

# Decisions Adopted by the Conference of the Parties to the Convention on Biological Diversity at its seventh meeting

KUALA LUMPUR, MALAYSIA, 9–20 AND 27 FEBRUARY 2004

## DECISION VII/1 | Forest biological diversity

### *The Conference of the Parties*

1. *Welcomes* the progress made on the implementation of the expanded programme of work on forest biological diversity as a significant contribution to achieving the 2010 target and achieving sustainable forest management at national, regional, and global levels;
2. *Urges* the Executive Secretary to continue and further strengthen its work in this field including the report on the effects on forest biological diversity of insufficient forest law enforcement as requested in paragraph 19(e) of decision VI/22;
3. *Invites* the Coordinator and Head of the Secretariat of the United Nations Forum on Forests, the Collaborative Partnership on Forests members and other relevant partners and organizations as specified in paragraph 19(b) of decision VI/22, as well as Parties and other Governments, to provide any further views on the preliminary assessment undertaken by the Executive Secretary on the relationship between the proposals for action of the Intergovernmental Panel on Forests/Intergovernmental forum on Forests (IPF/IFF) and the activities of the expanded programme of work on forest biological diversity (UNEP/CBD/SBSTTA/9/INF/31), with the objective of facilitating the implementation of related activities under these two instruments, and avoiding duplication of effort and noting that there has been work done by the Program on Forests (PROFOR) and the World Bank to link the expanded programme of work on forest biological diversity with the IPF/IFF proposals for action;
4. *Takes note* of the report of the first meeting of the Ad Hoc Technical Expert Group on the Review of Implementation of the Programme of Work on Forest Biological Diversity, held in Montpellier, France, from 24 to 27 November 2003 (UNEP/CBD/COP/7/INF/20) and *requests* that the Executive Secretary organizes another meeting of the Ad Hoc Technical Expert Group prior to the eleventh meeting of the Subsidiary Body on Scientific, Technical and Technological Advice;
5. *Recognizes* that the expanded programme of work on forest biological diversity benefits from regional cooperation and initiatives and *encourages* Parties and other Governments to take part in, and further develop, cooperation at the regional level in their efforts at implementing the activities contained in the work programme;
6. *Recommends* the incorporation of relevant indicators and actors into the expanded programme of work on forest biological diversity in order to assess its effectiveness and degree of implementation;

7. *Requests* the Executive Secretary, in collaboration with the Ad Hoc Technical Expert Group on the Review of Implementation of the Programme of Work on Forest Biological Diversity to propose outcome-oriented targets to be integrated into the work programme for consideration by the Subsidiary Body on Scientific, Technical and Technological Advice prior to the eighth meeting of the Conference of the Parties, taking into account decision VII/30 on the future evaluation of the Strategic Plan of the Convention as well as regionally and internationally agreed criteria and indicators for sustainable forest management through intergovernmental processes. 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 diversity between countries;

8. *Recommends* that the Executive Secretary continues collaboration with other members of the Collaborative Partnership on Forests in their efforts, *inter alia*, at harmonizing and streamlining forest-related reporting;

9. *Invites* Parties and other Governments to enhance cross-sectoral integration and inter-sectoral collaboration on the implementation of the expanded programme of work on forest biological diversity at all levels, in particular at national and sub-national levels;

10. *Urges* Parties and other governments, and international and regional groups further to enhance their efforts in implementing the programme of work on forest biological diversity as an essential contribution towards advancing the 2010 target;

11. *Urges* the Executive Secretary to facilitate the full and effective participation of indigenous and local communities and other relevant stakeholders in implementing the expanded programme of work on forest biological diversity by developing local capacities and participatory mechanisms, including women, in assembling, disseminating, and synthesizing information on relevant scientific and traditional knowledge on forest biological diversity.

## **DECISION VII/2 | The biological diversity of dry and sub-humid lands**

### *The Conference of the Parties*

1. *Adopts* the proposed process for the periodic assessment of the status and trends of biological diversity, in dry and sub-humid lands, as described in table 1 below, taking into account national laws, policies and programmes and recognizing the urgency for action in those countries severely affected by land degradation, focusing on strengthening the capacities of developing countries and countries with economies in transition to conduct assessments at the national level and build on the knowledge and structures of ongoing global assessments, as well as national assessments;

2. *Adopts* the proposal prepared by the Executive Secretary for the further refinement of the programme of work and suggesting collaborating partners as indicated in the annex to the present decision;

3. *Requests* the Executive Secretary to ensure that the parts of the programme of work relating to other thematic programmes of work of the Convention are taken

into account when developing and reviewing these programmes of work;

4. *Requests* the Executive Secretary, in consultation with Parties, to develop targets for the implementation of the programme of work, taking into account especially national action programmes to combat desertification, the Global Strategy for Plant Conservation, the Global Taxonomy Initiative, the Strategic Plan of the Convention, as well as the Plan of Implementation of the World Summit on Sustainable Development, for consideration by the Subsidiary Body on Scientific, Technical and Technological Advice. Such a process could follow the approach taken in the development of the Global Strategy for Plant Conservation (decision VI/9, annex) and be in line with decision VII/8, on monitoring and indicators;

5. *Requests* the Executive Secretary, in collaboration with the secretariats of the other Rio conventions and other biodiversity-related conventions, to further develop mechanisms for facilitating the synergistic implementation of these conventions, especially at the national level, as described in sections III and IV of the note by the Executive Secretary on dry and sub-humid lands prepared for the eighth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (UNEP/CBD/SBSTTA/8/10). Such mechanisms could include:

- (a) Joint work programmes at the national level as appropriate;
- (b) The activities of the joint liaison group of the three Rio conventions and potential additional members, and
- (c) Joint activities with a focus on several elements:
  - (i) Integration of activities related to national biodiversity strategies and action plans with national action programmes for the Convention to Combat Desertification, national adaptation programmes of action under the United Nations Framework Convention on Climate Change, Ramsar wetland policies and other relevant programmes, including national strategies for sustainable development and poverty reduction;
  - (ii) Capacity-building, information systems, institutional arrangements and joint planning activities between the coordinating bodies and focal points of the conventions;
  - (iii) Development of criteria for synergy projects and development and application of “good practice” synergy projects at the national level;
  - (iv) Sound preparation, formulation of objectives, organization and follow-up of national and regional synergy workshops;
  - (v) Training courses and awareness-raising among relevant stakeholders;
  - (vi) Consultation, decision-making and implementation processes with the full participation of relevant stakeholders, including indigenous peoples and local communities, non-governmental organizations and the private sector.

These mechanisms should take into account existing experience, as documented by, *inter alia*, the Committee for the Review of the Implementation of the Convention to Combat Desertification (CRIC), and the “Operational Guidelines for Expedited Funding of National Self Assessment of Capacity-building Needs” of the Global

Environment Facility, and the role and responsibilities of the Global Environment Facility and the Global Mechanism of the Convention to Combat Desertification in promoting synergy;

6. *Further requests* the Executive Secretary, in collaboration with the other Rio and other biodiversity-related conventions, to facilitate at the national level the review of the national biodiversity strategies and action plans under the Convention on Biological Diversity, in order to harmonize them with the national action programmes under the Convention to Combat Desertification and the national adaptation plans of action under the United Nations Framework Convention on Climate Change, with a focus on poverty alleviation and intersectoral integration;
7. *Recognizes* that the effective implementation of this programme of work is subject to the availability of financial, technological and human resources, and urges Parties, other Governments countries, international organizations, and relevant stakeholders that are in a position to do so to develop partnerships and other means to provide the necessary support;
8. *Takes note* of the reports of the Millennium Ecosystem Assessment and the Land Degradation Assessment in Drylands Project (LADA) of the Food and Agriculture Organization of the United Nations on how they address the assessment needs of the programme of work on biological diversity of dry and sub-humid lands, and especially on ways to strengthen national efforts to conduct assessments;
9. *Welcomes* the joint work programme between the United Nations Convention to Combat Desertification and the Convention on Biological Diversity (UNEP/CBD/COP/7/INF/28) and encourages Parties and relevant stakeholders to contribute to the implementation of its components.

**TABLE 1: PROPOSED PROCESS FOR THE PERIODIC ASSESSMENT OF STATUS AND TRENDS OF BIOLOGICAL DIVERSITY IN DRY AND SUB-HUMID LANDS (Phases II–IV will depend on the recommendations made after completion of phase I)**

<b>PHASE I:</b> 2002–2004 (COP 7)	<ol style="list-style-type: none"> <li>1. Invite LADA and the Millennium Ecosystem Assessment to investigate how the needs of the dry and sub-humid lands could be integrated into the ongoing assessments, emphasizing proposals and ways to strengthen national efforts to conduct assessments.</li> <li>2. Develop proposals for mechanisms(s) linking national assessment to regional/global assessment/report processes.</li> <li>3. Participatory development of draft guidelines for national assessments, including indicators initiated.</li> </ol>
<b>PHASE II:</b> 2004–2006 (COP 8)	<ol style="list-style-type: none"> <li>4. Agree to final guidelines for national assessments and adoption for implementation.</li> <li>5. Implementation mechanism agreed upon and functional.</li> </ol>
<b>PHASE III:</b> 2006–2012	<ol style="list-style-type: none"> <li>6. Data collection, processing and communication according to agreed guidelines and mechanisms.</li> <li>7. In 2010, Parties report on WSSD biodiversity-related targets, as appropriate.</li> <li>8. Global assessment report on status and trends of biological diversity, including information from national assessments.</li> </ol>
<b>PHASE IV:</b> 10-year periodic assessment reports	<ol style="list-style-type: none"> <li>9. Periodic ten-year report based on continuous assessments at national level and up-scaling.</li> </ol>

**ANNEX**  
**SYNTHESIS TABLE OF EXPECTED OUTCOMES AND TIMEFRAMES, POTENTIAL ACTORS, AND INDICATORS OF PROGRESS IN THE IMPLEMENTATION OF THE PROGRAMME OF WORK ON BIOLOGICAL DIVERSITY OF DRY AND SUB-HUMID LANDS**

**Part A: Assessments**

ACTIVITY	EXPECTED OUTCOMES	TIME-FRAME	KEY ACTORS	STATUS	PROGRESS INDICATORS	DATE
<b>Activity 1.</b> Assessment of status and trends	Comprehensive review and assessment report on status and trends of biological diversity in dry and sub-humid lands	2012	FAO, LADA, MA, Parties, SCBD, UNCCD, TPNS, CGIAR agencies	Planned	Preliminary assessment Draft full assessment	2006 2010
<b>Activity 2.</b> Areas of particular value and/or under threat	Review and assessment of areas of value/under threat	2012	World Heritage Centre, MAB Secretariat, WCPA, IUCN, UNEP-WCMC, Parties	Planned	Draft map and assessment report	2008
<b>Activity 3.</b> Indicators	Indicators for assessment of status and trends fully operational	2012	FAO, LADA, MA, Parties, SCBD.	In progress	Draft set of indicators	2004
<b>Activity 4.</b> Knowledge on processes that affect biodiversity	Reports and publications on the structure and functioning of dry and sub-humid lands ecosystems, including the potential impact of climate change and poverty on dry and sub-humid lands	Ongoing	Various research and development institutes, including local knowledge systems, Parties	Ongoing	Draft summary publication AHTEG on biodiversity and climate change	2006 2003
<b>Activity 5.</b> Benefits derived from biological diversity	Compilation of information on local and global benefits Economic valuation of priority specific sites Assessment of the socio-economic impact of biodiversity loss and linkage to poverty	2012	Various research and development institutes, including local knowledge systems, Parties.	In progress	AHTEG on dry and sub-humid lands Draft publication	2002 2006
<b>Activity 6.</b> Best management practices	Assessment of the socio-economic impact of biodiversity loss and linkage to poverty	2006	Parties, various research and development institutes, including local knowledge systems	In progress	AHTEG on dry and sub-humid lands Draft report	2002 2005
	Case-studies on inter-linkages between biodiversity loss and poverty	2006	Parties, collaborating partners including WIPO, SCBD	Planned	Submission of case-studies from Parties	2005
	Case-studies including consideration of traditional knowledge Guidelines for assessment of good practices	2006 2004	Parties, collaborating partners including WIPO, SCBD SCBD, Parties, TWNISO, GEF	Planned	Submission of case-studies from Parties Draft guidelines	2005 2003
	Case-studies of applied Ecosystem Management Approach			Planned		

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**Part B: Targeted Actions**

ACTIVITY	EXPECTED OUTCOMES	TIME-FRAME	KEY ACTORS	STATUS	PROGRESS INDICATORS	DATE
<b>Activity 7. Measures for conservation and sustainable use</b>						
(a) Protected areas	Guidelines on establishment of "adequate and effective protected areas networks"	2008	WCPA, Environmental conventions, IUCN, World Heritage, MAB Sec.	In process	Protected areas report	2012
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(b) Rehabilitation and/or restoration	Additional protected area established Report and database on appropriate technologies and transfer mechanisms Evaluation of effectiveness of measures at test sites	Ongoing 2002 Ongoing	Parties Norway, SCBD, Parties and various collaborating partners Parties	Ongoing Ongoing Proposed	Workshop on transfer of technologies Sites established; exchange visits between affected countries	2003 2008
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	Measures implemented through NBSAPs and NAPs		Parties	Proposed	Explicit rehabilitation Project implemented worldwide	2008
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(c) Invasive alien species	Increased information and information exchange on invasive alien species	Ongoing	Parties, supported by GISP	In progress	Workshops, CHM includes explicit information	2008
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(d) Production systems	Guidelines and mechanisms for best management; integration through NBSAPs Operational guidelines on sustainable use, good farming practices, integrated production system and drought preparedness Progress report on development of incentives, including "fair and equitable" markets Guidelines on management and sustainable use of water resources implemented	2008 2004 2004	Parties, GISP Parties, FAO, CGIAR centres, WB, various research institutes Parties	In progress In progress Proposed	Draft guidelines Draft guidelines Draft resource paper; 3rd National Reports	2006 2003 2008
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(e) Water resources	Case-studies on best practices available		Parties	Proposed	Submission of case-studies by Parties	2007

ACTIVITY	EXPECTED OUTCOMES	TIME-FRAME	KEY ACTORS	STATUS	PROGRESS INDICATORS	DATE
(f) <i>In situ</i> and <i>ex situ</i> conservation	Guidelines for <i>in situ</i> and <i>ex situ</i> conservation and management needs based on best practices implemented		WCPA, IUCN, WWF, CGIAR centres, Parties	Proposed	Draft guidelines	2006
	Capacities of zoos and seedbanks and other institutions for <i>ex situ</i> conservation strengthened		Parties, regional centres Proposed	Proposed	Integration into NBSAP and NAP	2008
(g) Economic valuation and adaptive technologies	Study on economic valuation of goods and services in areas of specific value for biodiversity		Parties, WB, various research and development institutes	Proposed	Draft report by AHTEG	2002
	Guidelines for the use of economic instruments implemented through NBSAP		Parties, various research and development institutes	Proposed	Draft guidelines	2006
(h) Plant and animal biomass	Case studies on best practices		Parties, various collaborating partners	Proposed		
	Incorporation of lessons learnt in NBSAPs and NAPs		Parties	Proposed		
(i) Training, education and public awareness	Training programmes nationally and regionally in place		Parties, regional centres of excellence, TPN of UNCCD, GM	Proposed	Training workshops per year per region	2006
	Public awareness campaigns on the importance of dry and sub-humid lands biodiversity		Parties, CBD, UNCCD	Proposed	Year of biodiversity in dry and sub-humid lands	
(j) Information on sustainable use	Development of information exchange mechanisms		Parties, sub-regional organizations, TPNs	Planned, ongoing	TPNs discuss 2 themes relevant to PoW per year	2008
(k) Promotion of research and development programmes	Research priorities established		Parties, research and development institutes	Planned, ongoing	Partnerships for collaborative research	
	Pilot projects developed and implemented on local level		Parties	Planned, ongoing	Demonstration sites per region per year	2006
(l) Integrated catchment management and endangered species	Case-studies on (i) integrated catchment management, (ii) migratory species corridors, (iii) conservation of rare and endangered species		Parties	Proposed	Case-studies per region documented	

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ACTIVITY	EXPECTED OUTCOMES	TIME-FRAME	KEY ACTORS	STATUS	PROGRESS INDICATORS	DATE
(m)Cooperation with relevant conventions	Memoranda of Cooperation (MoC) with relevant conventions Joint work programme with relevant conventions		Various conventions Various conventions	In progress In progress	Synergy workshops Pilot synergy projects	
<b>Activity 8.</b> Promotion of responsible re-source management						
(a) Local institutional structures; and indigenous and local techniques	Case-studies in place and success stories documented and shared Broad implementation through NBSAPs and NAPs		Parties Parties, GM	Proposed Proposed	Regional level exchange Visit programmes in place	2006
(b) Decentralization of management	Case-studies and success stories of community-based management of resources Case studies on the effect of users' access to land and water resources		Parties	Proposed	Publication of case-study, 2006 exchange visits to sites	2006
(c) Institutions for land tenure and conflict resolution	Case-studies and success stories of strengthened national organization structures		Parties	Proposed	Workshops demonstrating case examples	2008
(d) Transboundary issues	Guidelines on transboundary collaboration implemented through NBSAPs and NAPs Increased number of bilateral and subregional collaborative arrangements in place		Parties, WCPA, IGOs Parties	Proposed Ongoing	Draft guidelines	2008
(e) Policies and instruments	Mechanisms for collaboration between respective national focal points developed Case-studies, guidelines for cross-sectoral integration, integration of NBSAPs and NAPs		Parties, SCBD, UNCCD, GM Parties	In process In process	Synergy workshops held per annum Presentation of first case-studies (UNCCD GRIC 1)	2004 2002
<b>Activity 9.</b> Support for sustainable livelihoods						
(a) Income diversification	Case-studies on income diversification Guidelines for income diversification opportunities implemented through NBSAP and NAPs		Parties Parties	Proposed Proposed	Initial case-studies reported on Draft guidelines	2006 2008



