions, and *encourages* Parties in other regions to undertake similar assessments;

13. *Requests* the Executive Secretary to provide appropriate information to the Parties at an inter-sessional meeting for consideration of the future evaluation of progress in the implementation of the Convention and the Strategic Plan, in accordance with the relevant provisions of the Convention.

B. Operations of the Convention

The Conference of the Parties

REVIEW OF THE STATUS OF IMPLEMENTATION OF THE DECISIONS OF THE CONFERENCE OF THE PARTIES

1. *Welcomes* the Handbook on the Convention on Biological Diversity and encourages the Executive Secretary to seek ways and means to make it available in other United Nations official languages;

2. *Decides* to review, on the basis of the proposals by the Executive Secretary, the status of implementation of all its decisions at its next meeting with a view to adopting a consolidated body of decisions and to inform decision-making on the long-term work plan of the Convention;

3. *Decides* to retire the decisions and elements of decisions listed in the annex to the present decision;

4. *Requests* the Executive Secretary to make proposals to the seventh meeting of the Conference of the Parties regarding, *inter alia*, the retirement of decisions and elements of decisions taken at the third and fourth meetings of the Conference of the Parties and the consolidation of its decisions and to communicate such proposals to Parties, Governments and relevant international organizations at least six months prior to its seventh meeting;

5. *Invites* Parties, Governments and relevant international organizations to submit to the Executive Secretary written comments on the proposals referred to in paragraph 4 above, at least three months prior to its seventh meeting;

REVIEW OF RECOMMENDATIONS OF THE SUBSIDIARY BODY ON SCIENTIFIC, TECHNICAL AND TECHNOLOGICAL ADVICE

Recalling its decision to make an assessment at its sixth meeting of the recommendations made to it by the Subsidiary Body on Scientific, Technical and Tech-

nological Advice with a view to providing guidance to the Subsidiary Body on ways to improve its inputs,

6. *Decides* that this assessment will be undertaken under the authority of the Conference of the Parties at its seventh meeting;
7. *Requests* the Executive Secretary to undertake, in consultation with the bureaux of the Subsidiary Body on Scientific, Technical and Technological Advice and the Conference of the Parties, a review of the recommendations of the Subsidiary Body with a view to improving its inputs and to report thereon to Subsidiary Body at its ninth meeting and to the Conference of the Parties at its seventh meeting;
8. *Requests* the Subsidiary Body on Scientific, Technical and Technological Advice, on the basis of the review mentioned in paragraph 7 above, to prepare proposals for the improvement of the quality of its advice and to submit a report thereon to the Conference of the Parties at its seventh meeting;

ROSTER OF EXPERTS

9. *Requests* the Executive Secretary to make full use of the roster of experts identified by Parties through national nodes of the clearing-house mechanism, including for peer review and for Internet-based discussion groups;
10. *Requests* the Executive Secretary to retire the roster of experts nominated by Parties for specific tasks or activities once those tasks or activities have been completed;

REGIONAL AND SUBREGIONAL MECHANISMS FOR IMPLEMENTATION OF THE CONVENTION

11. *Acknowledging* the important role that regional and subregional mechanisms and networks such as the Pan-European Biological and Landscape Diversity Strategy, the Strategic Plan on Biodiversity for Tropical Andean Countries, the Central American Commission of Environment and Development and the South Pacific Regional Environment Programme play in promoting the implementation of the Convention, which, *inter alia*, provide forums for the preparation of regional inputs to meetings of the Convention and for translating decisions of the Conference of the Parties into regional actions:

- (a) *Requests* the Executive Secretary, with the assistance of the United Nations Environment Programme and in consultation with Parties, to identify, assess and report on the potential of existing regional and subregional instruments, institutions, networks and mechanisms in various regions as a basis for enhancing the implementation of the Convention, including as partners for capacity-building, taking into account:
 - (i) The benefits to be gained through the utilization of regional and subregional institutions, mechanisms or networks;
 - (ii) The views from regions as to the types of assistance required to respond to difficulties in implementing the Convention and their level of priority;

- (iii) The requirements necessary to strengthen such mechanisms and networks for the purposes of the implementation of the Convention;
 - (b) *Encourages* Parties to strengthen regional and subregional cooperation, enhance the integration and promote synergies with relevant regional and subregional processes;
 - (c) *Invites* all donors and institutions in a position to do so to support the work of existing regional coordination mechanisms and the development of regional and subregional networks or processes, as appropriate;
 - (d) *Invites* Parties, Governments, and relevant organizations to strengthen their existing regional and subregional mechanisms and initiatives for capacity-building and to contribute inputs regarding their experiences into the wider assessment process;
12. *Invites* those countries in a position to do so, individually or collectively, on a bilateral or multilateral basis, to consider providing financial resources and technically qualified person(s) recruited from either government or the private sector to collaborate in the preparation of the assessment in the candidate regions;
13. *Decides* to further consider this issue, based on the assessment, at its seventh meeting;

PARTICIPATION AND PROCEDURES UNDER THE CONVENTION

14. *Takes note* of concerns about procedural issues raised at inter-sessional meetings, and calls for the implementation of the rules of procedure for meetings of the Conference of the Parties and Subsidiary Bodies;
15. *Requests* the bureaux of the Conference of the Parties and of the Subsidiary Body on Scientific, Technical and Technological Advice to develop proposals for the further improvement of existing procedures for conducting meetings in order to allow a more effective participation of one-person delegations and report to the Conference of the Parties at its seventh meeting;
16. *Recognizes* the increasing workload for Bureau members, particularly the Chairs, and confirms the need for financial support for Bureau members from developing country Parties and Parties with economies in transition, and, in particular, to provide funding for the attendance of Bureau members at meetings and support for the Chair of the Subsidiary Body on Scientific, Technical and Technological Advice;
17. *Decides* to consider at its seventh meeting the possibility of providing financial support for at least two representatives from each developing country-Party through the Voluntary Trust Fund for Facilitating Participation of Parties in the Convention Process (BZ Trust Fund);
18. *Requests* the Executive Secretary, as a matter of priority, to identify potential sources of financial support for facilitating the participation of non-governmental organizations from developing countries and countries with economies in transition in meetings organized under the Convention;

19. *Requests* the Executive Secretary to establish a focal point within the Secretariat for non-governmental organizations in order to facilitate interaction with non-governmental organizations and to support, *inter alia*, dissemination of information on the Convention, awareness raising and improved coordination amongst stakeholders.