ACTIVITY	EXPECTED OUTCOMES	TIME-FRAME	KEY ACTORS	STATUS	PROGRESS INDICATORS	DATE
(b) Sustainable harvesting	Guidelines on best practices incorporated in NBSAPs, NAPs and other relevant policies		Parties	Proposed	Draft guidelines	2004
(c) Innovations for local income generation	Relevant case-studies made available		Parties	Proposed	Workshops and exchange visits	2006
(d) Market development	Products derived from sustainable use increasingly marketed		Parties, WTO	Proposed	Initial case-studies reported on	2006
	Conductive market relationships developed		Parties, WTO	Proposed		
	Guidelines produced and integrated in NBSAPs, NAPs and other relevant policies		Parties, SCBD	Proposed	Draft guidelines	2006
(e) Fair and equitable sharing of the benefits						

#### INDICATIVE LIST OF POTENTIAL COLLABORATORS<sup>1</sup> AND ABBREVIATIONS

CBD=Convention on Biological Diversity; CCD=Convention to Combat Desertification; CGIAR=Consultative Group on International Agricultural Research; CIAT=International Centre for Tropical Agriculture; CIFOR=Centre for International Forestry Research; CILSS=Permanent Inter-State Committee for Drought Control in the Sahel; CITES=Convention on International Trade in Endangered Species of Wild Fauna and Flora; CMS = Convention on the Conservation of Migratory Species of Wild Animals; CPF=Collaborative Partnership on Forests; FAO=Food and Agriculture Organization of the United Nations; GEF=Global Environment Facility; GISP=Global Invasive Species Project; GIWA=Global International Waters Assessment; GM=Global Mechanisms of the UNCCD; ICARDA=International Centre for Agricultural Research in the Dry Areas; ICRAF=International Centre for Research in Agroforestry; ICRISAT=International Crops Research Institute for the Semi-arid Tropics; IFAD=International Fund for Agricultural Development; IGBP=International Geosphere and Biosphere Programme; IITA=International Institute for Tropical Agriculture; ILRI=International Livestock Research Institute; ILTER=International Long-term Ecological Research Network; IPGRI=International Plant Genetic Resources Institute; IPCC=Integrated Pollution and Prevention Control; IGO=Intergovernmental organization; IUCN=World Conservation Union; IUFRU=International Union of Forestry Research Organizations; LUCCLand Use and Cover Change Programme (of IGBP); MA=Millennium Ecosystem Assessment; OIE=World Organization for Animal Health; OSS=Observatoire du Sahara et du Sahel; SADC=Southern African Development Community; TPN=Thematic Programme Networks of the CCD; TWNSO=Third World Network of Scientific Organisations; UNDP=United Nations Development Programme; UNEP=United Nations Environment Programme; UNEP-WCMC=World Conservation Monitoring Centre; UNESCO=United Nations Educational, Scientific and Cultural Organization; UNESCO-MAB=Man and Biosphere Project; UNFCCC=United Nations Framework Convention on Climate Change; UNFF=United Nations Forum on Forests; UNTAR=United Nations Institute for Training and Research; WB=World Bank; WCPA=World Commission on Protected Areas; WHC=World Heritage Centre (UNESCO); WIPO=World Intellectual Property Organization; WMO=World Meteorological Organization; WRI=World Resource Institute; WTO=World Trade Organization; WWF=World Wide Fund for Nature

<sup>1</sup> AS LISTED IN THE REPORT OF THE AD HOC TECHNICAL EXPERT GROUP ON THE BIODIVERSITY OF DRY AND SUB-HUMID LANDS (UNEP/CBD/SBSTTA/8/INF/2) AND UPDATED BASED ON A QUESTIONNAIRE SENT OUT IN AUGUST 2002.

**DECISION VII/3 | Agricultural biological diversity***The Conference of the Parties*

1. *Takes note* of the progress made in the implementation of decision VI/5, on the programme of work on agricultural biological diversity;
2. *Notes* the postponement of the preparation of the final report of the comprehensive assessment of agricultural biological diversity and related milestones by two years (UNEP/CBD/COP/7/11, paragraph 66);
3. *Takes note* of the report of the Ad Hoc Technical Expert Group on the Potential Impacts of Genetic Use Restriction Technologies on Smallholder Farmers, Indigenous and Local Communities and Farmers' Rights, established in paragraph 21 of decision VI/5, which met in Montreal from 19 to 21 February 2003 (UNEP/CBD/SBSTTA/9/INF/6);
4. *Requests* the Subsidiary Body on Scientific, Technical and Technological Advice to consider the report of the Ad Hoc Expert Group on Genetic Use Restriction Technologies at its tenth meeting with a view to providing advice to the Conference of the Parties at its eighth meeting, also taking into account decision VII/16 on Article 8(j) and related provisions;
5. *Takes note with appreciation* of the report of the Food and Agriculture Organization of the United Nations and its Commission on Genetic Resources for Food and Agriculture on the potential impacts of genetic use restriction technologies on agricultural biodiversity and agricultural production systems (UNEP/CBD/COP/7/INF/31), prepared pursuant to paragraphs 20 and 21 of decision V/5;
6. *Takes note also* of the notes by the Executive Secretary on the impacts of trade liberalization on agricultural biodiversity (UNEP/CBD/COP/7/INF/14 and 15) prepared pursuant to paragraph 17 of decision VI/5, and requests further gathering and incorporation of data on this matter from all countries;
7. *Welcomes* the future establishment of a facilitation unit for research on agricultural biodiversity by the International Plant Genetic Resources Institute in association with other centres of the Consultative Group on International Agricultural Research, the Food and Agriculture Organization of the United Nations, civil-society organizations and other research centres, as a contribution to the programme of work;
8. *Welcomes*, within the framework of the International Treaty of Plant Genetic Resources for Food and Agriculture, and as part of its funding strategy, the development of the Global Crop Diversity Trust first launched at the World Summit on Sustainable Development as this contributes towards the development of an important endowment fund to support *ex situ* conservation centres worldwide;
9. *Welcomes* the initiative of the Food and Agriculture Organization of the United Nations to dedicate World Food Day 2004 to "biodiversity for food security and encourages Parties and other Governments and the Executive Secretary to the Convention to participate in this FAO celebration;

10. *Invites* the Parties and other Governments to consider and promote, as appropriate and subject to national legislation and international law, the mainstreaming of agricultural biodiversity in their plans, programmes and strategies with the active participation of local and indigenous communities and the inclusion in the communities' plans, programmes and strategies on conservation, development and use of agricultural biodiversity, and to recognize and support the efforts of local and indigenous communities in conserving agricultural biodiversity;

11. *Invites* civil-society organizations and other non-governmental organizations and programmes to assist Parties in their capacity-building initiatives in the mainstreaming of agricultural biodiversity in their plans, programmes and strategies, and international organizations and international funding institutions to support the development and use of agricultural biodiversity;

12. *Requests* the Executive Secretary to invite the Food and Agriculture Organization of the United Nations, in close collaboration with other relevant United Nations bodies and regional and international organizations, to identify and assess activities and available information on agricultural biodiversity before the submission of the third national report;

13. *Urges* Parties and other Governments to ratify the International Treaty of Plant Genetic Resources for Food and Agriculture since the Treaty will be an important instrument for the conservation and sustainable use of genetic resources leading to hunger reduction and poverty alleviation.

## DECISION VII/4 | Biological diversity of inland water ecosystems

### *The Conference of the Parties*

#### *Review of the implementation of the programme of work*

1. *Notes* the progress made in the implementation of the programme of work on the biological diversity of inland water ecosystems, as reported in the note by the Executive Secretary (UNEP/CBD/COP/7/12);

2. *Recognizes* that a major shortcoming in the current review has been the limited availability of recent information on each of the activities of the programme of work and the lack of financial resources to generate it, and further recognizes the usefulness of the national reports submitted to the Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar, Iran, 1971) for a global status of the implementation of the programme of work on the biological diversity of inland water ecosystems, and, accordingly, *requests* the Executive Secretary to submit, for consideration at its eighth meeting, a proposal on ways and means for making the review more comprehensive;

3. *Also requests* the Executive Secretary to develop with the Secretariat of the Ramsar Convention a proposal, for consideration by the Conference of the Parties at its eighth meeting, on streamlining and improving the effectiveness of national reporting on inland water ecosystems, taking into account the work of the Task

Force on Streamlining Forest-related Reporting established in the framework of United Nations Forum on Forests and other initiatives for harmonizing biodiversity-related national reports;

4. *Welcomes* and *encourages*, in particular, the synergy being developed between the Convention on Biological Diversity and the Ramsar Convention in implementing the programme of work, *notes* the progress made in the implementation of the joint work plans between the two conventions (UNEP/CBD/COP/7/INF/27) and *encourages* further activities aiming at avoiding overlaps in the work of both conventions;

5. *Requests* the Executive Secretary to continue developing and strengthening collaboration with other organizations, institutions and conventions as a way to streamline many of the activities contained in the programme of work, promote synergies and avoid unnecessary duplications and to fully cooperate with all partners in the development and implementation of the International Decade for Action, “Water for Life,” 2005–2015, proclaimed by the General Assembly in December 2003;

6. *Notes* the need to adapt elements in the programme of work, as appropriate, in response to new developments or emergency matters and *decides* to carry out the next in-depth review of the programme of work no later than ten years from now, taking into account the multi-year programme of work of the Conference of the Parties and the 2010 target in the Strategic Plan.

*Revised programme of work*

7. *Recognizes* that the review of the implementation of the programme of work identified gaps and constraints that need to be addressed to meet the objectives of the Convention and, accordingly, *adopts* the revised programme of work<sup>158</sup> contained in the annex to the present decision, which addresses the identified gaps and constraints with its three programme elements on:

- (a) Conservation and sustainable use of biodiversity, including application of the ecosystem approach;
- (b) Enabling activities addressing many of the socio-economic gaps identified in the review of the programme of work; and
- (c) Monitoring and assessment;

8. *Recommends* that the Strategic Plan of the Convention on Biological Diversity and the Plan of Implementation of the World Summit on Sustainable Development, and their target of 2010 to reduce significantly the rate of biodiversity loss, should guide the implementation of the revised programme of work on inland water biological diversity;

9. *Recognizes* the need for resources, human, technological and financial, to implement effectively the activities under the revised programme of work, including capacity-building in the required fields, and in recognition of Article 20 of the Convention;

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158 Implementation of this programme of work should not promote incentives that negatively affect biodiversity of other countries.

10. *Urges* Parties, other Governments and organizations to incorporate the objectives and relevant activities of the programme of work in their biodiversity strategies and action plans, wetland policies and strategies, and the integrated water-resources management and water-efficiency plans being developed, by 2005, in line with paragraph 25 of the Plan of Implementation of the World Summit on Sustainable Development, and to implement them and further promote coordination and cooperation between national actors responsible for inland water ecosystems and biological diversity;

11. *Recognizes* the presence of inland water ecosystems in agricultural lands, forests, dry and sub-humid lands, and mountains, and the ecological connectedness between inland waters, estuaries and inshore coastal areas and, accordingly, *encourages* Parties, other Governments and organizations to ensure cross-referencing to, and coherence with, the other thematic programmes of work while implementing this programme of work;

12. *Urges* Parties to share information and lessons learned from the application of national and regional policies, plans and best practices, from the application of water frameworks, including specific examples of successful policy interventions to conserve and sustainably use inland waters, and requests the Executive Secretary to summarize this and related available information for the eighth meeting of the Conference of the Parties;

13. *Invites* Parties to formulate and adopt outcome oriented targets and identified priorities for each activity, including timescales, taking into account the Strategic Plan of the Convention as well as the Strategic Plan of the Ramsar Convention for the period 2003–2008, the Global Strategy for Plant Conservation and the Plan of Implementation of the World Summit on Sustainable Development;

14. *Requests* the Executive Secretary to:

- (a) Compile, for consideration by the Conference of the Parties at its eighth meeting, information on mountain ecosystems and their role as water suppliers and examples of transferable technologies relevant to the implementation of the revised programme of work on inland water biodiversity also relevant to mountain ecosystems, and ensure that this information is considered in the implementation of the programme of work on mountain biological diversity (decision VII/27), and taking into account, *inter alia*, the work of the Committee on Forestry of the Food and Agriculture Organization of the United Nations;
- (b) Ensure that inland water ecosystem issues are fully incorporated, as appropriate, into all other thematic work programmes;
- (c) In collaboration with relevant organizations and conventions, develop cost-effective means to report on implementation of the programme of work as measured against the global targets defined in the Strategic Plan, in the Global Strategy for Plant Conservation, and in the Plan of Implementation of the World Summit on Sustainable Development, essentially using indicators and assessments at the global level by international organizations, or existing data, and propose these to the Subsidiary Body prior to the eighth meeting of the Conference of the Parties.

*Assessment of status and trends, and rapid assessment*

15. *Takes note* of the status and trends of, and threats to, inland water biodiversity described in the note by the Executive Secretary (UNEP/CBD/SBSTTA/8/8/Add.1) and related information documents and gives particular consideration to the listing of major threats to inland water biodiversity, and their underlying causes, as a basis for the identification of priorities for early action, recognizing that the relative importance of threats, and their underlying causes, will vary by region and country;

16. *Recognizes* the need for reliable baseline data and subsequent regular national assessments of the status and trends of, and threats to, inland water biodiversity as a basis for decision-making on the conservation and sustainable use of biodiversity of inland water ecosystems and, accordingly, *requests* the Executive Secretary, in collaboration with Parties and relevant organizations, in particular the Ramsar Convention, the United Nations Environment Programme - World Conservation Monitoring Centre, the Millennium Ecosystem Assessment and the Global International Waters Assessment among others, and making use of all available information, to prepare, for consideration by the Conference of the Parties at its eighth meeting:

- (a) A work plan with defined timeframe, ways, means, and capacity needs for assessing the extent, distribution and characteristics of inland water ecosystems, including, *inter alia*, biological characteristics and those chemical and physical characteristics relevant to the conservation and sustainable use of biodiversity, including necessary requirements for ecosystem based approaches, where possible using and not duplicating the efforts of other initiatives;
- (b) A report on information, and sources of information, on the trends of inland water biodiversity, definition of agreed baselines, relevant indicators and frequency of the assessments; and
- (c) A work plan with ways and means for assessing processes and categories of activities which have or are likely to have significant adverse impacts on the conservation and sustainable use of inland water biological diversity;

17. *Encourages* Parties, other Governments and relevant organizations to improve national, regional and global data on inland water ecosystem goods and services, their uses and related socio-economic variables; on species and all taxonomic levels; on basic hydrological aspects and water supply; and on the threats to which inland water ecosystems are subjected;

18. *Welcomes* the report of the Expert Meeting on Guidelines on Rapid Assessment of Biological Diversity of Inland Water Ecosystems (UNEP/CBD/SBSTTA/8/INF/5) and the guidelines annexed thereto;

19. *Recognizes* the usefulness of these guidelines to create baseline or reference data sets for inland water ecosystems of different types and to address the serious gaps that exist in knowledge of taxonomy, distribution, and conservation status of freshwater species;

20. *Invites* Parties, other Governments and relevant organizations to use and promote the application of the guidelines, in particular in the circumstances of small

island developing States and in the territories of States in which inland water ecosystems suffer from ecological disaster;

21. *Recognizes* that the guidelines are focused on biological factors and, more specifically, on species-level assessments, and that they only touch on ecosystem-level and socio-economic and cultural aspects relating to the conservation and use of biological diversity, and *requests* the Executive Secretary, in collaboration with the Secretariat of the Ramsar Convention and other relevant organizations, to develop a complementary set of tools to assess the function and health of inland water ecosystems and the socio-economic and cultural values of biological diversity of inland waters to be presented as information paper to the Conference of the Parties at its eighth meeting;

22. *Requests* the Executive Secretary, in collaboration with relevant organizations, to strengthen capacities, including through practical training, for the application and, as needed, adaptation to local conditions of the guidelines especially in developing countries, particularly in small island developing States and in the territories of certain States in which inland water ecosystems suffer from ecological disaster;

23. *Requests* the Executive Secretary to develop a monitoring and reporting system to assess the experiences gathered with respect to the usefulness and applicability of the guidelines, including through the national reports under the Convention on Biological Diversity;

24. *Encourages* Parties, other Governments and relevant organizations to ensure opportunities for the active participation of indigenous and local communities in all stages of rapid assessments of biological diversity of inland waters traditionally occupied or used by these communities, consistent with decision VII/16 F of the Conference of the Parties on the Akwé: Kon Voluntary Guidelines 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;

25. *Emphasizes* the critical role of inland water biodiversity for sustainable livelihoods and, accordingly, *requests* the Executive Secretary, in collaboration with the Food and Agriculture Organization of the United Nations and other relevant organizations, to prepare a study on the linkages between conservation and sustainable use of inland water biodiversity and poverty alleviation/sustainable livelihoods, including human health considerations, for consideration by the Conference of the Parties at its eighth meeting. The study should contain proposals on ways and means to ensure that implementation of the programme of work contributes appropriately to poverty alleviation and sustainable livelihoods;

26. *Requests* the Executive Secretary to compile, in collaboration with relevant organizations and experts, existing information and disseminate it in a format that is useful to policy makers, recognizing that comprehensive information about the function of inland water ecosystems is invaluable to land and resource managers for planning, evaluating and executing plans and programmes. Emphasis should be put on assessment of, and research on, factors that affect ecosystem functions, the valuation of ecosystem functions, and remedial actions to restore ecosystem functions.

*Classification systems and criteria for the identification of important inland water biodiversity*

27. *Requests* those Parties for which this is appropriate, to adopt the Ramsar classification of wetlands as an interim classification system and use it as a framework for the initial inventorying of inland water ecosystems for the purpose of preparing indicative lists of inland water ecosystems important in the framework of the Convention, as requested in paragraph 12 of the programme of work on inland water biodiversity annexed to decision IV/4;

28. *Requests* the Subsidiary Body on Scientific, Technical and Technological Advice in close collaboration with the Ramsar Convention to review the interim classification system with the view to developing a definitive classification system as a matter of urgency prior to the tenth meeting of the Conference of the Parties, taking into account the multi-year programme of work (decision VII/31), on the basis of experiences accumulated by Parties, other Governments and relevant organizations, as appropriate to their national circumstances, taking into account the options described in the note by the Executive Secretary prepared for the eighth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (UNEP/CBD/SBSTTA/8/8/Add.4);

29. *Invites* the Secretariat of the Ramsar Convention and the Scientific and Technical Review Panel of the Ramsar Convention, in collaboration with the Executive Secretary and the Subsidiary Body on Scientific, Technical and Technological Advice, respectively, and in line with paragraph 30 of resolution VIII.10 of the Conference of the Parties to the Ramsar Convention, and with a view to achieving a more comprehensive coverage of components of biological diversity through the designation of Ramsar sites:

- (a) To further elaborate the guidelines on existing criteria for the following features:
  - (i) Wetlands supporting wild relatives of domesticated or cultivated species;
  - (ii) Wetlands that support species or communities and genomes or genes of economic, social, scientific or cultural importance;
  - (iii) Wetlands supporting species or communities that are important for research into the conservation and sustainable use of biological diversity including indicators of ecosystem health and integrity; and
  - (iv) Wetlands that support important populations of taxonomic groups with wetland-dependent species, including, *inter alia*, amphibians;
- (b) To consider the development of additional criteria, including, as appropriate, quantitative criteria;
- (c) To develop guidelines on the geographical scale at which criteria should be applied;

30. *Further invites* the Secretariat of the Ramsar Convention, in collaboration with the Executive Secretary of the Convention on Biological Diversity, to provide guidance, based on experiences, for the interpretation and application of the Ramsar criteria at the national and regional levels.



**ANNEX****REVISED PROGRAMME OF WORK ON INLAND WATER BIOLOGICAL DIVERSITY**

1. The revised and further elaborated programme of work for the conservation and sustainable use of the biological diversity of inland water ecosystems builds upon ongoing activities, uses existing knowledge, and also focuses attention on gaps in the institutional frameworks and the knowledge base upon which management decisions are made. It seeks to respond to the constraints identified by Parties through their national reports and to provide an integrated package of activities to address these obstacles and impediments. The activities within the programme of work are intended to be targeted towards, and address first and foremost, national priorities as prescribed through the national biodiversity strategy and action plan of each Party.
2. In furthering work under this programme duplication of effort should be avoided, and harmonization of respective programmes of work is to be pursued through strong coordination between the Convention on Biological Diversity and other relevant conventions and international bodies, with a particular view to the list of lead actors and collaborators. The programme and activities of the Ramsar Convention on Wetlands and its Scientific and Technical Review Panel (STRP) have been studied very carefully and actions were identified to optimize harmonization of activities of the Convention on Biological Diversity and its lead partner in the implementation of the programme of work on biological diversity of inland water ecosystems. This has been done in accordance with the third joint work plan between the Convention on Biological Diversity and the Ramsar Convention, as endorsed by the Conference of the Parties to the Convention on Biological Diversity in its decision VI/20.
3. The Executive Secretary is expected to continue and further develop collaboration, and avoid duplication, with programmes, organizations, institutions, conventions and stakeholders working with research, management and conservation of inland water biological diversity. These include (but are not limited to) the United Nations Convention to Combat Desertification (UNCCD), the United Nations Development Programme (UNDP), the United Nations Environment Programme (UNEP), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the Food and Agriculture Organization of the United Nations (FAO), the United Nations Framework Convention on Climate Change (UNFCCC), the Convention on International Trade in Endangered Species (CITES), the Convention on the Conservation of Migratory Species of Wild Animals (CMS), the Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention), BirdLife International, Conservation International, DIVERSITAS, the Global International Water Assessment, the Global Water Partnership, the WorldFish Center (formerly the International Center for Living Aquatic Resources Management, ICLARM), IUCN—the World Conservation Union, the Millennium Ecosystem Assessment, the World Water Council, Wetlands International, the World Wide Fund for Nature (WWF) and the World Bank.
4. The clearing-house mechanism should continue to be used as a primary vehicle to promote and facilitate the exchange of information and transfer of technology relevant to the conservation and use of inland water biological diversity.

5. The aim of the revised programme of work on biological diversity of inland water ecosystems is to further enhance the implementation of the Convention on Biological Diversity in this area at the catchment/watershed/river basin levels, and to fulfil its leadership role in international biodiversity issues relating to inland water ecosystems.<sup>159</sup>

6. The revised programme of work identifies goals, objectives and activities within the three programme elements: conservation, sustainable use and benefit-sharing; institutional and socio-economic enabling environment; and knowledge, assessment and monitoring. The programme of work is not intended to be prescriptive for Parties, given that national circumstances, capacities and priorities can and do vary greatly. As such, it should be viewed as providing a comprehensive and integrated framework of activities from which Parties can formulate their own nationally appropriate responses within the context of the national biodiversity and sustainable development strategies and action plans.

7. The programme of work should pay particular attention to the impacts of climate change and the role of inland waters in mitigation of and adaptation to climate change. In this process, the programme of work should consider, support and collaborate with ongoing and/or new initiatives in these areas and in particular those related to the conservation and sustainable use of peatlands.

8. Throughout the programme of work it should be assumed that references to biological diversity, unless otherwise specified, refers to genomes and genes, species and communities, ecosystems and habitats. It should also be understood that the order of presentation within this programme of work does not convey any indication of relative priority.

9. Within the programme of work goals and objectives are listed under each programme element. Overarching these, and operating as fundamental guiding principles, are the following:

- (a) To promote the conservation and sustainable use of inland water biological diversity including by appropriate transfer and development of technologies and by appropriate funding;
- (b) To apply the ecosystem approach to the management of inland water ecosystems;
- (c) To support indigenous and local communities to re-establish, develop and implement traditional approaches and/or adaptive management approaches to conserve and sustain the use of the biological diversity of inland water ecosystems;
- (d) To promote the fair and equitable sharing of benefits gained from the use of inland water genetic resources and associated traditional knowledge based on prior informed consent in accordance with national laws;
- (e) To use and draw upon scientific, technical and technological knowledge of indigenous and local communities and relevant stakeholders, with their participation and prior informed consent in accordance with national laws, in the implementation of all programme elements.

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159 Implementation of this programme of work should not promote incentives that negatively affect biodiversity of other countries.

PROGRAMME ELEMENT 1: CONSERVATION, SUSTAINABLE USE AND BENEFIT-SHARING

GOAL 1.1: To integrate the conservation and sustainable use of biological diversity into all relevant sectors of water-resource and river-basin management, taking into account the ecosystem approach

*Context and linkages*

Article(s) of the Convention on Biological Diversity: 6(a) and (b)

Strategic Plan objective(s): 1.2, 1.5, 2.1, 3.1, 3.3 and 3.4

Related element(s) of first programme of work: paragraphs 8(c), 9(a)(i) and (ii), (b)(i), (g)(i) and (ii), (k), (m) and (v)

Intra- and inter-programmatic linkages:

Goal 1.2 (*In situ* conservation through protected areas)

Goal 2.1 (Integration with other sectors, etc.)

Goal 3.2 (Relating to identification of stressed inland water ecosystems.)

Plan of Implementation of the World Summit: paragraphs 24, 32(c), 40(b) and 66(b)

*Objectives*

- (a) Adopt integrated land and catchment/watershed/river basin management approaches that incorporate the ecosystem approach, and the conservation and sustainable use of inland water ecosystems, including transboundary catchments, watersheds and river basins.
- (b) Encourage the adoption of such integrated watershed, catchment and river basin management strategies to maintain, restore or improve the quality and supply of inland water resources and the economic, social, cultural, spiritual, hydrological, biological diversity and other functions and values of inland water ecosystems.
- (c) Integrate into land-and water-use management approaches appropriate adaptive management and mitigation responses to combat, and prevent where possible, the negative impacts of climate change, *El Niño*, unsustainable land use and desertification on the biodiversity of inland water ecosystems.

*Activities of the Parties*

1.1.1. Assess current management approaches and strategies with regard to their integration of the ecosystem approach and sustainable use principles and adjust them as needed.

1.1.2. Develop effective management strategies to maintain or improve the sustainability of inland water ecosystems, including those identified as most stressed and facilitate a minimum water allocation to the environment to maintain ecosystem functioning and integrity. In so doing, consideration should also be given to the likely impacts of climate change and desertification, and factor in suitable mitigation and adaptive management approaches.

1.1.3. Identify and remove the sources, or reduce the impacts, of water pollution (chemical, thermal, microbiological or physical) on the biological diversity of inland waters.

1.1.4. Promote effective collaboration among scientists, local stakeholders, planners, engineers, and economists, and including indigenous and local communities with their prior informed consent (both within and among countries) in the planning and implementation of development projects to better integrate the conservation and sustainable use of inland water biological diversity with water resource developments.

1.1.5. Contribute to, and participate in, as appropriate, the River Basin Initiative (RBI) by sharing case-studies, experiences and lessons learned on:

- (a) Examples of watershed management that incorporate the conservation and sustainable use of inland water biological diversity with special reference to examples that use the ecosystem approach to meet water management goals; and
- (b) Examples of water resource development projects (water supply and sanitation, irrigation, hydropower, flood control, navigation, groundwater extraction) that incorporate consideration of the conservation and sustainable use of biological diversity.

1.1.6. Introduce into regional, national, catchment, watershed and river-basin level, and local water and land-use planning and management, adaptive management and mitigation strategies to combat and prevent, where possible, the negative impacts of climate change, *El Niño*, unsustainable land-use practices and desertification, noting the ongoing work of the Ad Hoc Technical Expert Group on Biodiversity and Climate Change and the programme of work on dry and sub-humid lands.

1.1.7. Provide to the Executive Secretary advice on national experiences and approaches to promoting and implementing adaptive management and mitigation strategies for combating the impacts of climate change, *El Niño* and desertification.

1.1.8. Use, where appropriate, all available information on dams in order to ensure that biodiversity considerations are fully taken into account in decision-making on large dams.

1.1.9. Assess the linkages between inland water ecosystems and climate change and the management options for mitigation of and adaptation to climate change.

#### *Supporting activities*

1.1.10. SBSTTA should:

- (a) Review existing information on the allocation and management of water for maintaining ecological functions, including the relevant guidelines and technical papers on this topic, and prepare advice for the Conference of the Parties;
- (b) Develop specific expert guidance on the management of the negative impacts of climate change, *El Niño*, unsustainable land-use practices and desertification on inland water biodiversity and appropriate adaptive management and mitigation responses, in collaboration with relevant partners;

- (c) Compile available information from Parties and other organizations for the clearing-house mechanism on the impacts of climate change on wetlands, and the roles that wetlands can play in mitigating the effects of climate change, notably the role of peatlands in carbon sequestration.

1.1.11. The Convention Secretariat and the Secretariat of the Ramsar Convention should finalize the development and move into full implementation of the River Basin Initiative, with input from collaborating partner organizations, as appropriate.

1.1.12. The Ramsar Secretariat should be invited to bring to the attention of the Parties to the Convention on Biological Diversity relevant guidance or approaches adopted by the Ramsar Convention for the wise use of wetlands, such as:

- (a) The Ramsar Convention guidelines for integrating wetland conservation and wise use into river basin management; and
- (b) Model approaches to transboundary watershed or river basin management that can demonstrate effective mechanisms for cooperative management.

1.1.13. The Executive Secretary, in collaboration with relevant partners as appropriate, should compile and disseminate, including through the clearing-house mechanism of the Convention on Biological Diversity:

- (a) Case-studies, lessons learned and best-practice guidance on ways and means to address all forms of water pollution at both the local and catchment scales;
- (b) Examples of water resource development projects (water supply and sanitation, irrigation, hydropower, flood control, navigation, groundwater extraction) that incorporate biological diversity considerations, and which aim for sustainable use and maintenance of ecological processes; and
- (c) The information provided by Parties in response to activity 1.1.7 above.

1.1.14. Also in collaboration with appropriate partners, the Executive Secretary should develop practical management guidance and associated instruments on sustainable use of inland water biodiversity, with special attention for sustainable tourism developments, sustainable use of freshwater fish stocks, and sustainable agricultural practices in association with inland water ecosystems, taking into account the ongoing work in response to the implementation of decisions V/24 and VI/13 of the Conference of the Parties, on sustainable use.

1.1.15. The Ramsar Secretariat should be invited to make available to Parties to the Convention on Biological Diversity, the Ramsar Convention guidelines for global action on peatlands, adopted at the eighth meeting of the Conference of the Contracting Parties to the Ramsar Convention.

#### *Main partners*

Ramsar Secretariat and STRP, River Basin Initiative, UNEP, UNESCO, International Water Management Institute (IWMI), subsidiary scientific bodies of UNFCCC, CCD and the Ramsar Convention, IPCC, WMO.

*Other collaborators*

Relevant international, regional and national organizations such as UNEP, International Council of Scientific Unions (ICSU), DIVERSITAS, IUCN, FAO.

GOAL 1.2: To establish and maintain comprehensive, adequate and representative systems of protected inland water ecosystems within the framework of integrated catchment/watershed/river-basin management

*Context and linkages*

Article(s) of the Convention on Biological Diversity: 8(a), (b), (c), (d) and (e)

Strategic Plan objective(s): 1.2, 1.5, 2.1, 3.1, 3.3 and 3.4

Related element(s) of first programme of work: paragraph 8(c)(vii)

Intra- and inter-programmatic linkages:

Goal 3.3 (National inventories and assessment)

Goal 3.6 (Further elaboration of Annex I)

Plan of Implementation of the World Summit: paragraph 32(c)

*Objective*

- (a) Comprehensive, adequate and representative systems of protected inland water ecosystems (including all IUCN protected area categories, as appropriate) are developed and maintained within the framework of integrated catchment/watershed/river basin management.
- (b) Where appropriate, transboundary, collaborative approaches to identifying, recognizing and managing protected inland water ecosystems are undertaken between neighbouring Parties.

*Activities of the Parties*

1.2.1. Provide, as appropriate, to the Executive Secretary, examples of protected-area establishment and management strategies that are supporting the conservation and sustainable use of inland water ecosystems.

1.2.2. Undertake the necessary assessments to identify priority sites for inclusion into a system of protected inland water ecosystems, applying in particular the guidance on operationalizing annex I of the Convention on Biological Diversity and its harmonized application with the criteria for identifying Wetlands of International Importance under the Ramsar Convention (see activity 3.2.3).

1.2.3. As part of activity 1.2.2 above, identify sites important for migratory species dependent on inland water ecosystems.

1.2.4. Develop incrementally, as the availability of resources and national priorities determine, and as part of an integrated catchment/watershed/river basin management approach, protected area systems (aquatic reserves, Ramsar sites, heritage rivers, etc.), which can contribute in a systematic way to the conservation and sustainable use of biological diversity, and to maintaining overall ecosystem function, productivity and “health” within each drainage basin.

1.2.5. As appropriate, work collaboratively with neighbouring Parties to identify, have formally recognized and managed, transboundary protected inland water ecosystems.

1.2.6. In undertaking activity 1.2.4 above, those Parties to the Convention on Biological Diversity that are also Parties to the Ramsar Convention should harmonize this work with the development of national networks of wetlands of international importance, which are comprehensive and coherent in line with the Ramsar strategic framework for the future development of the List of Wetlands of International Importance and taking into account ecological connectivity<sup>160</sup> and the concept, where appropriate, of ecological networks, in line with the programme of work on protected areas (decision VII/28).

#### *Supporting activities of the Executive Secretary*

1.2.7. Review and disseminate relevant information and guidance, including through the clearing-house mechanism, on national and transboundary experiences and case-studies to assist efforts in establishing and maintaining protected inland water ecosystems considering, *inter alia*:

- (a) The range of resource materials and guidance available through the IUCN Commission on Protected Areas;
- (b) The Ramsar Convention strategic framework for the future development of the List of Wetlands of International Importance, and its specific guidance in relation to the identification and designation of certain inland water ecosystem types such as karsts and subterranean hydrological systems, peatland, wet grasslands, etc;
- (c) The new Ramsar guidelines on management planning for Ramsar sites and other wetlands, adopted by the Conference of the Contracting Parties to the Ramsar Convention at its eighth meeting; and
- (d) Advice and guidance available from the UNESCO Man and the Biosphere programme, International Hydrological Programme (IHP) and World Heritage Centre.

1.2.8. In collaboration with the secretariats of the Convention on Migratory Species and the Ramsar Convention identify opportunities for collaborative work on protected area networks for migratory species dependent on inland water ecosystems, through the respective bilateral joint work plans.

#### *Main partners*

Ramsar Secretariat and STRP, CMS secretariat and Scientific Council, UNESCO-MAB, World Heritage Centre, IUCN.

#### *Other collaborators*

Relevant international, regional and national organizations, interested Parties and stakeholders.

<sup>160</sup> The concept of connectivity may not be applicable to all Parties.