ANNEX

DECISIONS AND ELEMENTS OF DECISIONS ADOPTED BY THE CONFERENCE OF THE PARTIES AT ITS FIRST AND SECOND MEETINGS TO BE RETIRED

Decisions of the first meeting of the Conference of the Parties

Decision I/2, paras. 4–8
Decision I/3, paras. 2–4
Decision I/4, paras. 2 and 3
Decision I/5, para. 1
Decision I/6, part I, para. 3 to 9 (part I)
Decision I/6, part II
Decision I/7, paras.1(d), 2, 4 (and annex)
Decision I/9
Decision I/10
Decision I/11
Decision I/13

Decisions of the second meeting of the Conference of the Parties

Decision II/1, paras. 1, 2 and 4–6
Decision II/2
Decision II/3, paras. 1, 4(a), 5, 6, 10 and 11
Decision II/4, paras. 2–4
Decision II/5
Decision II/6, paras. 3, 4, 7 and 12
Decision II/7, para. 7
Decision II/8, paras. 6 and 7
Decision II/9, paras. 1, 2(b) and 4
Decision II/10, paras. 7, 9, 10 and 14
Decision II/11, para. 1(a)
Decision II/12, paras. (a) and (c)
Decision II/13, paras. 1 and 5–7
Decision II/14
Decision II/15
Decision II/16
Decision II/17, paras. 4, 5, 9, 11
Decision II/18
Decision II/19, paras. 1 and 3–6

Decision II/20, paras. 1–10
 Decision II/21
 Decision II/22
 Decision II/23

DECISION VI/28 | Multi-year programme of work of the Conference of the Parties up to 2010

The Conference of the Parties

1. *Requests* the Executive Secretary, on the basis of the draft multi-year programme of work,¹⁵² with special consideration to items for in-depth consideration and review of the programmes of work, taking fully into consideration the Strategic Plan of the Convention and based upon submissions by Parties to the Convention, and the views of the Bureau of the Subsidiary Body on Scientific, Technical and Technological Advice, to prepare a multi-year programme of work for the Conference of the Parties up to 2010, covering the programme of work dealing with its eighth, ninth and tenth meetings. The programme of work dealing with its ninth and tenth meetings will be finalized by the Conference of the Parties at its next meeting;
2. *Requests* Parties to submit to the Executive Secretary proposals on issues to be included in the multi-year programme of work for the Conference of the Parties up to 2010;
3. *Decides* to hold an open-ended inter-sessional meeting to consider the multi-year programme of work for the Conference of the Parties up to 2010. The meeting will have a duration of two days and will be held back-to-back with the eighth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice. The inter-sessional meeting will report to the next meeting of the Conference of the Parties.

DECISION VI/29 | Administration of the Convention and the budget for the programme of work for the biennium 2003–2004

The Conference of the Parties,

Having considered the report of the Executive Secretary on the administration of the Convention and the performance of the Convention's trust funds,¹⁵³

Having also considered the proposed budget for the biennium 2003–2004 submitted by the Executive Secretary,¹⁵⁴

Noting the increased cooperation between the Convention on Biological Diversity, the United Nations Framework Convention on Climate Change, the United Nations

152 UNEP/CBD/COP/6/5/Add.2/Rev.1.

153 UNEP/CBD/COP/6/10.

154 UNEP/CBD/COP/6/16 and Corr.1 and Add.1.

Convention to Combat Desertification, the Convention on Wetlands (Ramsar, Iran, 1971), the Convention on International Trade in Endangered Species of Wild Fauna and Flora, the Convention on the Conservation of Migratory Species of Wild Animals, and other related agreements and the wide support for the implementation of the Convention's programme of work among governments, international organizations, non-governmental organizations and the private sector through the provision of expertise, information and financial and human resources,

Noting with appreciation the commendable efforts of the Executive Secretary and his staff in the delivery and effective management of the programme of work for the biennium 2001–2002, including the substantial increase of the workload, within the approved budgetary and human resources,

1. *Welcomes* the annual contribution of US\$ 1,000,000 from Canada, the host country of the Secretariat, to offset contributions from Parties for the biennium 2003-2004;
2. *Approves* a core budget (BY Trust Fund) of US\$ 10,742,500 for the year 2003 and of US\$ 11,214,300 for the year 2004, for the purposes listed in table 1 below;
3. *Adopts* the indicative scale of contributions for 2003 and 2004 contained in the annex to the present decision;
4. *Decides* to establish a working capital reserve at a level of 4 per cent of the core budget (BY Trust Fund) expenditure, including programme support costs,¹⁵⁵
5. *Approves* a Secretariat staffing table for the programme budget contained in table 2 below; requests that all staff positions be filled expeditiously and authorizes the Executive Secretary to redeploy staff within the Secretariat, where appropriate, to meet evolving needs and priorities and to ensure the smooth functioning of the Secretariat;
6. *Welcomes with appreciation* the decision of the Secretary-General of the United Nations of 8 December 2000, to upgrade the post of the Executive Secretary of the Convention from D-2 to Assistant Secretary-General (ASG), pursuant to paragraph 21 of its decision V/22; and *endorses* the decision of the Bureau of the fifth meeting of the Conference of the Parties approving the upgrading of the post of the Executive Secretary to Assistant Secretary-General in April 2001;
7. *Requests* the President of the Conference of the Parties, taking into account paragraph 6 above, to invite the Secretary-General of the United Nations to appoint the Executive Secretary at the level of Assistant Secretary-General, for a three-year term of office, starting on 1 July 2002;
8. *Approves* a drawing of US\$ 5 million from the unspent balances or contributions ("carry-over") from previous financial periods to cover part of the 2003-2004 budget;
9. *Authorizes* the Executive Secretary to transfer resources among the programmes within the limits agreed to in decisions V/22, IV/17 and III/23, namely the

¹⁵⁵ The purpose of the working capital reserve shall be to ensure continuity of operations of the Convention's Secretariat in the event of a temporary shortfall of cash. Drawdowns from the working capital reserve shall be restored from contributions as soon as possible.

ability to transfer between each of the main appropriation lines set out in table 1 up to an aggregate of 15 per cent of the total programme budget, provided that a further limitation of up to a maximum of 25 per cent of each such appropriation line shall apply;

10. *Notes with concern* that a number of Parties have not paid their contributions to the core budget (BY Trust Fund) for 2002 and prior years, which are due on 1 January of each year in accordance with paragraph 4 of the financial rules, and the late payment of contributions to the core budget by Parties during each calendar year of a biennium, which have contributed to the significant carry-over from one biennium to the next, and, in the event that there is no improvement in the payment of contributions by Parties, and *invites* the Executive Secretary to submit proposals for promoting full and timely payment of contributions by Parties for consideration and review by the Conference of the Parties at its seventh meeting;

11. *Urges* Parties that have still not paid their contributions to the core budget (BY Trust Fund) to do so without delay, and requests the Executive Secretary to publish and regularly update information on the status of contributions of Parties to the Convention's trust funds (BY, BE, BZ);

12. *Reiterates*, with regard to contributions due from 1 January 2001 onwards, that Parties whose contributions are in arrears for two or more years will be allowed to attend the meetings of the Convention's bodies with a maximum of two delegates until their arrears have been cleared;

13. *Further reiterates* that, with regard to contributions due from 1 January 2001 onwards, Parties that are not least developed countries or small island developing States whose contributions are in arrears for two or more years, will not receive funding from the Secretariat to attend meetings of the Convention's bodies until their arrears have been cleared;

14. *Authorizes* the Executive Secretary to enter into commitments up to the level of the approved budget, drawing on available cash resources, including unspent balances, contributions from previous financial periods and miscellaneous income;

15. *Decides* to fund, upon request, from the core budget (BY Trust Fund) the participation of members of the bureaux of the Conference of the Parties and Subsidiary Body on Scientific Technical and Technological Advice at the inter-sessional meetings of the respective bureaux;

16. *Endorses* the decisions of the Bureau of the fifth meeting of the Conference of the Parties authorizing the Executive Secretary to utilize savings, unspent balances from previous financial periods and miscellaneous income in the amount of US\$ 2,319,500 from the BY Trust Fund, of which US\$ 1,157,142 was spent, to fund inter-sessional activities recommended by the Subsidiary Body on Scientific, Technical and Technological Advice, the Intergovernmental Committee for the Cartagena Protocol on Biosafety and the Ad Hoc Open-ended Working Group on Access and Benefit-sharing, which were not envisaged and therefore for which no budgetary allocations were approved by the Conference of the Parties at its fifth meeting, including the participation of developing country Parties, in particular the least developed and small island developing States, and Parties with economies in

transition, in the meetings of the Convention as well as to carry out activities approved by the Conference of the Parties and *requests* the Executive Secretary, in consultation with the Bureau, to continue to monitor the availability of voluntary contributions to the BE and BZ Trust Funds in the event of any shortfalls;

17. *Decides* that the Trust Funds (BY, BE, BZ) for the Convention shall be extended for the period of two years, beginning 1 January 2004 and ending 31 December 2005;

18. *Invites* all Parties to the Convention to note that contributions to the core budget (BY) are due on 1 January of the year in which these contributions have been budgeted for, and to pay them promptly, and *urges* Parties, in a position to do so, to pay by 1 October 2002 for the calendar year 2003 and by 1 October 2003 for the calendar year 2004 the contributions required to finance expenditures approved under paragraph 2 above, as offset by the amount in paragraph 4, and, in this regard, *requests* that Parties be notified of the amount of their contributions by 1 August of the year preceding the year in which the contributions are due;

19. *Urges* all Parties and States not party to the Convention, as well as governmental, intergovernmental and non-governmental organizations and other sources, to contribute to the trust funds (BY, BE, BZ) of the Convention;

20. *Takes note* of the funding estimates for the Special Voluntary Trust Fund (BE) for Additional Voluntary Contributions in Support of Approved Activities for the Biennium 2003–2004 specified by the Executive Secretary and included in table 3 below, and *urges* Parties to make contributions to this Fund;

21. *Takes note* also of the funding estimates for the special voluntary Trust Fund (BZ) for facilitating participation of developing country Parties, in particular the least developed and the small island developing States among them, and Parties with economies in transition, for the biennium 2003–2004, as specified by the Executive Secretary and included in table 4 below, and *urges* Parties to make contributions to this Fund;

22. *Authorizes* the Executive Secretary to consult with the Bureau of the Conference of the Parties on any adjustments which may be necessary in the servicing of the programme of the work as foreseen in the core budget (BY Trust Fund) for the biennium 2003–2004, including the postponement of meetings, in the event that sufficient resources are not available to the Secretariat in a timely fashion from the approved budget (BY Trust Fund), including available cash resources, unspent balances, contributions from previous financial periods and miscellaneous income;

23. *Authorizes* the Executive Secretary to draw, in consultation with the bureau of the Conference of the Parties, on available cash resources, including unspent balances, contributions from previous financial periods and miscellaneous income within the approved core budget (BY Trust Fund) for the biennium 2003–2004, to cover any shortfalls in the special voluntary Trust Fund (BZ) for facilitating participation of developing country Parties, in particular the least developed and the small island developing States among them, and Parties with economies in transition, for the biennium 2003–2004, in priorities¹⁵⁶ identified in the core budget (BY Trust Fund);

156 See footnote in table 1 below.

24. *Authorizes* the Executive Secretary, in consultation with the Bureau of the Conference of the Parties, to draw on available cash resources, including unspent balances, contributions from previous financial periods and miscellaneous income within the approved core budget (BY Trust Fund) for the biennium 2003–2004, to fund inter-sessional activities recommended by the Subsidiary Body on Scientific, Technical and Technological Advice, the Intergovernmental Committee for the Cartagena Protocol on Biosafety and the ad hoc open-ended working groups, that have not been envisaged and for which no budgetary allocations were approved by the Conference of the Parties at its sixth meeting, up to a maximum of 20 per cent (US\$ 855,523) of the cost of the priorities¹⁸ identified within the core budget (BY Trust Fund) for the biennium 2003–2004;

25. *Approves* a contingency of US\$ 250,000 to meet the costs of the conference services if a second meeting of the Conference of the Parties serving as the meeting of the Parties to the Cartagena Protocol on Biosafety takes place in 2004, back-to-back with the seventh meeting of the Conference of the Parties to the Convention, and in the event that the first meeting of the Conference of the Parties serving as the meeting of the Parties to the Protocol does not decide on budgetary arrangements to this end;