GOAL 1.3: To enhance the conservation status of inland water biological diversity through rehabilitation and restoration of degraded ecosystems and the recovery of threatened species

*Context and linkages*

Article(s) of the Convention on Biological Diversity: 8(f), 9(c), 10(d)

Strategic Plan objective(s): 1.2, 1.5, 2.1, 3.1, 3.3 and 3.4

Related element(s) of first programme of work: paragraph 8(c)(iv)

Intra- and inter-programmatic linkages:

Goal 1.1 (Integrating biodiversity conservation into water resource and river basin management). Apart from the clear benefits for biodiversity conservation that come from restoring or rehabilitating inland water ecosystems, there is the added benefit gained for overall “health” of catchment and river basins from reinstating these part of the natural water infrastructure.

Goal 1.2 (Protected areas)

Goal 2.1 (Integration into other sectors, etc.)

Plan of Implementation of the World Summit: paragraphs 26(c) and 37(d)

*Objectives*

- (a) Degraded inland water ecosystems are rehabilitated or restored, where appropriate and possible.
- (b) The conservation status of threatened species reliant on inland water ecosystems is improved.

*Activities of the Parties*

1.3.1. Provide, as appropriate, to the Executive Secretary case-studies, national experiences and any relevant local, national or regional guidance relating to the successful rehabilitation or restoration of degraded inland water ecosystems, and the recovery of threatened species.

1.3.2. Identify nationally priority candidate inland water ecosystems and/or sites for rehabilitation or restoration and proceed to undertake such works, as resources allow. In identifying potential candidate sites, consider the relative conservation status of the threatened species involved, and the potential gains for the overall ecosystem functioning, productivity and “health” within each drainage basin (see activity 1.2.4).

1.3.3. Identify nationally and then act, as appropriate, to improve the conservation status of threatened species, including migratory species, reliant on inland water ecosystems, (see activities 1.2.3 and 1.2.4), taking into account the programme of work on restoration and rehabilitation of degraded ecosystems being developed by the Conference of the Parties as part of its multi-year programme of work up to 2010.



*Supporting activities*

1.3.4. SBSTTA to prepare guidelines on promoting rehabilitation and restoration of inland water ecosystems, on the basis of the Ramsar principles and guidelines on wetlands restoration, the findings of the IUCN Species Survival Commission regarding the conservation status of threatened species reliant on inland water ecosystems, and other information provided by Parties (see activity 1.3.1).

*Main partners*

Ramsar Secretariat and STRP, Wetlands International, CMS Secretariat and Scientific Council, CMS-related agreements, IUCN, DIVERSITAS.

*Other collaborators*

MAB and other relevant international, regional and national organizations, and stakeholders.

GOAL 1.4: To prevent the introduction of invasive alien species, including exotic stocks that potentially threaten the biological diversity of inland water ecosystems, and to control and, where possible, eradicate established invasive species in these ecosystems

*Context and linkages*

Article(s) of the Convention on Biological Diversity: 7(c), 8(h), 8(l) and 14(a)

Strategic Plan objective(s): 1.2, 1.5, 2.1, 3.1, 3.3, 3.4, 4.1, 4.3 and 4.4

Related element(s) of first programme of work: paragraphs 8(c)(vi) and 9(h)

Intra- and inter-programmatic linkages:

Goal 2.1 (Integration with other sectors)

Goal 2.4 (Communication, education and public awareness)

Goals 3.2 and 3.3 (Assessments)

*Objective*

Through national biodiversity strategies and action plans and other relevant national and regional policies, programmes and plans undertake appropriate actions to prevent invasive alien species, which threaten the biological diversity of inland water ecosystems, from spreading and either control or eradicate them where invasion has already taken place.

*Activities of the Parties*

1.4.1. Promote and implement relevant guidelines and/or guiding principles in relation to invasive alien species making use of the expert guidance available such as through the “toolkit” of the Global Invasive Species Programme (GISP), the Scientific Committee on Problems of the Environment of the International Council of Scientific Unions (ICSU), and other sources referred to under the heading “Supporting activities” below.

1.4.2. Provide the Executive Secretary, as appropriate, with examples of the impacts of invasive alien species and of programmes used to control their introduction and mitigate negative consequences on inland water ecosystems, especially at the catchment, watershed and river-basin levels.

1.4.3. Raise awareness, as part of communication, education and public awareness-raising activities (see goal 2.4) of the possible problems and costs associated with the deliberate or accidental introduction of alien species, including exotic stocks and alien genotypes and genetically modified organisms that potentially threaten aquatic biological diversity, taking into consideration the Cartagena Protocol on Biosafety to the Convention on Biological Diversity.

1.4.4. Within the context of transboundary catchments, watershed and river-basin management, and especially in relation to inter-basin water transfers, provide appropriate mechanisms to prevent the spread of invasive alien species.

1.4.5. Prevent the introduction of invasive alien species and restore, where appropriate, indigenous wild-capture fisheries stocks in preference to other aquaculture developments.

*Supporting activities*

1.4.6. In collaboration with the Global Invasive Species programme (GISP), the Executive Secretary should implement the project on assessment of impacts of invasive alien species in inland waters<sup>161</sup> and make proposals on future assessments for consideration by SBSTTA.

1.4.7. The Ramsar Secretariat should be requested to make available to Parties to the Convention on Biological Diversity the results of the consideration of the issue of invasive alien species in wetlands at the eighth meeting of the Contracting Parties to the Ramsar Convention.

1.4.8. The Executive Secretary should compile information provided by Parties pursuant to activity 1.4.2 above and other suitable information products including the FAO Code of Conduct for Responsible Fisheries and that prepared by the Ramsar Secretariat, Commonwealth Secretariat, and IUCN for the communications and awareness-raising project on African wetland invasive alien species.

1.4.9. CITES, the Ramsar STRP, TRAFFIC and other appropriate collaborators should be invited to advise Parties on the impact of the aquarium trade and the use of exotic pasture grasses on the conservation of biodiversity in inland water ecosystems and make the results of this study available to Parties.

*Partners*

GISP, ICSU-SCOPE.

*Other collaborators*

Secretariat and STRP of the Ramsar Convention and its STRP, CITES, TRAFFIC, Commonwealth Secretariat, FAO, IUCN, UNEP-WCMC, IWMI, WorldFish Center.

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<sup>161</sup> The project brief was distributed at the seventh meeting of SBSTTA (UNEP/CBD/SBSTTA/7/3).

PROGRAMME ELEMENT 2: INSTITUTIONAL AND SOCIO-ECONOMIC ENABLING ENVIRONMENT

GOAL 2.1: To promote the integration of conservation and sustainable use of the biological diversity of inland water ecosystems into relevant sectoral and cross-sectoral plans, programmes, policies and legislation

*Context and linkages*

Article(s) of the Convention on Biological Diversity: 6(a) and (b), 14.1(b) and 18.1, 24.1(d)

Strategic Plan objective(s): 1.2, 1.3, 1.5, 2.1, 3.1, 3.3, 3.4, 4.1, 4.3 and 4.4

Related element(s) of first programme of work: 9(a)(i), 9(e)(ii), 9(g), 9(j), 9(l)(iii), 9(m)(iv) and (v)

Intra- and inter-programmatic linkages

Goal 3.5 (Environmental impact assessments).

Plan of Implementation of the World Summit: paragraphs 32(e) and 40(b).

*Objectives:*

- (a) Relevant sectoral plans, programmes, policies and legislation are compatible with, and where appropriate supportive of, plans, policies, programmes and laws for the conservation and sustainable use of the biological diversity of inland waters.
- (b) Strategic environmental assessments are operating to ensure national institutional arrangements (plans, programmes, policies and legislations) are supporting the implementation of this programme of work.
- (c) The national implementation of relevant multilateral environment agreements that relate to inland water biodiversity and ecosystems is taking place in an integrated, efficient and effective way.

*Activities of the Parties*

2.1.1. Undertake reviews and introduce reforms to policies, legal and administrative frameworks as necessary, in order to integrate the conservation and sustainable use of inland water biodiversity into the mainstream of government, business, and societal decision-making.

2.1.2. Apply, as urged by decision VI/7, the guidelines for incorporating biodiversity-related issues into environmental impact assessment legislation and/or processes (see goal 3.3) and in strategic environmental assessment.

2.1.3. Review institutional arrangements (policies, strategies, focal points and national reporting approaches) for national implementation of relevant multilateral environment agreements (see objective (c) above) and introduce reforms to streamline and, where appropriate, integrate implementation.

2.1.4. Provide the Executive Secretary with case-studies and information on lessons learned from policy, legal and institutional review and reform processes relating to

inland water biodiversity and ecosystems, including measures taken to harmonize national implementation of the relevant multilateral environment agreements.

*Supporting activities of the Executive Secretary*

2.1.5. Identify and make available to Parties, guidance, case-studies and lessons learned, including those relating to the practical application of strategic environmental assessment, to assist in reviewing and fine-tuning institutional frameworks (plans, programmes, policies and legislations) for the conservation and sustainable use of the biological diversity of inland waters.

2.1.6. Continue to support and participate in the WCMC-led project on harmonizing information management between the five biodiversity-related Conventions (Convention on Biological Diversity, Ramsar Convention, CITES, CMS and the World Heritage Convention).

2.1.7. Together with other relevant multilateral environmental agreements and interested Parties, seek the resources to establish working models (demonstration sites) show-casing the collaborative implementation of activities to achieve the complementary objectives of several multilateral environmental agreements.

*Main partners*

International Association for Impact Assessment (IAIA), Ramsar Secretariat and STRP, UNFCCC, UNCCD, CITES, CMS, World Heritage, UNESCO MAB, WCMC.

*Other collaborators*

International Water Management Institute (IWMI), other relevant international, regional and national organizations, interested Parties and other stakeholders.

GOAL 2.2: To encourage the development, application and transfer of low-cost appropriate technology, non-structural and innovative approaches to water resource management and the conservation and sustainable use of the biological diversity of inland water ecosystems, taking into account any decision taken by the Conference of the Parties at its seventh meeting on technology transfer and cooperation

*Context and linkages*

Article(s) of the Convention on Biological Diversity: 16 and 17

Strategic Plan objective(s):

Related element(s) of first programme of work: 9(b)(i) and (ii) and 9(c)

Intra- and inter-programmatic linkages: All others.

Plan of Implementation of the World Summit: paragraphs 9(e), 10(a), 25(a), (c) and (d), 26(e) and (f), 28, 41(a) and 54(l)

*Objectives*

- (a) Promote the development, documentation and transfer of appropriate technologies and approaches to water-resource management and the conservation and sustainable use of the biological diversity of inland water ecosystems.

- (b) Apply, as appropriate, the technologies and approaches identified and made available in response to the above objective.

#### *Activities of the Parties*

2.2.1. Make available to the Executive Secretary information on appropriate technologies and effective approaches to managing biodiversity of inland water ecosystems for transfer to other Parties.

2.2.2. Encourage the use of low-cost (appropriate) technology, non-structural and innovative approaches, and, where appropriate and through prior informed consent in accordance with national laws traditional or indigenous practices for inland water biodiversity assessment and to meet watershed management goals, such as using wetlands to improve water quality, using forests and wetlands to recharge groundwater and maintain the hydrological cycle, to protect water supplies and using natural floodplains to prevent flood damage, and to use, whenever possible, indigenous species for aquaculture.

2.2.3. Encourage the development of preventative strategies such as cleaner production, continual environmental improvement, corporate environmental reporting, product stewardship and environmentally sound technologies to avoid degradation and promote maintenance, and, where applicable, restoration of inland water ecosystems.

2.2.4. Emphasize more effective conservation and efficiency in water use, together with non-engineering solutions. Environmentally appropriate technologies should be identified, such as low-cost sewage treatment and recycling of industrial water, to assist in the conservation and sustainable use of inland waters.

#### *Supporting activities of the Executive Secretary*

2.2.5. Through the clearing-house mechanism, make available to Parties information on appropriate technologies and approaches to water resource management and the conservation and sustainable use of the biological diversity of inland water ecosystems.

2.2.6. Through partnerships with relevant organizations seek to provide Parties with access to the latest technologies and innovative management approaches relating to programme elements 1 and 3 developed by the private sector, catchment-management bodies and others actively engaged in integrated water resource management.

#### *Main partners*

Challenge Programme on Water and Food of the Consultative Group for International Agricultural Research (CGIAR), the International Water Management Institute, Ramsar Secretariat and STRP.

#### *Other collaborators*

Relevant international, regional and national organizations, interested Parties and stakeholders.

GOAL 2.3: To provide the appropriate incentives and valuation measures to support the conservation and sustainable use of inland water biological diversity, and to remove, or reform appropriately, any perverse incentives opposing such conservation and sustainable use of ecosystems, as it relates to biodiversity conservation<sup>162</sup>

*Context and linkages*

Article(s) of the Convention on Biological Diversity: 11

Strategic Plan objectives: 1.2, 1.3, 1.5, 3.1, 3.3 and 3.4

Related element(s) of first programme of work: paragraphs 8(d), 9(f)(i) and (iii), 9(m)

Intra- and inter-programmatic linkages:

Goal 2.1—in relation to strategic environmental assessment.

Plan of Implementation of the World Summit: Articles 26(b) and 40(k)

*Objectives*

- (a) Apply for inland water biological diversity the proposals for the design and implementation of incentive measures (as endorsed through decision VI/15 of the Conference of the Parties to the Convention on Biological Diversity and contained in annex I of that decision).
- (b) Encourage valuation of the full range of goods and services provided by inland water biological diversity and ecosystems in development proposals and with respect to applying incentive measures, and the identification and removal or modification of perverse incentives.

*Activities of the Parties*

2.3.1. Apply to inland water ecosystems the proposals for the design and implementation of incentive measures, including identification and removal or mitigation of perverse incentives, as endorsed by the Conference of the Parties in decision VI/15 and taking into account land-tenure systems. In particular:

- (a) Review the range and effectiveness of national incentives, subsidies, regulations, and other relevant financial mechanisms, which can affect inland water ecosystems, whether adversely or beneficially;
- (b) Redirect, as appropriate, financial support measures that run counter to the objectives of the Convention regarding the biological diversity of inland waters;
- (c) Implement targeted incentive and regulatory measures that have positive impacts on the biological diversity of inland waters;
- (d) Develop the policy research capacity needed to inform the decision-making process in a multidisciplinary and sectorally integrated manner;
- (e) Encourage the identification of the interdependence between conservation and sustainable use of inland water ecosystems and sustainable development;

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162 Implementation of this programme of work should not promote incentives that negatively affect the biodiversity of other countries.

(f) At appropriate levels (regional, national, subnational and local), encourage the identification of stressed inland waters, the allocation and reservation of water for the maintenance of ecosystem functions, and the maintenance of environmental flows as an integral component of appropriate legal, administrative and economic mechanisms.

2.3.2. In accordance with decision VI/15, submit case-studies, lessons learned and other information on positive or perverse incentives, land-use practices and tenure relating to inland water biodiversity to the Executive Secretary. Include within this submission national experiences and guidance in relation to water rights, markets and pricing policies.

2.3.3. Undertake comprehensive valuations of the goods and services of inland water biodiversity and ecosystems, including their intrinsic, aesthetic, cultural, socio-economic and other values, in all relevant decision-making across the appropriate sectors (see also goal 3.3 in relation to environmental, cultural and social impact assessments).

#### *Supporting activities*

2.3.4. The Ramsar STRP should be invited to consider the proposals of the Conference of the Parties to the Convention on Biological Diversity for the design and implementation of incentive measures (as endorsed through decision VI/15) and identify ways and means to see this guidance developed further, specifically for inland water ecosystems.

2.3.5. SBSTTA should compile and disseminate studies on valuation of inland water ecosystem goods and services; and identify ways and means to further integrate the use of economic valuation into national inland water-related plans, programmes and policies (e.g., within integrated water management approaches) as a core component of policy reform.

2.3.6. In collaboration with key partners such as OECD, International Association for Impact Assessment (IAIA), IUCN, WWF, the Ramsar STRP and Secretariat and relevant stakeholders, the Executive Secretary should compile information on relevant guidance, resource kits and other information on incentive measures, including that relating to the development of incentives options through water rights, markets, pricing policies and land use and tenure. More specifically, he may wish to:

- (a) Compile and disseminate case-studies and best practices on the use of incentive measures for the management of inland water ecosystem goods and services;
- (b) Further explore the advantages and disadvantages of wetland mitigation banking, including the identification of institutional requirements, possible shortcomings and limitations;
- (c) Further explore the respective advantages and disadvantages of tax/charge approaches as well as their interaction, including the identification of institutional requirements, possible shortcomings and limitations;
- (d) Identify ways and means to further integrate the use of incentive measures into inland water-related plans, programmes and policies, including opportunities for the removal or mitigation of perverse incentives;

- (e) Further monitor recent discussions on incentive measures with a view to identifying other measures of specific use for the sustainable management of inland water ecosystems.

*Main partners*

Secretariat and STRP of the Ramsar Convention on Wetlands, IUCN, WWF, IWMI.

*Other collaborators*

Relevant international, regional and national organizations and interested Parties.

**GOAL 2.4:** To implement the programme of work for the Global Initiative on Communication, Education and Public Awareness (as adopted by the Conference of the Parties to the Convention on Biological Diversity in its decision VI/19), giving particular attention to matters relating to the conservation and sustainable use of the biological diversity of inland water ecosystems

*Context and linkages*

Article(s) of the Convention on Biological Diversity: 13

Strategic Plan Objectives: 3.1, 3.4, and 4.1

Related element(s) of first programme of work: paragraph 9(i)

Intra- and inter-programmatic linkages: Programme of work for the Global Initiative on Communication, Education and Public Awareness (as adopted by the Conference of the Parties in decision VI/19)

Plan of Implementation of the World Summit: paragraphs 7(c) and 41(d)

*Objectives*

- (a) Comprehensive and well-targeted national programmes for communication, education and public awareness for the conservation and sustainable use of the biological diversity of inland water ecosystems are put in place and operate effectively.
- (b) Key national, catchment/river basin and local-level decision makers and stakeholders are identified and appropriate communication mechanisms are established between them.