26. *Requests* the Executive Secretary, in accordance with the provisions of Article 31, paragraph 3 of the Cartagena Protocol on Biosafety, to identify the costs of the secretariat services for the Protocol, to the extent that they are distinct, for inclusion in a proposed budget for the consideration of the first meeting of the Conference of the Parties serving as the meeting of the Parties to the Protocol;

27. *Decides* to establish, pursuant to paragraphs 6 and 7, section B, of recommendation 2/9 of the Intergovernmental Committee for the Cartagena Protocol on Biosafety, and on a pilot phase basis, a trust fund, to be administered by the Secretariat, for voluntary contributions from Parties and Governments for the specific purpose of supporting developing country Parties, in particular the least developed and the small island developing States among them, and Parties with economies in transition to pay for the use of experts selected from the roster of experts on biosafety; and *requests* the Executive Secretary to seek submissions from Governments on the operation of this Fund, and to report thereon to the first meeting of the Conference of the Parties serving as the meeting of the Parties to the Protocol;

28. *Requests* the Executive Secretary to prepare and submit a budget for the programme of work for the biennium 2005–2006 for the seventh meeting of the Conference of the Parties, and report on income and budget performance as well as any adjustments made to the Convention budget for the biennium 2003–2004;

29. *Authorizes* the Executive Secretary, in an effort to improve the efficiency of the Secretariat and to attract highly qualified staff to the Secretariat, to enter into direct administrative and contractual arrangements with Parties, governments and organizations—in response to offers of human resources and other support to the Secretariat—as may be necessary for the effective discharge of the functions of the Secretariat, while ensuring the efficient use of available competencies, resources and services, and taking into account United Nations rules and regulations. Special attention should be given to possibilities of creating synergies with relevant, existing work

programmes or activities that are being implemented within the framework of other international organizations;

30. *Welcomes* the generous offer of the Botanic Gardens Conservation International to second a staff member to the Secretariat to promote the implementation of the Global Strategy for Plant Conservation and *requests* the Executive Secretary to enter arrangements to this end, in accordance with paragraph 29 above.

TABLE 1: BIENNIUM BUDGET OF THE TRUST FUND FOR THE CONVENTION ON BIOLOGICAL DIVERSITY 2003–2004

EXPENDITURES	2003 (THOUSANDS OF US\$)	2004
I Programmes		
Executive direction and management ¹	782.9	809.1
Scientific, technical and technological matters ²	1,412.1	1,539.5
Social, economic and legal matters ³	1,395.5	1,101.8
Implementation and outreach ⁴	1,971.7	2,070.3
Biosafety ⁵	1,705.6	1,217.1
Resource management and conference services ⁶	2,238.8	3,186.4
SUB-TOTAL (I)	9,506.6	9,924.2
II Programme support charge 13%	1,235.9	1,290.1
SUB-TOTAL (II)	1,235.9	1,290.1
III Working capital reserve⁷	–	–
SUB-TOTAL (III)	–	–
GRAND TOTAL (I + II + III)	10,742.5	11,214.3
Less contribution from the host country	1,000.0	1,000.0
Less savings from previous years (surplus)	2,500.0	2,500.0
NET TOTAL (AMOUNT TO BE SHARED BY PARTIES)	7,242.5	7,714.3

PRIORITIES IDENTIFIED IN THE CORE BUDGET (US\$ 4,277,615 INCLUDING 13% PROGRAMME SUPPORT COSTS)

- 1 MEETING OF THE BUREAU OF THE CONFERENCE OF THE PARTIES.
- 2 AD HOC TECHNICAL EXPERT GROUP ON FOREST BIOLOGICAL DIVERSITY; SUPPORT TO EXPERT GROUPS ON GENETIC USE RESTRICTION TECHNOLOGIES AND INVASIVE ALIEN SPECIES; MEETINGS OF THE BUREAU OF THE SUBSIDIARY BODY ON SCIENTIFIC, TECHNICAL AND TECHNOLOGICAL ADVICE
- 3 OPEN-ENDED AD HOC WORKING GROUP ON ACCESS AND BENEFIT-SHARING; SUPPORT TO EXPERT GROUPS ON INCENTIVE MEASURES.
- 4 SUPPORT TO EXPERT GROUPS ON COMMUNICATION.
- 5 FIRST MEETING OF THE CONFERENCE OF THE PARTIES TO THE CONVENTION SERVING AS THE MEETING OF THE PARTIES TO THE CARTAGENA PROTOCOL ON BIOSAFETY; MEETINGS OF THE BUREAU OF THE INTERGOVERNMENTAL COMMITTEE FOR THE CARTAGENA PROTOCOL ON BIOSAFETY.
- 6 SEVENTH MEETING OF THE CONFERENCE OF THE PARTIES; NINTH MEETING OF THE SUBSIDIARY BODY ON SCIENTIFIC, TECHNICAL AND TECHNOLOGICAL ADVICE; TENTH MEETING OF THE SUBSIDIARY BODY ON SCIENTIFIC, TECHNICAL AND TECHNOLOGICAL ADVICE; OPEN-ENDED AD HOC WORKING GROUP ON ARTICLE 8(j); OPEN-ENDED INTER-SESSIONAL MEETING ON THE MULTI-YEAR PROGRAMME OF WORK FOR THE CONFERENCE OF THE PARTIES UP TO 2010.
- 7 FOR THE BIENNIUM 2003–2004, AN AMOUNT OF \$878,272 WILL BE TAKEN FROM THE CARRY-OVER FOR THE WORKING CAPITAL RESERVE ON AN EXCEPTIONAL BASIS WITHOUT SETTING A PRECEDENT FOR FUTURE BIENNIA.

TABLE 2: SECRETARIAT-WIDE STAFFING REQUIREMENTS FROM THE CORE BUDGET

	2003	2004
A Professional category		
ASG*	1	1
D-1	3	3
P-5	4	4
P-4	14	14
P-3	13	13
P-2	1	1
TOTAL PROFESSIONAL CATEGORY	36	36
B. Total General Service category	26	26
TOTAL (A + B)	62	62

TABLE 3: SPECIAL VOLUNTARY TRUST FUND (BE) FOR ADDITIONAL VOLUNTARY CONTRIBUTIONS IN SUPPORT OF APPROVED ACTIVITIES FOR THE BIENNIUM 2003–2004 (THOUSANDS OF UNITED STATES DOLLARS)

EXPENDITURES	2003 (THOUSANDS OF US\$)	2004
I		
A Meetings/workshops		
Executive direction and management		
Regional meetings for the seventh meeting of the Conference of the Parties (4)	0	40.0
Scientific, technical and technological matters		
Regional workshops on taxonomy (4)	160.0	160.0
Liaison group—restoration and recovery of ecosystems and species	60.0	0
Advisory group on anthologies of terms on invasive alien species	80.0	0
AHTEG—genetic use restriction technologies	0	80.0
AHTEG—mountain biodiversity	80.0	80.0
AHTEG—protected areas	80.0	80.0
AHTEG—restoration of degraded ecosystems and threatened species	80.0	80.0
AHTEG—targets/baselines/indicators	80.0	0
AHTEG—non-timber forest resources	80.0	80.0
AHTEG—forest fires	80.0	80.0
Social, economic and legal affairs		
Open-ended expert workshop on capacity-building on access and benefit-sharing	450.0	0
Group of legal and technical experts on liability and redress	80.0	0
Workshop on incentive measures	190.0	0
Incentive measures inter-agency coordination committee	20.0	20.0
Implementation and outreach		
Clearing-house mechanism regional workshops (4)	240.0	80.0
Global Initiative on Education and Public Awareness		
• Global communication, education and awareness network	62.5	25.0
• Exchange of knowledge and expertise	100.0	100.0
• Capacity-building for communication, education and awareness	375.0	375.0

continues...

EXPENDITURES	2003	2004
	(THOUSANDS OF US\$)	
Biosafety		
Open-ended Ad Hoc Working Group on Liability and Redress	450.0	0
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Regional meetings for the Biosafety Protocol	80.0	80.0
Biosafety technical expert meetings (4)	160.0	160.0
Regional workshops for the Biosafety Clearing-House	160.0	160.0
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B Staff		
Agricultural Biodiversity Programme Officer (FAO)	141.5	146.5
Senior Programme Officer (Netherlands)	156.2	163.1
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C Travel		
Travel of the President of the Conference of the Parties	10.0	10.0
Travel of SBSTTA Chair	10.0	10.0
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D Consultants/sub-contracts		
Biosafety Clearing-House	20.0	20.0
Protected areas	15.0	15.0
Mountains	15.0	15.0
Technology transfer	15.0	15.0
Ecosystem recovery/approach	15.0	15.0
Composite report on status and trends regarding traditional knowledge	150.0	0
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E Miscellaneous		
Strengthening incentive measures (CDs; flyers; translations, etc.)	10.0	10.0
<hr/>		
SUB-TOTAL (I)	3,705.2	2,094.6
<hr/>		
II Programme support costs (13%)	481.7	272.3
<hr/>		
TOTAL (I + II)	4,186.8	2,366.9

TABLE 4: SPECIAL VOLUNTARY TRUST FUND (BZ) FOR FACILITATING PARTICIPATION OF PARTIES IN THE CONVENTION PROCESS FOR THE BIENNIUM 2003–2004

DESCRIPTIONS	2003 (THOUSANDS OF US\$)	2004
I Meetings		
Seventh meeting of the Conference of the Parties	0.0	650.0
Regional meetings for the Conference of the Parties	0.0	300.0
Subsidiary Body on Scientific, Technical and Technological Advice	540.0	540.0
Ad Hoc Inter-sessional Meeting on the Multi-Year Programme of Work of the Conference of the Parties up to 2010	163.0	0.0
First meeting of the Conference of the Parties serving as the meeting of the Parties to the Biosafety Protocol	540.0	0.0
Regional meetings for the Biosafety Protocol	300.0	300.0
Ad Hoc Working Group on Access and Benefit-sharing	163.0	0.0
Ad Hoc Working Group on Article 8(j)	0.0	163.0
Open-ended expert workshop on capacity-building for access and benefit-sharing	540.0	0.0
Ad Hoc Working Group on Liability and Redress	540.0	0.0
Second meeting of the Conference of the Parties serving as the Meeting of the Parties to the Biosafety Protocol		163.0
SUB-TOTAL (I)	2,786.0	2,116.0
II Programme support costs (13%)	362.2	275.1
TOTAL (I + II)	3,148.2	2,391.1