*Activities of the Parties*

2.4.1. Review the Global Initiative on Communication, Education and Public Awareness (CEPA) contained in decision VI/19 with a view to identifying how best to promote its application for supporting the implementation of the programme of work on inland water biological diversity, as appropriate, taking into account the second CEPA programme adopted by the Conference of the Contracting Parties to the Ramsar Convention at its eighth meeting.

2.4.2. In undertaking activity 2.4.1, identify case-studies and best practices and provide these to the Executive Secretary to be made available to other Parties.



2.4.3. Ensure effective working linkages between the focal points for the Convention on Biological Diversity, and the Ramsar (government and non-government) focal points for wetlands communication, education and public awareness, including the amalgamation, at a national level, of communication, education and public awareness (CEPA) programmes under both conventions.

2.4.4. Identify key national, catchment/river basin and local-level decision makers and stakeholders and establish appropriate communication and awareness raising mechanisms to ensure they are all informed of, and supporting through their actions, the implementation of this programme of work.

2.4.5. Undertake suitable initiatives to enhance awareness of the knowledge held by indigenous and local communities and the appropriate procedures, such as prior informed consent, for accessing such knowledge in accordance with national legislation on access to traditional knowledge.

2.4.6. Review, and as necessary reform, formal educational curricula to ensure they are operating to inform and educate about the conservation and sustainable use of the biological diversity of inland water biological diversity.

See also activity 3.1.5 in relation to the communication of research findings.

#### *Supporting activities of the Executive Secretary*

2.4.7. In collaboration with key partners and collaborators, review the global initiative on communication, education and public awareness and develop and make available guidance for Parties on how best to promote its application for supporting this programme of work.

2.4.8. Pursuant to activity 2.4.2, make available to Parties case-studies, advice on best practice approaches, plus other sources of information and expertise in the field of communication, education and public awareness.

#### *Main partners*

UNEP, UNESCO, Ramsar Secretariat and CEPA Working Group, IUCN, Wetlands International.

#### *Other collaborators*

Ramsar national focal points for communication, education and public awareness, other multilateral environmental agreements, relevant international, regional and national organizations and donor agencies.

**GOAL 2.5:** Promote the effective participation of indigenous and local communities and relevant stakeholders in the conservation and sustainable use of biological diversity of inland water ecosystems in accordance with national laws and applicable international obligations

#### *Context and linkages*

Article(s) of the Convention on Biological Diversity: 8(j), 10, 17, 18

Strategic Plan objectives: 4.3

Related element(s) of first programme of work: 9(l)

Intra- and inter-programmatic linkages:

Goal 2.1 (Integration with other sectors etc)

Goal 3.3 (Cultural, environmental and social impact assessment)

Plan of Implementation of the World Summit: paragraphs 7(c), 24, 40(b), (d) and 66(a)

### *Objective*

Relevant national stakeholders, including representatives of indigenous and local communities, are involved, as far as appropriate, in the policy-making and in the planning, implementation and monitoring of the implementation of the programme of work.

### *Activities of the Parties*

2.5.1. Promote effective participation of indigenous and local communities in accordance with Article 8(j) in the development of management plans and in the implementation of projects that may affect inland water biological diversity.

2.5.2. Implement Article 8(j) as related to inland water biological diversity.

2.5.3. Promote the full and effective participation and involvement of indigenous and local communities and relevant stakeholders as appropriate, in policy-making, planning and implementation in accordance with national laws.

2.5.4. Implement capacity-building measures to facilitate the participation of indigenous and local communities and the application of traditional knowledge favourable to the conservation of biodiversity, with their prior informed consent in accordance with national laws, in the management, conservation and sustainable use of biological diversity of inland water ecosystems.

### *Activities of the Executive Secretary*

2.5.5. Promote the implementation of the programme of work and decisions of the Conference of the Parties on Article 8(j) and related provisions.

### *Main partners*

FAO and other relevant organizations.

## PROGRAMME ELEMENT 3: KNOWLEDGE, ASSESSMENT AND MONITORING

GOAL 3.1: To develop an improved understanding of the biodiversity found in inland water ecosystems, how these systems function, their ecosystem goods and services and the values they can provide

### *Context and linkages*

Article(s) of the Convention on Biological Diversity: 5, 7, 12, 14, 17 and 18

Strategic Plan objectives: 1.2, 1.3, 2.1, 2.5, 3.1, 3.3 and 3.4

Related element(s) of first programme of work: paragraphs 1, 8(a), 9(d), 13, 15(b), 16, 18 and 21

Intra- and inter-programmatic linkages:

Goal 1.1 relates to implementation of the ecosystem approach

Goal 2.4 (Communication, education and public awareness) is relevant also.

This goal also has links with all other goals under programme element 3.

Plan of Implementation of the World Summit: paragraph 40(c)

### *Objectives*

- (a) Develop an improved picture of the status and trends of the biological diversity of inland waters, its uses, taxonomy and threats and ensure adequate dissemination of this information.
- (b) Establish, maintain and further develop expertise in inland water biological diversity and ecosystems.

### *Activities of the Parties*

3.1.1. Encourage, and where possible support, applied research to gain an improved understanding of the status, trends, taxonomy and uses of biological diversity in inland water ecosystems, including transboundary systems where applicable.

3.1.2. Promote research to improve the understanding of the social, economic, political and cultural drivers within civil society that are directly impacting on the conservation and sustainable use of the biological diversity of inland waters.

3.1.3. In line with the Global Taxonomy Initiative (GTI) encourage studies aimed at improving the understanding of the taxonomy of the biological diversity of inland water ecosystems.

3.1.4. Support efforts to achieve international consistency and interoperability of taxonomic nomenclature, databases and metadata standards, as well as data-sharing policies.

3.1.5. As part of national communication, education and public awareness activities/programme (see goal 2.4), provide mechanisms for disseminating research findings to all relevant stakeholders, in a form which will be most useful to them. Make this same information available to the Executive Secretary for sharing with other Parties.

### *Supporting activities of the Executive Secretary*

3.1.6. Strengthen working partnerships with appropriate organizations and institutions which undertake, or can assist in mobilizing, research efforts leading to an improved understanding of the biodiversity and functioning of inland water ecosystems, and the practical application of the ecosystem approach.

3.1.7. As part of the agreed programme of work for the GTI, support and assist, in collaboration with suitable partners, the development of the series of regional guides to the taxonomy of freshwater fish and invertebrates (including adult ter-

restrial forms where appropriate) as an input to ecosystem monitoring for river and lake health (as specified by decision VI/8 of the Conference of the Parties to the Convention on Biological Diversity).

3.1.8. Further develop methods and techniques for the valuation of goods and services of inland water ecosystems, incentives and policy reform, and the understanding of ecosystem function.

*Main partners*

IUCN, UNEP, WCMC, WRI, FAO, World Fisheries Trust.

*Collaborators*

Global International Waters Assessment (GIWA), World Water Assessment Programme (WWAP), Millennium Ecosystem Assessment, FAO, Global Environmental Outlook, Global Biodiversity Information Facility (GBIF), WRI, Conservation International, (Japan) BioNET International, and other relevant international, regional and national organizations and stakeholders.

GOAL 3.2: To develop, based on inventories, rapid and other assessments applied at the regional, national and local levels, an improved understanding of threats to inland water ecosystems and responses of different types of inland water ecosystems to these threats

*Context and linkages*

Article(s) of the Convention on Biological Diversity: 7(a), (c) and (d)

Strategic Plan objectives: 2.1, 3.1, 3.3 and 3.4

Related element(s) of first programme of work: paragraphs 6, 7, 8 (b), 9(e)(i)–(iv) and 9(m)(v), 12, 19 and 20

Intra- and inter-programmatic linkages:

Goal 1.2. (Integrating biodiversity conservation into water management)

Goal 1.3. (*In situ* conservation through protected areas)

Goals 3.3. and 3.4.

Plan of Implementation of the World Summit: paragraph 66(c)

*Objectives*

- (a) Assessments and inventories of inland water biodiversity undertaken, including the urgent identification of stressed inland water ecosystems and those mentioned in Annex I of the Convention.
- (b) Rapid assessments, using suitable indicators, being undertaken for inland water biodiversity, in particular in small island developing States and States where inland water ecosystems suffer from ecological disasters and urgent provision of support to develop and implement national strategies for the prevention and mitigation of ecological disasters in inland water ecosystem types.

- (c) Build national capacity for undertaking the above-mentioned assessments through appropriate mechanisms.

See also goal 3.3 in relation to environmental, cultural and social impact assessments.

### *Activities of the Parties*

3.2.1. In accordance with the priorities set down in national biodiversity strategies and action plans, undertake comprehensive national inventories and assessments of inland water biological diversity, which may be regarded as important in accordance with the terms of Annex I of the Convention. Furthermore, undertake assessments of threatened habitats and species, and conduct inventories and impact assessments of alien species in inland water ecosystems using the guidelines adopted by the Conference of the Parties in decision VI/7 A. The transboundary nature of many inland water ecosystems should be fully taken into account in assessments, and it may be appropriate for relevant regional and international bodies to contribute to such assessments.

3.2.2. Identify the most cost-effective approaches and methods to describe the status, trends and threats of inland waters and indicate their condition in functional as well as species terms.

3.2.3. Adopt an integrated approach in the assessment, management and, where possible, remedial actions of inland water ecosystems, including associated terrestrial and in-shore marine ecosystems. It should be noted that:

- (a) Assessments should involve all stakeholders, including indigenous and local communities, should be cross-sectoral and should make full use of indigenous knowledge based on prior informed consent;
- (b) Suitable organisms should be identified as being particularly important in the assessment of inland water ecosystems. Ideally, such groups (taxa) should meet the following criteria:
- (i) The group should contain a reasonable number of species with varied ecological requirements;
  - (ii) The taxonomy of the group should be reasonably well understood;
  - (iii) The species should be easy to identify;
  - (iv) The group should be easy to sample or observe so that density - absolute or as indices—can be assessed, used objectively and treated statistically;
  - (v) The group should serve as indicators of overall ecosystem health or indicators of the development of a key threat to ecosystem health;<sup>163</sup>
- (c) In view of the great economic importance of some groups (e.g. inland water fish species and aquatic macro-invertebrates), and of the large gaps in taxonomic knowledge for many species, capacity-building in taxonomy should focus on inland water biodiversity of economic as well as ecological importance.

3.2.4. Apply the rapid assessment guidelines for national circumstances and adapt these as necessary to suit current and emerging priorities. In accordance with

<sup>163</sup> See decision IV/4, annex I, paragraph 15.

SBSTTA recommendation II/1, endorsed by the Conference of the Parties in decision III/10, assessments should be simple, inexpensive, rapid and easy to use. Such rapid assessment programmes will never replace thorough inventories.

3.2.5. Seek the resources, opportunities and mechanisms to build national capacity for undertaking assessments and inventories.

3.2.6. Promote the development of criteria and indicators for the evaluation of the impacts on inland water ecosystems from both physical infrastructure projects and watershed activities, including, *inter alia*, agriculture, forestry, mining and physical alteration, taking into consideration the natural variability of water conditions.<sup>164</sup>

3.2.7. Promote, in close cooperation with indigenous and local communities, the development of global social indicators in accordance with decision VII/30 relevant to the implementation of the programme of work on inland water biological diversity and their review through the Ad Hoc Open-ended Inter-sessional Working Group on Article 8(j) and Related Provisions.

3.2.8. Develop means of identifying and protecting groundwater recharge areas, groundwater aquifers, and surface waters fed by groundwater discharges.

3.2.9. Assessments should be carried out with a view to implementing other articles of the Convention and, in particular, to addressing the threats to inland water ecosystems within an appropriate framework such as that included in paragraphs 39–41 of the note by the Executive Secretary on options for implementing Article 7 of the Convention prepared for the third meeting of the Conference of the Parties (UNEP/CBD/COP/3/12). Of particular importance is the undertaking of environmental impact assessments on biological diversity of development projects involving inland water ecosystems.

### *Supporting activities*

3.2.10. Make available to Parties guidelines for rapid, simple, inexpensive, and easy-to-use assessments of inland water biological diversity, taking into account the different types of such ecosystems and regional considerations, and giving special consideration to the priority needs of small island developing States, and States in which inland water ecosystems are suffering from ecological disasters.

3.2.11. In collaboration with the Ramsar Convention and other partners, make available to Parties guidance for:

- (a) Undertaking national inventories and assessments of inland water biological diversity;
- (b) The identification of stressed inland water ecosystems;
- (c) The national elaboration of Annex I of the Convention on Biological Diversity in relation to biological diversity of inland waters;
- (d) A list of indicators grouped as driver, state, impact, and response to pressures on biological diversity of inland water ecosystems (taking into account the implementation of decision VI/7 B of the Conference of the Parties to the Convention on Biological Diversity, on monitoring and indicators).

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<sup>164</sup> See decision IV/4, annex I, paragraph 9(e)(ii).

3.2.12. Through continued collaboration with global and regional assessments including, but not restricted to, the Global International Waters Assessment (GIWA), the World Water Assessment Programme (WWAP), the Millennium Ecosystem Assessment, the FAO Fisheries Assessment, the Global Environmental Outlook (GEO), the Global Biodiversity Information Facility (GBIF), the report on State of the World's Plant and Animal Resources and the IUCN Freshwater Biodiversity Assessment and Red List of Threatened Species, seek to advance the generation of information on status and trends that can assist and support global, transboundary and national priority setting processes for the conservation and sustainable use of inland water biodiversity.

3.2.13. Make available to Parties information on the various global and regional assessments referred to in activity 3.2.10, and how these may offer information to support the implementation of national biodiversity strategies and action plans in relation to inland waters.

#### *Main partners*

Ramsar Secretariat and STRP of the Ramsar Convention on Wetlands, Conservation International.

#### *Other collaborators*

UNESCO (SIDS programme), GIWA and WWAP, the Millennium Ecosystem Assessment and other relevant international, regional and national organizations particularly those active in the small island States. Relevant international, regional and national organizations.

**GOAL 3.3:** To ensure projects and actions with the potential to impact negatively on the biological diversity of inland water ecosystems are subjected, in accordance with national legislation and where appropriate, to suitably rigorous impact assessments, including consideration of their potential impact on sacred sites and on lands and waters traditionally occupied or used by indigenous and local communities

#### *Context and linkages*

Article(s) of the Convention on Biological Diversity: 14

Strategic Plan objectives: 2.1, 3.1, 3.3 and 3.4

Related element(s) of first programme of work: paragraphs 9(e)(ii), 18, and 20

Intra- and inter-programmatic linkages:

Goal 2.1 Strategic environmental assessments are a core part of integrating biodiversity conservation considerations into national institutions and programmes. This element of the inland waters programme of work is a further elaboration for the cross-cutting work on impact assessment being pursued by the Convention.

Plan of Implementation of the World Summit: paragraph 37

*Objectives*

- (a) Undertake environmental impact assessments, in accordance with national legislation and where appropriate, for all projects with the potential to impact on the biological diversity of inland water ecosystems, ensuring that these take into account the “inter-related socio-economic, cultural and human-health impacts, both beneficial and adverse.”<sup>165</sup>
- (b) Conduct cultural, environmental, and socio-economic impact assessments, in accordance with national legislation and where appropriate, 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, in accordance with section VII/16 (Akwé: Kon Voluntary Guidelines 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).

*Activities of the Parties:*

3.3.1. Taking into account decision VI/7A of the Conference of the Parties to the Convention on Biological Diversity, on guidelines for incorporating biodiversity-related issues into environmental impact assessment legislation and/or processes and in strategic environmental assessment, and decision VII/16, on Article 8(j) and related provisions, including the annex, decision VII/16, containing the Akwé: Kon Voluntary Guidelines 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:

- (a) Apply environmental impact assessments on water-development projects, aquaculture and watershed activities, including agriculture, forestry and mining, and best predictions with well designed sampling schemes that can adequately distinguish the effects of anthropogenic activities from natural processes;
- (b) Strengthen efforts to apply environmental impact assessments, not only of individual proposed projects, but also taking into account effects of existing and proposed developments on the watershed, catchment or river basin; and
- (c) Incorporate, where appropriate, environmental flow assessments into impact assessment processes for any projects with the potential to have negative effects on inland water ecosystems, and also undertake baseline ecosystem assessments in the planning phase to ensure that the necessary basic data will be available to support the environmental impact assessment process and the development of effective mitigation measures if necessary.

3.3.2. Apply the 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.

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<sup>165</sup> Paragraph 1 (a) of the annex to decision VI/7 A.



3.3.3. For transboundary inland water ecosystems, undertake, where feasible and appropriate and by agreement between the Parties concerned, collaborative impact and environmental flow assessments when applying the Convention's guidelines for incorporating biodiversity-related issues into environmental impact assessment legislation and/or processes and in strategic environmental assessment.

*Supporting activities of the Executive Secretary*

3.3.4. Collaborate with the International Association for Impact Assessment (IAIA) and other relevant organizations to contribute to the implementation of decision VI/7 A on further development and refinement of the guidelines, particularly to incorporate all stages of the environmental impact assessment processes taking into account the ecosystem approach.

3.3.5. Compile:

- (a) Information on impact assessment and other methodologies that address inland water biological diversity issues in an adaptive management framework; and
- (b) Examples of the impacts of invasive alien species and of programmes used to control their introduction and mitigate negative consequences on inland water ecosystems especially at the watershed, catchment and river-basin level.