TABLE 5: CONTRIBUTIONS TO THE TRUST FUND FOR THE CONVENTION ON BIOLOGICAL DIVERSITY FOR THE BIENNIUM 2003–2004

PARTY	UN SCALE OF ASSESSMENTS	SCALE WITH 22% CEILING, NO LDC PAYING MORE THAN 0.01%	CONTRIBUTIONS AS PER 1 JAN. 2004	UN SCALE OF ASSESSMENTS	SCALE WITH 22% CEILING, NO LDC PAYING MORE THAN 0.01%	CONTRIBUTIONS AS PER 1 JAN. 2004	TOTAL CONTRIBUTIONS 2003–2004
	%	%	US\$	%	%	US\$	US\$
Albania	0.00300	0.00383	277	0.00300	0.00383	295	573
Algeria	0.07000	0.08938	6,473	0.07000	0.08938	6,895	13,368
Angola	0.00200	0.00255	185	0.00200	0.00255	197	382
Antigua and Barbuda	0.00200	0.00255	185	0.00200	0.00255	197	382
Argentina	1.14900	1.46707	106,252	1.14900	1.46707	113,174	219,426
Armenia	0.00200	0.00255	185	0.00200	0.00255	197	382
Australia	1.62700	2.07739	150,455	1.62700	2.07739	160,256	310,711
Austria	0.94700	1.20915	87,573	0.94700	1.20915	93,277	180,850
Azerbaijan	0.00400	0.00511	370	0.00400	0.00511	394	764
Bahamas	0.01200	0.01532	1,110	0.01200	0.01532	1,182	2,292
Bahrain	0.01800	0.02298	1,665	0.01800	0.02298	1,773	3,437
Bangladesh	0.01000	0.01277	925	0.01000	0.01277	985	1,910
Barbados	0.00900	0.01149	832	0.00900	0.01149	886	1,719
Belarus	0.01900	0.02426	1,757	0.01900	0.02426	1,871	3,628
Belgium	1.12900	1.44153	104,403	1.12900	1.44153	111,204	215,607
Belize	0.00100	0.00128	92	0.00100	0.00128	98	191
Benin	0.00200	0.00255	185	0.00200	0.00255	197	382
Bhutan	0.00100	0.00128	92	0.00100	0.00128	98	191
Bolivia	0.00800	0.01021	740	0.00800	0.01021	788	1,528
Botswana	0.01000	0.01277	925	0.01000	0.01277	985	1,910
Brazil	2.39000	3.05160	221,012	2.39000	3.05160	235,410	456,422
Bulgaria	0.01300	0.01660	1,202	0.01300	0.01660	1,280	2,483
Burkina Faso	0.00200	0.00255	185	0.00200	0.00255	197	382
Burundi	0.00100	0.00128	92	0.00100	0.00128	98	191
Cambodia	0.00200	0.00255	185	0.00200	0.00255	197	382
Cameroon	0.00900	0.01149	832	0.00900	0.01149	886	1,719
Canada	2.55800	3.26611	236,548	2.55800	3.26611	251,957	488,505
Cape Verde	0.00100	0.00128	92	0.00100	0.00128	98	191
Central African Republic	0.00100	0.00128	92	0.00100	0.00128	98	191
Chad	0.00100	0.00128	92	0.00100	0.00128	98	191
Chile	0.21200	0.27069	19,604	0.21200	0.27069	20,882	40,486
China	1.53200	1.95609	141,670	1.53200	1.95609	150,899	292,568
Colombia	0.20100	0.25664	18,587	0.20100	0.25664	19,798	38,385
Comoros	0.00100	0.00128	92	0.00100	0.00128	98	191
Congo	0.00100	0.00128	92	0.00100	0.00128	98	191
Cook Islands	0.00100	0.00128	92	0.00100	0.00128	98	191
Costa Rica	0.02000	0.02554	1,849	0.02000	0.02554	1,970	3,819
Cote d'Ivoire	0.00900	0.01149	832	0.00900	0.01149	886	1,719

PARTY	UN SCALE OF ASSESSMENTS 2003	SCALE WITH 22% CEILING, NO LDC PAYING MORE THAN 0.01%	CONTRIBUTIONS AS PER 1 JAN. 2004	UN SCALE OF ASSESSMENTS 2003	SCALE WITH 22% CEILING, NO LDC PAYING MORE THAN 0.01%	CONTRIBUTIONS AS PER 1 JAN. 2004	TOTAL CONTRIBUTIONS 2003-2004
	%	%	US\$	%	%	US\$	US\$
Croatia	0.03900	0.04980	3,606	0.03900	0.04980	3,841	7,448
Cuba	0.03000	0.03830	2,774	0.03000	0.03830	2,955	5,729
Cyprus	0.03800	0.04852	3,514	0.03800	0.04852	3,743	7,257
Czech Republic	0.20300	0.25919	18,772	0.20300	0.25919	19,995	38,767
Democratic People's Republic of Korea	0.00900	0.01149	832	0.00900	0.01149	886	1,719
Democratic Republic of the Congo	0.00400	0.00511	370	0.00400	0.00511	394	764
Denmark	0.74900	0.95634	69,263	0.74900	0.95634	73,775	143,038
Djibouti	0.00100	0.00128	92	0.00100	0.00128	98	191
Dominica	0.00100	0.00128	92	0.00100	0.00128	98	191
Dominican Republic	0.02300	0.02937	2,127	0.02300	0.02937	2,265	4,392
Ecuador	0.02500	0.03192	2,312	0.02500	0.03192	2,462	4,774
Egypt	0.08100	0.10342	7,490	0.08100	0.10342	7,978	15,469
El Salvador	0.01800	0.02298	1,665	0.01800	0.02298	1,773	3,437
Equatorial Guinea	0.00100	0.00128	92	0.00100	0.00128	98	191
Eritrea	0.00100	0.00128	92	0.00100	0.00128	98	191
Estonia	0.01000	0.01277	925	0.01000	0.01277	985	1,910
Ethiopia	0.00400	0.00511	370	0.00400	0.00511	394	764
European Community	2.50000	2.50000	181,063	2.50000	2.50000	192,858	373,920
Fiji	0.00400	0.00511	370	0.00400	0.00511	394	764
Finland	0.52200	0.66650	48,271	0.52200	0.66650	51,416	99,687
France	6.46600	8.25592	597,935	6.46600	8.25592	636,887	1,234,822
Gabon	0.01400	0.01788	1,295	0.01400	0.01788	1,379	2,674
Gambia	0.00100	0.00128	92	0.00100	0.00128	98	191
Georgia	0.00500	0.00638	462	0.00500	0.00638	492	955
Germany	9.76900	12.47326	903,376	9.76900	12.47326	962,225	1,865,601
Ghana	0.00500	0.00638	462	0.00500	0.00638	492	955
Greece	0.53900	0.68821	49,843	0.53900	0.68821	53,090	102,934
Grenada	0.00100	0.00128	92	0.00100	0.00128	98	191
Guatemala	0.02700	0.03447	2,497	0.02700	0.03447	2,659	5,156
Guinea	0.00300	0.00383	277	0.00300	0.00383	295	573
Guinea-Bissau	0.00100	0.00128	92	0.00100	0.00128	98	191
Guyana	0.00100	0.00128	92	0.00100	0.00128	98	191
Haiti	0.00200	0.00255	185	0.00200	0.00255	197	382
Honduras	0.00500	0.00638	462	0.00500	0.00638	492	955
Hungary	0.12000	0.15322	11,097	0.12000	0.15322	11,820	22,917
Iceland	0.03300	0.04214	3,052	0.03300	0.04214	3,250	6,302
India	0.34100	0.43540	31,534	0.34100	0.43540	33,588	65,121