*Main partners*

IAIA, Ramsar Convention Secretariat and STRP, IUCN, Conservation International.

The Ramsar Secretariat is expected to share with the Executive Secretary of the Convention on Biological Diversity the resolutions of the eighth meeting of the Conference of the Contracting Parties to the Ramsar Convention concerning the guidelines for integrating biodiversity considerations into environmental impact assessment legislation and/or processes and in strategic impact assessment, annexed to decision VI/7 A.

*Other collaborators*

Other relevant international, regional and national organizations, interested Parties and stakeholders.

GOAL 3.4: To introduce and maintain appropriate monitoring arrangements to detect changes in the status and trends of inland water biodiversity

*Context and linkages*

Article(s) of the Convention on Biological Diversity: 7(b)

Strategic Plan objectives: 2.1, 3.1, 3.3 and 3.4

Related element(s) of first programme of work: New element

Intra- and inter-programmatic linkages:

Goal 3.2—Indicators, national inventories, rapid and other assessments

Plan of Implementation of the World Summit: paragraph 66(c)

*Objective*

Establish and maintain national monitoring programmes for the components of inland water biodiversity, paying particular attention to those requiring urgent conservation measures and those which offer the greatest potential for sustainable use.

*Activities of the Parties*

3.4.1. Introduce appropriate monitoring regimes based on the Convention on Biological Diversity and other guidance for priority inland water biodiversity and ecosystems in the first instance, taking into account the implementation of decisions VI/7 A–C on identification, monitoring, indicators and assessments and possible adoption by the Conference of the Parties at its seventh meeting of principles for developing and implementing national-level monitoring and indicators.

*Supporting activities of the Executive Secretary*

3.4.2. Develop a proposal on the establishment of monitoring programmes for inland water ecosystems taking into account existing guidance, including the Ramsar Convention guidance, relating to the establishment of monitoring programmes for wetland sites.

*Lead partners*

Ramsar Convention Secretariat and STRP.

*Other collaborators*

Relevant international, regional and national organizations and stakeholders.

## **DECISION VII/5 | Marine and coastal biological diversity**

### **Review of the programme of work on marine and coastal biodiversity**

*The Conference of the Parties*

1. *Takes note* that progress has been made in the implementation of the programme of work at the national, regional and global levels and that facilitation of implementation has been undertaken by the Secretariat;
2. *Recognizes* that the programme of work on marine and coastal biological diversity must incorporate a diverse range of tools and approaches and address the three objectives of the Convention, and notes the need to ensure integration between the programmes of work on protected areas and on marine and coastal biological diversity, and in particular the programme element on marine and coastal protected areas, to ensure effective coordination in their implementation;
3. *Agrees* that the programme of work on marine and coastal biological diversity should be applied and interpreted consistently with national law, and where applicable, international law, including the United Nations Convention on the Law of the Sea;

4. *Decides* that the programme elements of the programme of work still correspond to global priorities, which are not fully implemented, and therefore *extends* the time period of the programme of work by an additional six years, taking into account the multi-year programme of work of the Conference of the Parties up to 2010;
5. *Notes* that the programme of work has been refined to take into account recent developments and new priorities and *endorses* for the guidance of Parties and any other relevant organizations or bodies the elaborated programme of work as presented in annex I to the present decision and its appendices 1-5, noting that Parties will implement those suggested activities that are consistent with their national priorities;
6. *Welcomes* the entry into force of the Agreement on the Conservation of Albatrosses and Petrels, and *notes* the adoption of the International Convention for the Control and Management of Ships' Ballast Water and Sediments under the International Maritime Organization and *encourages* Parties to the Convention on Biological Diversity and other Governments to consider ratifying these treaties;
7. *Agrees* that further technical advice is required to support the implementation of the programme elements related to sustainable use and to support the work of developing countries in achieving sustainable use of their marine and coastal areas, including in relation to tourism and fishing, and *requests* the Executive Secretary to work with the Food and Agriculture Organization of the United Nations and other relevant organizations to develop that advice and support;
8. *Taking into account* the report of the Ad Hoc Technical Expert Group on biodiversity and Climate Change and the recommendations of the Subsidiary Body on Scientific, Technical and Technological Advice at its ninth meeting and decision VII/15 of the Conference of the Parties at its seventh meeting on biodiversity and climate change, *agrees* that the programme of work on marine and coastal biodiversity should address issues related to biodiversity and climate change, and *further encourages* Parties to make use of it as relevant source of useful information and take measures to manage coastal and marine ecosystems, including mangroves, seagrass beds and coral reefs so as to maintain their resilience to extreme climatic events;
9. Recognizing the particular significance of this programme of work to small island developing States, *invites* funding institutions, and development agencies to provide financial support for the implementation of the elaborated programme of work on marine and coastal biodiversity, and its annexes and appendices.

## Marine and coastal protected areas

10. *Welcomes* the report of the Ad Hoc Technical Expert Group on Marine and Coastal Protected Areas (UNEP/CBD/SBSTTA/8/INF/7),<sup>166</sup> *expresses its gratitude* to the Governments of New Zealand and the United States of America, and the World Conservation Union (IUCN), for their financial, organizational and technical support for this work, and *expresses its gratitude* to the Chair and members of the Ad Hoc Technical Expert Group for their work;

11. *Notes* that marine and coastal biodiversity is under rapidly increasing and locally acute human pressure, such that globally, regionally and nationally marine and coastal biodiversity is declining or being lost. One of the reasons for this level of threat is the very low level of development of marine and coastal protected areas;

12. *Notes* that marine and coastal protected areas have been proven to contribute to:

- (a) Protecting biodiversity;
- (b) Sustainable use of components of biodiversity; and
- (c) Managing conflict, enhancing economic well-being and improving the quality of life;

13. *Notes* that there are increasing numbers of marine and coastal protected areas, but in many cases they have not been effective because of problems related to their management (including as a result of lack of resources), size and habitat coverage;

14. *Notes also* that according to available data, marine and coastal ecosystems are severely underrepresented as protected areas, and these protected areas probably protect a very small proportion of marine and coastal environments globally and consequently make a relatively small contribution to sustainable management of marine and coastal biodiversity;

15. *Takes note with appreciation* of the joint note of the International Coral Reef Initiative and the Convention on Biological Diversity (UNEP/CBD/COP/7/INF/26) prepared pursuant to decision VI/3 of the Conference of the Parties on the International Coral Reef Initiative resolutions on small island developing States (annex I to the note) and on cold water coral reefs (see annex II to the note).

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166 The Ad Hoc Technical Expert Group adopted the following definition of “marine and coastal protected area”, which incorporates all of the IUCN categories of protected areas:

“‘Marine and coastal protected area’ means any defined area within or adjacent to the marine environment, together with its overlying waters and associated flora, fauna and historical and cultural features, which has been reserved by legislation or other effective means, including custom, with the effect that its marine and/or coastal biodiversity enjoys a higher level of protection than its surroundings.

“Areas within the marine environment include permanent shallow marine waters; sea bays; straits; lagoons; estuaries; subtidal aquatic beds (kelp beds, seagrass beds; tropical marine meadows); coral reefs; intertidal muds; sand or salt flats and marshes; deep-water coral reefs; deep-water vents; and open ocean habitats.”

## Goals of marine and coastal protected areas

16. *Agrees* that marine and coastal protected areas are one of the essential tools and approaches in the conservation and sustainable use of marine and coastal biodiversity;

17. *Notes* that there is an international body of evidence demonstrating that those marine and coastal protected areas where extractive uses are excluded have benefits for fisheries in surrounding areas, and in many cases for communities, and for sustainable tourism and other economic activities within and outside the marine and coastal protected area;

18. *Agrees* that the goal for work under the Convention relating to marine and coastal protected areas should be:

The establishment and maintenance of marine and coastal protected areas that are effectively managed, ecologically based and contribute to a global network<sup>167</sup> of marine and coastal protected areas, building upon national and regional systems, including a range of levels of protection, where human activities are managed, particularly through national legislation, regional programmes and policies, traditional and cultural practices and international agreements, to maintain the structure and functioning of the full range of marine and coastal ecosystems, in order to provide benefits to both present and future generations.

19. *Notes* that the Plan of Implementation of the World Summit on Sustainable Development promotes the conservation and management of the oceans, and agreed to develop and facilitate the use of diverse approaches and tools, including the ecosystem approach, the elimination of destructive fishing practices, the establishment of marine protected areas consistent with international law and based on scientific information, including representative networks, by 2012 and time/area closures for the protection of nursery grounds and periods, proper coastal land use, and watershed planning, and the integration of marine and coastal areas management into key sectors; and *agrees* to adopt this approach for the work of the Convention on marine and coastal protected areas, and to develop a strategy to meet this goal, including indicators of progress.

## National framework of marine and coastal protected areas

20. *Aware* that marine and coastal protected areas should be part of a wider marine and coastal management framework, *urges* Parties and other Governments, as appropriate, to make efforts to adopt, as a matter of high priority (while taking into account the resource limitations of small island developing States), such a framework, taking into account appendix 3 to annex I to the present decision;

<sup>167</sup> A global network provides for the connections between Parties, with the collaboration of others, for the exchange of ideas and experiences, scientific and technical cooperation, capacity building and cooperative action that mutually support national and regional systems of protected areas which collectively contribute to the achievement of the programme of work. This network has no authority or mandate over national or regional systems.

21. *Agrees* that an effective marine and coastal biodiversity management framework as set out in appendix 3 to annex I to the present decision would comprise sustainable management practices and actions to protect biodiversity over the wider marine and coastal environment, including integrated networks of marine and coastal protected areas consisting of:

- (a) Marine and coastal protected areas, where threats are managed for the purpose of biodiversity conservation and/or sustainable use and where extractive uses may be allowed; and
- (b) Representative marine and coastal protected areas where extractive uses are excluded, and other significant human pressures are removed or minimized, to enable the integrity, structure and functioning of ecosystems to be maintained or recovered;

22. *Agrees* that the balance between categories (a) and (b) marine and coastal protected areas, in paragraph 21 above would be selected by the country concerned;

23. *Notes* that the Ad Hoc Technical Expert Group on marine and coastal protected areas advised that certain objectives of marine and coastal protected areas, such as scientific reference areas can only be accomplished through the establishment of category (b) marine and coastal protected areas, and *encourages* Parties to take this advice into account when determining an appropriate balance between categories (a) and (b);

24. *Notes* that there are some benefits of the framework that can be provided with any degree of certainty only by including highly protected areas, and that to achieve the full benefits a network needs to include representative and distinctive areas and contain a sufficient area of the coastal and marine environment to be effective and ecologically viable;

25. *Agrees* that key factors for achieving effective management of marine and coastal protected areas include effective governance, clear national legal or customary frameworks to prevent damaging activities, effective compliance and enforcement, ability to control external activities that affect the marine and coastal protected area, strategic planning, capacity-building and having a sustainable financing for management;

26. *Urges* Parties to urgently address, through appropriate integrated marine and coastal management approaches, all threats, including those arising from the land (e.g. water quality, sedimentation) and shipping/transport, in order to maximize the effectiveness of marine and coastal protected areas and networks in achieving their marine and coastal biodiversity objectives taking into account possible effects of climate change such as rising sea levels;

27. *Agrees* that the full participation of indigenous and local communities and relevant stakeholders is important for achieving the global goal, and for the establishment and maintenance of individual marine and coastal protected areas and national and regional networks in line with decision VII/28 on protected areas;

28. *Notes* the technical advice provided by the Ad Hoc Technical Expert Group, contained in annex II to the present decision and in its report, relating to marine and coastal protected areas within national jurisdiction, and *urges* Parties and Gov-

ernments to utilize that advice in their work to establish marine and coastal protected areas networks.

### **Marine protected areas in areas beyond national jurisdiction**

29. *Notes* that there are increasing risks to biodiversity in marine areas beyond national jurisdiction and that marine and coastal protected areas are extremely deficient in purpose, numbers and coverage in these areas;

30. *Agrees* that there is an urgent need for international cooperation and action to improve conservation and sustainable use of biodiversity in marine areas beyond the limits of national jurisdiction, including the establishment of further marine protected areas consistent with international law, and based on scientific information, including areas such as seamounts, hydrothermal vents, cold-water corals and other vulnerable ecosystems;

31. *Recognizes* that the law of the sea provides a legal framework for regulating activities in marine areas beyond national jurisdiction and *requests* the Executive Secretary to urgently collaborate with the Secretary-General of the United Nations and relevant international and regional bodies in accordance with their mandates and their rules of procedure on the report called for in General Assembly resolution 58/240, paragraph 52, and to support any work of the General Assembly in identifying appropriate mechanisms for the future establishment and effective management of marine protected areas beyond national jurisdiction.

### **Assessment, monitoring and research priorities**

32. *Notes* that the research priorities and pilot projects set out in appendix 4 to annex I to the present decision would provide important assistance to national and, where appropriate, regional efforts to establish and maintain marine and coastal protected areas and national and regional networks, and that research programmes on the conservation of marine and coastal biodiversity resources are needed while setting up national biodiversity research priorities;

33. *Agrees* to incorporate the research priorities and pilot projects contained in appendix 4 to annex I to the present decision into the programme of work on marine and coastal biodiversity, and *requests* the Executive Secretary to identify partners to adopt the research priorities and undertake these projects as a matter of urgency;

34. *Notes* that it is necessary to develop research programmes on the conservation of marine biological diversity resources beyond marine and coastal protected areas, with a view to establishing protected-area networks.

### **International support for the creation of networks of marine and coastal protected areas**

35. *Urges* Parties, other Governments and relevant organizations to provide active financial, technical and other support for the establishment of a global system of marine and coastal protected area networks and the implementation within it of relevant provisions contained in this decision, including identification

and removal of barriers to the creation of marine and coastal protected areas, and removal of perverse incentives for unsustainable activities in the marine and coastal environment, pursuant to decision VI/15, on incentive measures, within the framework of relevant marine-related international law;

36. *Decides* to 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 for activities relating to the establishment and maintenance of marine and coastal protected areas and networks of marine and coastal protected areas and in particular to assist Parties to develop systems to make their marine and coastal protected area networks self-sustaining in the medium to long term;

37. *Notes* that further technical advice related to network design and in particular ecological coherence of networks may be needed to assist Parties in implementation work, and requests the Executive Secretary, in consultation with the Bureau of Subsidiary Body on Scientific, Technical and Technological Advice, to identify appropriate mechanisms for developing this advice.

### **Monitoring progress toward the global goal**

38. *Invites* the World Conservation Monitoring Centre of the United Nations Environment Programme, in collaboration with relevant organizations and authorities, to provide and maintain up-to-date information on marine and coastal protected areas, in line with the proposed categories for inventory and contextual information set out in annex III below, to provide a basis for the assessment work under the Convention;

39. *Requests* the Executive Secretary to provide an assessment of progress toward the global goal, as part of reporting on the programme of work on marine and coastal biological diversity;

### *Mariculture*

40. *Welcomes* the summary report of the Ad Hoc Technical Expert Group on Mariculture (UNEP/CBD/SBSTTA/8/9/Add.2) and the full report of the Group as presented as an information document for the eighth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (UNEP/CBD/SBSTTA/8/INF/6);

41. *Expresses its appreciation* to the Food and Agriculture Organization of the United Nations (FAO) for the technical support and meeting facilities provided for the meeting of the Ad Hoc Technical Expert Group on Mariculture;

42. *Takes note* of the negative biodiversity effects of mariculture, as described in section II of the summary report of the Ad Hoc Technical Expert Group on Mariculture, and of the methods and techniques available for their mitigation, as described in section III of that summary report;

43. *Notes also* that, in section IV of the summary report, the Ad Hoc Technical Expert Group identified some positive effects for biodiversity of some forms of mariculture with native species;



44. *Urges* Parties and other Governments to adopt the use of relevant methods and techniques for avoiding the adverse effects of mariculture on marine and coastal biological diversity, and incorporate them into their national biodiversity strategies and action plans;

45. *Recognizes* the complexity of mariculture activities, the highly variable circumstances of different geographical areas, mariculture practices and cultured species, as well as social, cultural and economic conditions, which will influence mitigation options, and, accordingly, taking into account the special needs of and the difficulties faced by stakeholders in developing countries, *recommends* that Parties and other Governments adopt the use of the following specific methods, techniques or practices for avoiding the adverse biodiversity-related effects of mariculture:

- (a) The application of environmental impact assessments, or similar assessment and monitoring procedures, for mariculture developments, with due consideration paid to the scale and nature of the operation, as well as carrying capacities of the environment, taking into account the guidelines on the integration of biodiversity considerations in environmental impact assessment legislation and/or processes and in strategic impact assessment, endorsed by the Conference of the Parties in its decision VI/7 A, as well as the recommendations endorsed in decision VI/10, annex II, on 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. There is a need to address the likely immediate, intermediate and long-term impacts on all levels of biodiversity;
- (b) Development of effective site-selection methods, in the framework of integrated marine and coastal area management, taking into account the special needs and difficulties encountered by stakeholders in developing countries;
- (c) Development of effective methods for effluent and waste control;
- (d) Development of appropriate genetic resource management plans at the hatchery level and in the breeding areas, including cryopreservation techniques, aimed at biodiversity conservation;
- (e) Development of controlled low-cost hatchery and genetically sound reproduction methods, made available for widespread use, in order to avoid seed collection from nature, where appropriate. In cases where seed collection from nature cannot be avoided, environmentally sound practices for spat collecting operations should be employed;
- (f) Use of selective fishing gear in order to avoid or minimize by-catch in cases where seed are collected from nature;
- (g) Use of native species and subspecies in mariculture;
- (h) Implementation of effective measures to prevent the inadvertent release of mariculture species and fertile polyploids, including, in the framework of the Cartagena Protocol on Biosafety, living modified organisms (LMOs);

- (i) Use of proper methods of breeding and proper places of releasing in order to protect genetic diversity;
- (j) Minimizing the use of antibiotics through better husbandry techniques;
- (k) Ensuring that fish stocks used for fish meal and fish oil are managed in such a way as to be sustainable and to maintain the trophic web;
- (l) Use of selective methods in industrial fisheries to avoid or minimize by-catch;
- (m) Considering traditional knowledge, where applicable as a source to develop sustainable mariculture techniques;

46. *Urges* Parties and other Governments to adopt relevant best management practices and legal and institutional arrangements for sustainable mariculture, taking into account the special needs and difficulties encountered by stakeholders in developing countries, in particular through implementing Article 9 of Code of Conduct on Responsible Fisheries, as well as other provisions in the Code dealing with aquaculture, recognizing that it provides necessary guidance to develop legislative and policy frameworks at the national, regional and international levels;

47. *Requests* the Executive Secretary to undertake a comprehensive review of relevant documents on best practices relevant to mariculture, and to disseminate the results, as well as relevant case studies, through the clearing-house mechanism prior to the tenth meeting of the Subsidiary Body on Scientific, Technical and technological Advice;

48. *Agrees* to incorporate the research and monitoring priorities identified by the Ad Hoc Technical Expert Group on Mariculture as outlined in appendix 5 to annex I to the present decision into the programme of work on marine and coastal biological diversity;

49. *Recommends* that the Executive Secretary, in collaboration with the Food and Agriculture Organization of the United Nations and other relevant organizations, explore ways and means for implementing these research and monitoring priorities, including an evaluation of means through which mariculture can be used to restore or maintain biodiversity;

50. *Recommends* that the Executive Secretary, in collaboration with the Food and Agriculture Organization of the United Nations and other relevant organizations, harmonize the use of terms in regard to mariculture by further developing and adopting the glossary of the Food and Agriculture Organization of the United Nations;

51. *Expresses its support* for regional and international collaboration to address transboundary impacts of mariculture on biodiversity, such as spread of disease and invasive alien species;

52. *Decides* to promote technical exchange and training programmes, and transfer of tools and technology;

53. *Decides* to examine the need for support through the financial mechanism to developing country Parties for country-driven activities aimed at enhancing capabilities to mitigate the adverse effects of mariculture on biological diversity.

## **Conservation and sustainable use of deep seabed genetic resources beyond national jurisdiction: issues arising from the study of the relationship between the Convention on Biological Diversity and the United Nations Convention on the Law of the Sea**

54. *Requests* the Executive Secretary, in consultation with Parties and other Governments and the International Seabed Authority, and in collaboration with international organizations, such as the United Nations Division for Ocean Affairs and the Law of the Sea, the United Nations Environment Programme, and the Intergovernmental Oceanographic Commission of the United Nations Educational, Cultural and Scientific Organization, if appropriate, to compile information on the methods for the identification, assessment and monitoring of genetic resources of the seabed and ocean floor and subsoil thereof, in areas beyond the limits of national jurisdiction; compile and synthesize information on their status and trends including identification of threats to such genetic resources and the technical options for their protection; and report on the progress made to the Subsidiary Body on Scientific, Technical and Technological Advice;

55. *Welcomes* United Nations General Assembly resolution 58/240 of December 2003 and *invites* the Parties to raise their concerns regarding the issue of conservation and sustainable use of genetic resources of the deep seabed beyond limits of national jurisdiction at the next meeting of the General Assembly and *further invites* the General Assembly to further coordinate work relating to conservation and sustainable use of genetic resources of the deep seabed beyond the limits of national jurisdiction;

56. *Invites* Parties and other States to identify activities and processes under their jurisdiction or control which may have significant adverse impact on deep seabed ecosystems and species beyond the limits of national jurisdiction, in order to address Article 3 of the Convention.

## **Conservation and sustainable use of biological diversity in marine areas beyond the limits of national jurisdiction**

57. *Recalling* paragraph 32(a) and (c) of the Plan of Implementation from the World Summit on Sustainable Development, that calls on the international community to “maintain the productivity and biodiversity of important and vulnerable marine and coastal areas, including in areas within and beyond national jurisdiction;”

58. *Notes* that United Nations General Assembly in paragraph 51 of its resolution 58/240, has reiterated “its call for urgent consideration of ways to integrate and improve, on a scientific basis, the management of risks to the marine biodiversity of seamounts, cold water coral reefs and certain other underwater features”;

59. *Recalls* paragraph 52 of General Assembly resolution 58/240, in which the Assembly “invites the relevant global and regional bodies, in accordance with their mandate, to investigate urgently how to better address, on a scientific basis, including the application of precaution, the threats and risks to vulnerable and threatened marine ecosystems and biodiversity beyond national jurisdiction; how existing treaties and other relevant instruments can be used in this process consistent with

international law, in particular with the Convention, and with the principles of an integrated ecosystem-based approach to management, including the identification of marine ecosystem types that warrant priority attention and to explore a range of potential approaches and tools for the protection and management”;

60. *Concerned about* the serious threats to the biological diversity, *stresses* the need for rapid action to address these threats on the basis of the precautionary approach and the ecosystem approach, in marine areas beyond the limits of national jurisdiction, in particular areas with seamounts, hydrothermal vents, and cold-water corals, other vulnerable ecosystems and certain other underwater features, resulting from processes and activities in such areas;

61. *Calls upon* the General Assembly and other relevant international and regional organizations, within their mandate, according to their rules of procedure, to urgently take the necessary short-term, medium-term and long-term measures to eliminate/avoid destructive practices, consistent with international law, on scientific basis, including the application of precaution, for example, consideration on a case by case basis, of interim prohibition of destructive practices adversely impacting the marine biological diversity associated with the areas identified in paragraph 60 above;

62. *Recommends* Parties to also urgently take the necessary short-term, medium-term and long-term measures to respond to the loss or reduction of marine biological diversity associated with the areas identified in paragraph 60 above.

## **ANNEX I**

### **ELABORATED PROGRAMME OF WORK ON MARINE AND COASTAL BIOLOGICAL DIVERSITY**

#### **I. Vision, Mission, Goals and Targets of the Programme of Work on Marine and Coastal Biological Diversity**

##### **A. OVERALL VISION**

1. The overall vision that the effective implementation of the elaborated programme of work on marine and coastal biological diversity strives to attain is to halt the loss of marine and coastal biological diversity nationally, regionally and globally and secure its capacity to provide goods and services.

##### **B. MISSION**

2. The overall goal of the programme of work on marine and coastal biodiversity, consistent with the Strategic Plan of the Convention, is to promote the implementation of the three objectives of the Convention and achieve significant reduction of the current rate of marine and coastal biological diversity loss by the year 2010.

##### **C. GOALS AND TARGETS**

3. Requests SBSTTA at its tenth or eleventh meeting to further refine the proposal for the integration of outcome-oriented targets into the programme of work on

marine and coastal biodiversity taking into account, as appropriate, the framework in annex II of decision VII/30 on the future evaluation of progress on the Strategic Plan, and taking into account that these goals and targets should be viewed as flexible framework within which national and/or regional targets may be developed, according to national priorities and capacities, and decides that outcome-oriented targets are a key priority at SBSTTA.

## II. Basic principles

4. In accordance with paragraphs 2–14 of the annex to decision IV/5, the ecosystem approach and the precautionary approach have a central role in guiding all activities undertaken as part of the programme of work, and thus provide the foundation for its implementation. The success of the programme of work also relies on scientific research aimed at providing understanding of the functioning of the broader ecosystem in terms of its component parts and their connectivity. Research efforts oriented towards the information needs of management ensure that management decisions are based on best available science in the context of the precautionary approach. The roster of experts continues to provide the Executive Secretary with a valuable source of expertise in marine and coastal biological diversity, and its continued use, expansion and updating is encouraged. The programme of work will also use and draw upon scientific, technical and technological knowledge of local and indigenous communities in keeping with the contents of Article 8(j) of the Convention, as well as community and user-based approaches.
5. The programme of work may be implemented on the following levels:
  - (a) NATIONAL AND LOCAL, which provide the primary level of implementation of the activities in the programme of work;
  - (b) REGIONAL, where appropriate, through regional organizations, arrangements and bodies;
  - (c) GLOBAL, where appropriate, through international organizations and appropriate bodies.
6. The involvement of all relevant stakeholders in implementation of the programme of work should be promoted. The role of the Secretariat is to promote and facilitate the implementation of the programme of work.
7. The implementation of the programme of work should be carried out with the full and effective participation of indigenous and local communities as appropriate and respect of their rights under domestic and applicable international law. In this context, Article 6.18 of the FAO Code of Conduct for Responsible Fisheries, which highlights the need to protect the preferential access rights of fishers and fishworkers, particularly those engaged in subsistence, small-scale and artisanal fisheries, to traditional fishing grounds and resources, should be noted.
8. In accordance with the Millennium Development Goals, the implementation of the programme of work aims to make a direct contribution to poverty alleviation. Its successful implementation will require national and regional capacity-building and financial resources for developing country Parties, in particular the least developed and small island developing States among them.

### III. Programme elements

#### PROGRAMME ELEMENT 1: IMPLEMENTATION OF INTEGRATED MARINE AND COASTAL AREA MANAGEMENT (IMCAM)

GOAL: To promote and improve the implementation of IMCAM at the local, national and regional level.

OPERATIONAL OBJECTIVE 1.1: *To apply appropriate policy instruments and strategies, including building of capacity, for the effective implementation of IMCAM.*

*Suggested activities:*

- (a) To promote, within the framework of IMCAM, the integration of biological diversity concerns in all socio-economic sectors adversely impacting the marine and coastal environment.
- (b) To promote the application of ecosystem-based management, including through integration of coastal management activities and watershed management.
- (c) To identify obstacles to the implementation of IMCAM nationally and regionally, and develop and implement strategies, such as partnerships, tools and other means, to overcome those obstacles, including provision of guidance on the application of such tools.
- (d) To encourage the application of the ecosystem approach, promote integrated multidisciplinary and multisectoral coastal and ocean management at the national level, and encourage States in developing ocean policies and mechanisms on integrated coastal management.
- (e) To promote the identification or establishment of national and, where appropriate, regional processes for developing advice on the application of IMCAM and issues identified under the operational objective.
- (f) To assist the development of national and regional capacity-building.
- (g) To provide information on relevant legal and institutional issues, having regard to the United Nations Convention on the Law of the Sea (UNCLOS) and other related international and regional agreements.
- (h) To assist the development of appropriate education and public awareness programmes at all levels.
- (i) To provide guidance on maintenance and wider application of local and traditional knowledge.
- (j) To cooperate with and build upon the Large Marine Ecosystem (LME) concept, as well as specific LME projects that are ongoing or planned.

*Ways and means*

The activities should be carried out by Parties acting individually or under regional agreements, assisted by regional and international organizations, and the Executive Secretary. An ad hoc technical expert group on implementation of integrated marine and coastal area management (SBSTTA recommendation VIII/3 A, annex) will provide guidance on implementation of activity (c).

OPERATIONAL OBJECTIVE 1.2: *To undertake direct action to protect the marine environment from negative impacts.*

*Suggested activities*

- (a) To promote adequate protection of areas important for reproduction such as spawning and nursery areas and restoration of such areas and other important habitats for marine living resources.
- (b) To promote action to reduce and control sea-based sources of pollution.
- (c) To achieve substantial progress in protecting the marine environment from land-based activities through effective application of the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities and other appropriate instruments, including proper coastal land use, watershed planning, and integration of integrated marine and coastal area management into key sectors.
- (d) To promote urgent and special attention and measures in respect to closed and semi-closed seas.
- (e) To take measures to reduce by-catch.

*Ways and means*

The activities should be carried out by Parties acting individually or under regional agreements where appropriate and assisted by regional and international organizations, including the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities. The Executive Secretary should assist Parties in implementation.

OPERATIONAL OBJECTIVE 1.3: *To develop guidelines for ecosystem evaluation and assessment, paying attention to the need to identify and select indicators, including social and abiotic indicators that distinguish between natural and human-induced effects.*

*Suggested activities*

- (a) To promote the development of sets of national indicators on which to base decision-making; and convene regional workshops to help select key indicators.
- (b) To identify existing organizations and initiatives.
- (c) To promote the identification of key habitats for marine living resources on a regional basis, with a view to further develop policies for action to prevent physical alteration and destruction of these habitats, and pursue restoration of degraded habitats, including, *inter alia*, coral-reef systems.
- (d) To promote the establishment or strengthening of mechanisms for research, monitoring and assessment of marine and coastal ecosystems and their living resources.
- (e) To promote exchange of information and experience using the clearing-house mechanism and other appropriate mechanisms.
- (f) To collaborate with relevant organizations in the preparation of guidelines.

- (g) To facilitate the establishment of a regular process under the United Nations for global reporting and assessment of the state of the marine environment, including socio-economic aspects, both current and foreseeable, building on existing regional assessments.

*Ways and means*

The Executive Secretary should support the implementation of activities (a) at the global level, (b), (e), (f), and (g). Parties should implement (a), (b), (c), (d), and (e) at the national level and under regional agreements where appropriate, with regional organizations, such as regional seas conventions and action plans, taking a lead role on relevant activities at the regional level.

**PROGRAMME ELEMENT 2: MARINE AND COASTAL LIVING RESOURCES**

**GOAL:** To ensure the conservation and sustainable use of marine and coastal living resources.

**OPERATIONAL OBJECTIVE 2.1:** *To promote ecosystem approaches to the conservation and sustainable use of marine and coastal living resources, including the identification of key variables or interactions, for the purpose of assessing and monitoring, first, components of biological diversity; second, the sustainable use of such components; and, third, ecosystem effects.*

*Suggested activities*

- (a) To develop collaborative links with relevant organizations and institutions, including in regards to cooperative activities aimed at protecting biodiversity in marine areas beyond national jurisdiction.
- (b) To promote the exchange of information and experience using appropriate mechanisms.
- (c) To promote the identification and development of ecosystem approaches compatible with the sustainable use of marine and coastal living resources.
- (d) To promote the identification both of components of the ecosystems which are critical to the functioning of the ecosystem and of key threats.
- (e) To promote capacity-building at local, national and regional levels, including local and traditional knowledge.
- (f) To carry out a study on the effects of fish and invertebrate stock enhancement on marine and coastal biological diversity at the species and genetic levels.
- (g) To implement the 1995 Code of Conduct for Responsible Fisheries taking note of the relevant FAO international plans of action and technical guidelines.
- (h) To eliminate destructive fishing practices, and restore and maintain fisheries stocks to sustainable levels by the year 2015, including through financial assistance to developing countries, in particular small island developing States, for improved enforcement, surveillance and patrolling and recognizing the importance of use of sustainable fishing practices, including traditional fishing practices.



- (i) To maintain the productivity and biodiversity of important and vulnerable marine and coastal areas, including areas within and beyond national jurisdiction.
- (j) To promote, in collaboration with the Global Taxonomy Initiative, the strengthening of taxonomic expertise at regional and national levels.

#### *Ways and means*

The activities should be carried out by Parties acting individually or under regional agreements where appropriate, and regional and international organizations. The Executive Secretary will assist Parties in implementation, and should carry out activity (f).

**OPERATIONAL OBJECTIVE 2.2:** *To make available to the Parties information on marine genetic resources in marine areas beyond national jurisdiction and, as appropriate, on coastal and marine genetic resources under national jurisdiction from publicly available information sources.*

#### *Suggested activities*

- (a) To compile and synthesize information on the methods for the identification, assessment and monitoring of genetic resources of the seabed and ocean floor and subsoil thereof, beyond the limits of national jurisdiction, and information on their status and trends including identification of threats to such genetic resources and the technical options for their protection and report on the progress made to SBSTTA.
- (b) To identify activities and processes under national jurisdiction or control which may have significant adverse impact on deep seabed ecosystems and species beyond the limits of national jurisdiction, in order to address Article 3 of the Convention on Biological Diversity.

#### *Ways and means*

Activity (a) should be carried out by international organizations, such as the United Nations Division for Ocean Affairs and the Law of the Sea, the United Nations Environment Programme, and the Intergovernmental Oceanographic Commission of the United Nations Educational, Cultural and Scientific Organization, as appropriate with the support of the Executive Secretary. Activity (b) should be undertaken by Parties and other States.

**OPERATIONAL OBJECTIVE 2.3:** To gather and assimilate information on, build capacity to mitigate the effects of, and to promote policy development, implementation strategies and actions to address: (i) the biological and socio-economic consequences of physical degradation and destruction of key marine and coastal habitats including mangrove ecosystems, tropical and cold-water coral-reef ecosystems, seamount ecosystems and seagrass 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 mangrove forests and rehabilitate damaged coral reef; and in particular (ii) the

impacts of mangrove forest destruction, 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.

*Suggested activities*

- (a) Activities on coral bleaching and physical degradation and destruction of coral reefs as adopted in decision VI/3 and as amended in decision VII/5 are contained in appendices 1 and 2 below.
- (b) Other activities relevant to non-coral ecosystems will be developed by Parties and, where appropriate, by regional organizations.

*Ways and means*

The Executive Secretary should facilitate implementation, through active collaboration with 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. The other activities should be carried out by Parties acting individually or under regional agreements and regional and international organizations.