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PARTY	UN SCALE OF ASSESSMENTS 2003	SCALE WITH 22% CEILING, NO LDC PAYING MORE THAN 0.01%	CONTRIBUTIONS AS PER 1 JAN. 2004	UN SCALE OF ASSESSMENTS 2003	SCALE WITH 22% CEILING, NO LDC PAYING MORE THAN 0.01%	CONTRIBUTIONS AS PER 1 JAN. 2004	TOTAL CONTRIBUTIONS 2003-2004
	%	%	US\$	%	%	US\$	US\$
Indonesia	0.20000	0.25536	18,495	0.20000	0.25536	19,700	38,194
Iran (Islamic Republic of)	0.27200	0.34730	25,153	0.27200	0.34730	26,791	51,944
Ireland	0.29400	0.37539	27,187	0.29400	0.37539	28,958	56,146
Israel	0.41500	0.52988	38,377	0.41500	0.52988	40,877	79,253
Italy	5.06475	6.46678	468,356	5.06475	6.46678	498,867	967,223
Jamaica	0.00400	0.00511	370	0.00400	0.00511	394	764
Japan	19.51575	22.00000	1,593,350	19.51575	22.00000	1,697,146	3,290,496
Jordan	0.00800	0.01021	740	0.00800	0.01021	788	1,528
Kazakhstan	0.02800	0.03575	2,589	0.02800	0.03575	2,758	5,347
Kenya	0.00800	0.01021	740	0.00800	0.01021	788	1,528
Kiribati	0.00100	0.00128	92	0.00100	0.00128	98	191
Kyrgyzstan	0.00100	0.00128	92	0.00100	0.00128	98	191
Lao People's Democratic Republic	0.00100	0.00128	92	0.00100	0.00128	98	191
Latvia	0.01000	0.01277	925	0.01000	0.01277	985	1,910
Lebanon	0.01200	0.01532	1,110	0.01200	0.01532	1,182	2,292
Lesotho	0.00100	0.00128	92	0.00100	0.00128	98	191
Liberia	0.00100	0.00128	92	0.00100	0.00128	98	191
Libya	0.06700	0.08555	6,196	0.06700	0.08555	6,599	12,795
Liechtenstein	0.00600	0.00766	555	0.00600	0.00766	591	1,146
Lithuania	0.01700	0.02171	1,572	0.01700	0.02171	1,674	3,247
Luxembourg	0.08000	0.10215	7,398	0.08000	0.10215	7,880	15,278
Madagascar	0.00300	0.00383	277	0.00300	0.00383	295	573
Malawi	0.00200	0.00255	185	0.00200	0.00255	197	382
Malaysia	0.23500	0.30005	21,731	0.23500	0.30005	23,147	44,878
Maldives	0.00100	0.00128	92	0.00100	0.00128	98	191
Mali	0.00200	0.00255	185	0.00200	0.00255	197	382
Malta	0.01500	0.01915	1,387	0.01500	0.01915	1,477	2,865
Marshall Islands	0.00100	0.00128	92	0.00100	0.00128	98	191
Mauritania	0.00100	0.00128	92	0.00100	0.00128	98	191
Mauritius	0.01100	0.01405	1,017	0.01100	0.01405	1,083	2,101
Mexico	1.08600	1.38663	100,426	1.08600	1.38663	106,969	207,395
Micronesia (Federated States of)	0.00100	0.00128	92	0.00100	0.00128	98	191
Monaco	0.00400	0.00511	370	0.00400	0.00511	394	764
Mongolia	0.00100	0.00128	92	0.00100	0.00128	98	191
Morocco	0.04400	0.05618	4,069	0.04400	0.05618	4,334	8,403
Mozambique	0.00100	0.00128	92	0.00100	0.00128	98	191
Myanmar	0.01000	0.01277	925	0.01000	0.01277	985	1,910
Namibia	0.00700	0.00894	647	0.00700	0.00894	689	1,337

PARTY	UN SCALE OF ASSESSMENTS 2003	SCALE WITH 22% CEILING, NO LDC PAYING MORE THAN 0.01%	CONTRIBUTIONS AS PER 1 JAN. 2004	UN SCALE OF ASSESSMENTS 2003	SCALE WITH 22% CEILING, NO LDC PAYING MORE THAN 0.01%	CONTRIBUTIONS AS PER 1 JAN. 2004	TOTAL CONTRIBUTIONS 2003-2004
	%	%	US\$	%	%	US\$	US\$
Nauru	0.00100	0.00128	92	0.00100	0.00128	98	191
Nepal	0.00400	0.00511	370	0.00400	0.00511	394	764
Netherlands	1.73800	2.21911	160,719	1.73800	2.21911	171,189	331,908
New Zealand	0.24100	0.30771	22,286	0.24100	0.30771	23,738	46,024
Nicaragua	0.00100	0.00128	92	0.00100	0.00128	98	191
Niger	0.00100	0.00128	92	0.00100	0.00128	98	191
Nigeria	0.06800	0.08682	6,288	0.06800	0.08682	6,698	12,986
Niue	0.00100	0.00128	92	0.00100	0.00128	98	191
Norway	0.64600	0.82483	59,738	0.64600	0.82483	63,630	123,368
Oman	0.06100	0.07789	5,641	0.06100	0.07789	6,008	11,649
Pakistan	0.06100	0.07789	5,641	0.06100	0.07789	6,008	11,649
Palau	0.00100	0.00128	92	0.00100	0.00128	98	191
Panama	0.01800	0.02298	1,665	0.01800	0.02298	1,773	3,437
Papua New Guinea	0.00600	0.00766	555	0.00600	0.00766	591	1,146
Paraguay	0.01600	0.02043	1,480	0.01600	0.02043	1,576	3,056
Peru	0.11800	0.15066	10,912	0.11800	0.15066	11,623	22,535
Philippines	0.10000	0.12768	9,247	0.10000	0.12768	9,850	19,097
Poland	0.37800	0.48264	34,955	0.37800	0.48264	37,232	72,187
Portugal	0.46200	0.58989	42,723	0.46200	0.58989	45,506	88,229
Qatar	0.03400	0.04341	3,144	0.03400	0.04341	3,349	6,493
Rep. of Korea	1.85100	2.36339	171,169	1.85100	2.36339	182,319	353,488
Republic of Moldova	0.00200	0.00255	185	0.00200	0.00255	197	382
Romania	0.05800	0.07406	5,363	0.05800	0.07406	5,713	11,076
Russian Federation	1.20000	1.53218	110,968	1.20000	1.53218	118,197	229,166
Rwanda	0.00100	0.00128	92	0.00100	0.00128	98	191
Saint Kitts and Nevis	0.00100	0.00128	92	0.00100	0.00128	98	191
Saint Lucia	0.00200	0.00255	185	0.00200	0.00255	197	382
Saint Vincent and the Grenadines	0.00100	0.00128	92	0.00100	0.00128	98	191
Samoa	0.00100	0.00128	92	0.00100	0.00128	98	191
San Marino	0.00200	0.00255	185	0.00200	0.00255	197	382
Sao Tome and Principe	0.00100	0.00128	92	0.00100	0.00128	98	191
Saudi Arabia	0.55400	0.70736	51,230	0.55400	0.70736	54,568	105,798
Senegal	0.00500	0.00638	462	0.00500	0.00638	492	955
Seychelles	0.00200	0.00255	185	0.00200	0.00255	197	382
Sierra Leone	0.00100	0.00128	92	0.00100	0.00128	98	191
Singapore	0.39300	0.50179	36,342	0.39300	0.50179	38,710	75,052
Slovakia	0.04300	0.05490	3,976	0.04300	0.05490	4,235	8,212

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PARTY	UN SCALE OF ASSESSMENTS 2003		SCALE WITH 22% CEILING, NO LDC PAYING MORE THAN 0.01%		CONTRIBUTIONS AS PER 1 JAN. 2004		UN SCALE OF ASSESSMENTS 2003		SCALE WITH 22% CEILING, NO LDC PAYING MORE THAN 0.01%		CONTRIBUTIONS AS PER 1 JAN. 2004		TOTAL CONTRIBUTIONS 2003-2004	
	%	%	US\$	%	%	US\$	US\$	%	%	US\$	US\$			
Slovenia	0.08100	0.10342	7,490	0.08100	0.10342	7,978	15,469							
Solomon Islands	0.00100	0.00128	92	0.00100	0.00128	98	191							
South Africa	0.40800	0.52094	37,729	0.40800	0.52094	40,187	77,916							
Spain	2.51875	3.21599	232,918	2.51875	3.21599	248,091	481,009							
Sri Lanka	0.01600	0.02043	1,480	0.01600	0.02043	1,576	3,056							
Sudan	0.00600	0.00766	555	0.00600	0.00766	591	1,146							
Suriname	0.00200	0.00255	185	0.00200	0.00255	197	382							
Swaziland	0.00200	0.00255	185	0.00200	0.00255	197	382							
Sweden	1.02675	1.31098	94,947	1.02675	1.31098	101,133	196,080							
Switzerland	1.27400	1.62667	117,812	1.27400	1.62667	125,486	243,298							
Syrian Arab Republic	0.08000	0.10215	7,398	0.08000	0.10215	7,880	15,278							
Tajikistan	0.00100	0.00128	92	0.00100	0.00128	98	191							
The Former Yugoslav Rep. of Macedonia	0.00600	0.00766	555	0.00600	0.00766	591	1,146							
Togo	0.00100	0.00128	92	0.00100	0.00128	98	191							
Tonga	0.00100	0.00128	92	0.00100	0.00128	98	191							
Trinidad and Tobago	0.01600	0.02043	1,480	0.01600	0.02043	1,576	3,056							
Tunisia	0.03000	0.03830	2,774	0.03000	0.03830	2,955	5,729							
Turkey	0.44000	0.56180	40,688	0.44000	0.56180	43,339	84,027							
Turkmenistan	0.00300	0.00383	277	0.00300	0.00383	295	573							
Uganda	0.00500	0.00638	462	0.00500	0.00638	492	955							
Ukraine	0.05300	0.06767	4,901	0.05300	0.06767	5,220	10,121							
United Arab Emirates	0.20200	0.25792	18,680	0.20200	0.25792	19,897	38,576							
United Kingdom of Great Britain and Northern Ireland	5.53600	7.06848	511,935	5.53600	7.06848	545,284	1,057,218							
United Republic of Tanzania	0.00400	0.00511	370	0.00400	0.00511	394	764							
Uruguay	0.08000	0.10215	7,398	0.08000	0.10215	7,880	15,278							
Uzbekistan	0.01100	0.01405	1,017	0.01100	0.01405	1,083	2,101							
Vanuatu	0.00100	0.00128	92	0.00100	0.00128	98	191							
Venezuela	0.20800	0.26558	19,235	0.20800	0.26558	20,488	39,722							
Viet Nam	0.01600	0.02043	1,480	0.01600	0.02043	1,576	3,056							
Yemen	0.00600	0.00766	555	0.00600	0.00766	591	1,146							
Yugoslavia	0.02000	0.02554	1,849	0.02000	0.02554	1,970	3,819							
Zambia	0.00200	0.00255	185	0.00200	0.00255	197	382							
Zimbabwe	0.00800	0.01021	740	0.00800	0.01021	788	1,528							
TOTAL	81.147	100.000	7,242,500	81.147	100.000	7,714,300	14,956,800							

DECISION VI/30 | Preparations for the seventh meeting of the Conference of the Parties

The Conference of the Parties

1. *Welcomes* the proposals put forward by the Executive Secretary in his note on preparations for the seventh meeting of the Conference of the Parties¹⁵⁷ and *requests* that preparation for the priority themes for the seventh meeting of the Conference of the Parties continue as outlined in that document;
2. *Encourages* the Executive Secretary, in preparation for the protected areas theme at the seventh meeting of the Conference of the Parties to actively collaborate with the Vth World Congress on Protected Areas, as well as with other appropriate conventions, international organizations, and non-governmental organizations;
3. *Invites* Parties, other Governments and relevant international organizations to provide appropriate financial support for the organization of the ad hoc technical expert groups on mountain biological diversity, protected areas, and technology transfer and cooperation.

DECISION VI/31 | Date and venue of the seventh meeting of the Conference of the Parties

The Conference of the Parties,

1. *Welcomes* the kind offer of Malaysia to host the seventh meeting of the Conference of the Parties;
2. *Decides* that the seventh meeting of the Conference of the Parties will be held in Kuala Lumpur on a date in the first quarter of 2004 to be specified by the Bureau.

DECISION VI/32 | Tribute to the Government and people of the Kingdom of the Netherlands

The Conference of the Parties,

Having met in The Hague from 7 to 19 April 2002, at the gracious invitation of the Government of the Kingdom of the Netherlands,

Deeply appreciative of the special courtesy and warm hospitality extended by the Government and the people of the Netherlands to the ministers, members of delegations, observers and members of the Secretariat attending the meeting,

Expresses its sincere gratitude to the Government of the Netherlands and to its people for the cordial welcome that they accorded to the meeting and to those associated with its work, and for their contribution to the success of the meeting.

¹⁵⁷ UNEP/CBD/COP/6/2.