*OPERATIONAL OBJECTIVE 2.4: To enhance the conservation and sustainable use of biological diversity of marine living resources in areas beyond the limits of national jurisdiction.*

*Suggested activities*

- (a) To identify threats to the biological diversity in areas beyond the limits of national jurisdiction, in particular areas with seamounts, hydrothermal vents, and cold-water corals, and certain other underwater features.
- (b) To urgently take the necessary short-term, medium-term and long-term measures to eliminate/avoid destructive practices, consistent with international law, on scientific basis, including the application of precaution, for example, consideration, on a case by case basis, of interim prohibition of destructive practices adversely impacting the marine biological diversity associated with marine areas beyond the limits of national jurisdiction, in particular areas with seamounts, hydrothermal vents, and cold-water corals, other vulnerable ecosystems and certain other underwater features.

*Ways and means*

Activities (a) and (b) should be carried out by Parties, the United Nations General Assembly and other relevant international and regional organizations, within their mandate, and according to their rules of procedure.

## PROGRAMME ELEMENT 3: MARINE AND COASTAL PROTECTED AREAS

GOAL: The establishment and maintenance of marine and coastal protected areas that are effectively managed, ecologically based and contribute to a global network<sup>168</sup> of marine and coastal protected areas, building upon national and regional systems, including a range of levels of protection, where human activities are managed, particularly through national legislation, regional programmes and policies, traditional and cultural practices and international agreements, to maintain the structure and functioning of the full range of marine and coastal ecosystems, in order to provide benefits to both present and future generations.

OPERATIONAL OBJECTIVE 3.1: *To establish and strengthen national and regional systems of marine and coastal protected areas integrated into a global network and as a contribution to globally agreed goals.*

*Suggested activities*

- (a) To establish effective marine and coastal biodiversity management frameworks as set out in appendix 3 below, which would comprise sustainable management practices and actions to protect biodiversity over the wider marine and coastal environment, including integrated networks of marine and coastal protected areas consisting of:
  - (i) Marine and coastal protected areas, where threats are managed for the purpose of biodiversity conservation and/or sustainable use and where extractive uses may be allowed; and
  - (ii) Representative marine and coastal protected areas where extractive uses are excluded, and other significant human pressures are removed or minimized, to enable the integrity, structure and functioning of ecosystems to be maintained or recovered.

In establishing these frameworks, the appropriate balance between categories (i) and (ii) above would be selected by the country concerned.

*Ways and means:*

Activity (a) should be carried out by Parties acting individually or under regional agreements and regional and international organizations. Funding agencies should support implementation of these activities.

OPERATIONAL OBJECTIVE 3.2: *To enhance the conservation and sustainable use of biological diversity in marine areas beyond the limits of national jurisdiction.*

*Suggested activities:*

- (a) To support any work of the United Nations General Assembly in identifying appropriate mechanisms for the future establishment and effective management

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<sup>168</sup> A global network provides for the connections between Parties, with the collaboration of others, for the exchange of ideas and experiences, scientific and technical cooperation, capacity building and cooperative action that mutually support national and regional systems of protected areas which collectively contribute to the achievement of the programme of work. This network has no authority or mandate over national or regional systems.

of marine protected areas beyond national jurisdiction.

*Ways and means*

Activity (a) should be carried out by the Executive Secretary in support of the Secretary-General of the United Nations.

**OPERATIONAL OBJECTIVE 3.3:** *To achieve effective management of existing marine and coastal protected areas.*

*Suggested activities*

- (a) To achieve effective management of marine and coastal protected areas through good governance, clear legal or customary frameworks to prevent damaging activities, effective compliance and enforcement, ability to control external activities that affect the marine and coastal protected area, strategic planning, capacity building and sustainable financing.
- (b) To address, through appropriate integrated marine and coastal management approaches, all threats, including those arising from the land (e.g. water quality, sedimentation) and shipping/transport, in order to maximize the effectiveness of marine and coastal protected areas and networks in achieving their marine and coastal biodiversity objectives taking into account possible effects of climate change such as rising sea levels.
- (c) To facilitate relevant stakeholder and indigenous and local community participation as an essential component of implementing operational objective 3.3.

*Ways and means*

The activities should be carried out by Parties acting individually or under regional agreements and regional and international organizations. Funding agencies should support implementation of these activities.

**OPERATIONAL OBJECTIVE 3.4:** *To provide support for and facilitate monitoring of national and regional systems of marine and coastal protected areas.*

*Suggested activities*

- (a) To provide active financial, technical and other support for the establishment of a global system of marine and coastal protected area networks and the implementation within it of relevant provisions contained in this operational objective, including identification and removal of barriers to the creation of marine and coastal protected areas, and removal of perverse incentives for unsustainable activities in the marine and coastal environment, pursuant to decision VI/15, on incentive measures, within the framework of relevant marine-related international law.
- (b) To provide and maintain, in collaboration with the World Conservation Monitoring Centre of the United Nations Environment Programme, in collaboration with relevant organizations and authorities, up-to-date information on marine and coastal protected areas in order to provide a basis for assessment of progress made in implementing the operational objective.

- (c) Promote transfer of appropriate technology and closely collaborate with regional initiatives to fund activities, such as monitoring, geared towards conservation and sustainable use of marine and coastal biological diversity.

*Ways and means*

The activities should be carried out by Parties acting individually or under regional agreements, and regional and international organizations, such as the World Conservation Monitoring Centre of the United Nations Environment Programme. The Executive Secretary should facilitate their implementation. Funding agencies should support implementation of the activities.

*OPERATIONAL OBJECTIVE 3.5: To facilitate research and monitoring activities that reflect identified global knowledge gaps and priority information needs of management of marine and coastal protected areas.*

*Suggested activities*

- (a) To collaborate with relevant organizations in the preparation of project proposals to facilitate the implementation of the research and monitoring priorities outlined in appendix 4 below.
- (b) To identify and implement an appropriate mechanism for developing advice related to network design and ecological coherence of networks.
- (c) Using the clearing-house mechanism, to assist the exchange of information on research, management issues and problems (including incentive measures) between marine protected area managers, to facilitate continuous improvement in management effectiveness across the global network<sup>169</sup> of marine protected areas.

*Ways and means*

Activity (a) should be carried out by Parties acting individually or under regional agreements and regional and international organizations, including research organizations. The Executive Secretary should facilitate its implementation. The Executive Secretary should take the lead role in implementing activities (b) and (c).

**PROGRAMME ELEMENT 4: MARICULTURE**

**GOAL:** To prevent or minimize the negative impacts of mariculture on marine and coastal biodiversity and to enhance any positive effects of mariculture using native species.

*OPERATIONAL OBJECTIVE 4.1: To promote use of techniques, which minimize adverse impact of mariculture on marine and coastal biological diversity.*

<sup>169</sup> A global network provides for the connections between Parties, with the collaboration of others, for the exchange of ideas and experiences, scientific and technical cooperation, capacity building and cooperative action that mutually support national and regional systems of protected areas which collectively contribute to the achievement of the programme of work. This network has no authority or mandate over national or regional systems.

*Suggested activities*

- (a) To adopt the use of relevant methods, techniques and practices for avoiding the adverse effects of mariculture on marine and coastal biological diversity, and to incorporate them into national biodiversity strategies and action plans as appropriate, including:
- (i) The application of environmental impact assessments, or similar assessment and monitoring procedures, for mariculture developments, with due consideration paid to the scale and nature of the operation, as well as carrying capacities of the ecosystem, taking into account the guidelines on the integration of biodiversity considerations in environmental impact assessment legislation and/or processes and in strategic impact assessment, endorsed by the Conference of the Parties in its decision VI/7 A, as well as the recommendations endorsed in decision VI/10, annex II, on 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. There is a need to address the likely immediate, intermediate and long-term impacts on all levels of biodiversity;
  - (ii) Development of effective site-selection methods, in the framework of integrated marine and coastal area management, taking into account the special needs and difficulties encountered by stakeholders in developing countries;
  - (iii) Development of effective methods for effluent and waste control;
  - (iv) Development of appropriate genetic resource management plans at the hatchery level and in the breeding areas, including cryo-preservation techniques, aimed at biodiversity conservation;
  - (v) Development of controlled low-cost hatchery and genetically sound reproduction methods, made available for widespread use, in order to avoid seed collection from nature, where appropriate. In cases where seed collection from nature cannot be avoided, environmentally sound practices for spat collecting operations should be employed;
  - (vi) Use of selective fishing gear in order to avoid or minimize by-catch in cases where seed are collected from nature;
  - (vii) Use of native species and subspecies in mariculture;
  - (viii) Implementation of effective measures to prevent the inadvertent release of mariculture species and fertile polyploids, including, in the framework of the Cartagena Protocol on Biosafety, living modified organisms (LMOs);
  - (ix) Use of proper methods of breeding and proper places of releasing in order to protect genetic diversity;
  - (x) Minimizing the use of antibiotics through better husbandry techniques;
  - (xi) Ensure that fish stocks used for fish meal and fish oil are managed in such a way as to be sustainable and to maintain the trophic web;

- (xii) Use selective methods in industrial fisheries to avoid or minimize by-catch;
  - (xiii) Considering traditional knowledge, where applicable as a source to develop sustainable mariculture techniques.
- (b) To adopt best-management practices and legal and institutional arrangements for sustainable mariculture, taking into account the special needs and difficulties encountered by stakeholders in developing countries, in particular through implementing Article 9 of Code of Conduct on Responsible Fisheries, as well as other provisions in the Code dealing with aquaculture, recognizing that it provides necessary guidance to develop legislative and policy frameworks at the national, regional and international levels.
  - (c) To undertake a comprehensive review of relevant documents on best practices relevant to mariculture, and to disseminate the results, as well as relevant case-studies, through the clearing-house mechanism prior to the tenth meeting of SBSTTA.
  - (d) To facilitate the implementation of the research and monitoring priorities outlined in appendix 5 below in collaboration with FAO and other relevant organizations.
  - (e) To undertake regional and international collaboration to address trans-boundary impacts of mariculture on biodiversity, such as the spread of disease and invasive alien species.

#### *Ways and means*

Activities (a) and (b) should be carried out by Parties acting individually or under regional agreements, with assistance from regional and international organizations, such as FAO, and the Executive Secretary. The Executive Secretary should take a lead role in carrying out activity (c). Activity (d) should be carried out by Parties, regional and international organizations, including research organizations. The Executive Secretary should facilitate its undertaking. Funding agencies should support implementation of activities (a) and (b).

#### PROGRAMME ELEMENT 5: INVASIVE ALIEN SPECIES

**GOAL:** To prevent the introduction of invasive alien species into the marine and coastal environment, and to eradicate to the extent possible those invasive alien species that have already been introduced.

**OPERATIONAL OBJECTIVE 5.1:** *To achieve better understanding of the pathways and the causes of the introduction of alien species and the impact of such introductions on biological diversity.*

#### *Suggested activities*

- (a) To analyse and disseminate information, data and case-studies on the subject.
- (b) To develop collaboration with relevant organizations.

- (c) To ensure exchange of information and experience, using appropriate mechanisms.

*Ways and means*

The Executive Secretary should take a lead role in carrying out these activities, with assistance from international organizations (such as the International Maritime Organization (IMO) and the Global Invasive Species Programme (GISP)), regional organizations and Parties.

**OPERATIONAL OBJECTIVE 5.2:** *To put in place mechanisms to control all pathways, including shipping, trade and mariculture, for potential invasive alien species in the marine and coastal environment.*

*Suggested activities*

- (a) To invite relevant organizations such the International Maritime Organization (IMO), the Global Invasive Species Programme (GISP), the Food and Agriculture Organization of the United Nations (FAO), and the Ramsar Convention on Wetlands 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.
- (b) To implement measures to address invasive alien species in ballast water, including through the International Convention for the Control and Management of Ships' Ballast Water and Sediments.
- (c) To exchange information and facilitate technical cooperation on effective techniques for prevention, early detection, eradication and control of invasive alien species in the marine and coastal environments.
- (d) To develop close collaboration between national agencies responsible for development of controls on pathways for entry of alien species and national input into the work of the International Plant Protection Convention (IPPC), the Organization internationale des epizooties (OIE), IMO and other relevant international agreements.
- (e) To identify means to support capacity-building in developing countries to strengthen their ability to conduct work related to alien species.
- (f) To promote international cooperation by inviting relevant organizations and donor agencies to collaborate in the assessment of the effects of invasive alien species, and in the elaboration of strategies for their control.

*Ways and means*

Activities (b), (c) and (d) should be carried out by Parties. The other activities should be carried out by the Executive Secretary and the organizations identified in activity (a) as well as by, and in collaboration with, Parties.



OPERATIONAL OBJECTIVE 5.3: *To maintain an incident list on introductions of alien species.*

*Suggested activities*

To continue making updated information on introductions of alien species available through the clearing-house mechanism or other appropriate mechanisms.

*Ways and means*

The Executive Secretary should take a lead role in facilitating the implementation of this activity in collaboration with relevant international and regional organizations and the Parties.

PROGRAMME ELEMENT 6: GENERAL

OPERATIONAL OBJECTIVE 6.1: *To assemble a database of initiatives on programme elements through a cooperative approach with relevant organizations and bodies, with special emphasis on integrated marine and coastal areas management.*

*Suggested activities*

- (a) To identify sources of relevant information and to make this readily available.
- (b) To request inputs from Parties, countries and relevant organizations and bodies.
- (c) To carry out desk evaluations with the assistance of the roster of experts of available information and to disseminate the findings through the clearing-house mechanism.

*Ways and means*

The Executive Secretary should take a lead role in implementing these activities.

OPERATIONAL OBJECTIVE 6.2: *To undertake effective collaboration, cooperation and harmonization of initiatives with relevant conventions, organizations and agencies while recognising their independent mandates.*

*Suggested activities*

- (a) To identify and implement meaningful joint activities and initiatives with relevant conventions, organizations and agencies aimed at the implementation of this work programme.
- (b) To collaborate with regional seas conventions and action plans, including identification of joint programmes of work on topics of mutual relevance, including through regionally elaborated criteria for the establishment and management of marine and coastal protected areas under regional seas conventions and action plans.

*Ways and means*

The Executive Secretary should take a lead role in implementing these activities, together with relevant conventions, organizations and agencies, coordinating units of regional seas conventions and action plans.

#### IV. Enabling activities

- (a) Provision of assistance to coastal in particular small island developing States in developing ocean policies and mechanisms for integrated management.
- (b) Strengthening capacity of small island developing States, through training and other appropriate means, to enable their effective participation in all elements of the Convention's research priorities on marine and coastal biodiversity, including conducting new research and compiling information from past research on marine and coastal biodiversity within and beyond national jurisdiction.
- (c) Updating and strengthening existing legislation as well as institutions dealing with marine and coastal issues, including the effective implementation of laws and regulations, and the strengthening and rationalization of institutions.
- (d) Provision of assistance to coastal in particular small island developing States in coordinating policies and programmes at the regional and subregional level, aimed at the conservation and sustainable management of fishery resources and implementation of integrated coastal area management plans, including through the promotion of sustainable coastal and small-scale fishing activities and, where appropriate, the development of related infrastructure.
- (e) Formation of cooperative partnerships between countries or between international and/or regional organizations to enhance capacity for implementation, taking into account the special needs and difficulties experienced by stakeholders in developing countries and by indigenous and local communities.
- (f) Increase of scientific, technical and technological collaboration, including integrated assessment at the global and regional levels, including the appropriate transfer of marine science and marine technologies and techniques for the conservation and management of living marine resources and expanding ocean-observing capabilities for timely prediction and assessment of the state of the marine environment.
- (g) Build capacity in marine science, information and management, through, *inter alia*, promoting the use of environmental impact assessments and environmental evaluation and reporting techniques for projects or activities that are potential harmful to the coastal and marine environments and their living and non-living resources.
- (h) Undertaking capacity-building, technology transfer, public education and awareness, and training in order to improve the implementation of this programme of work.
- (i) Urgent mobilization of financial resources and identification of additional funding mechanisms for implementation of this programme of work, including provision of information about creative arrangements and tools for financing conservation and sustainable use, and through establishment of additional mechanisms, such as small grants funds.
- (j) Provision of financial and technical support by the international community including by distant water fishing nations to developing countries in particular small island developing States for sustainable management and use of marine and coastal resources.

- (k) Continued review of obstacles to implementation of each programme element leading to development of additional enabling activities, as appropriate, aimed at overcoming such obstacles.
- (l) To develop close collaboration between national agencies responsible for implementation of this programme of work and related supporting activities.

#### *Ways and means*

The Executive Secretary should collaborate with funding agencies, international and regional organizations and Parties to facilitate the implementation of these activities. Activity (b) will be carried out in collaboration with regional fisheries and research organizations as appropriate. Funding agencies should support implementation of activity (b).

## V. Time schedule

The elaborated programme of work will be effective for a six year time period (2004–2010) at which point its implementation will be reviewed in depth, and the programme of work will be revised as necessary. Additional elaboration of the programme of work prior to 2010 can be undertaken through decisions of the Conference of the Parties in response to emerging global priorities needing urgent action.

## Appendix 1 Specific Work Plan on Coral Bleaching

The following activities, adopted by the Conference of the Parties in its decision VI/3 and amended by decision VII/5, would be incorporated under operational objective 2.3 of the elaborated programme of work. These amendments recognize the urgent need to implement action to manage coral reefs for resistance and resilience to, and recovery from, episodes of raised sea temperatures and/or coral bleaching.

### 1. MANAGEMENT ACTIONS AND STRATEGIES TO SUPPORT REEF RESILIENCE, REHABILITATION AND RECOVERY

- (a) The identification, investigation and management of areas of demonstrated resilience and/or resistance to raised sea-temperature and coral-bleaching events:<sup>170</sup>

#### *Highest priority actions for implementation*

- (i) Identification of coral-reef areas that exhibit resistance and/or resilience to raised sea temperatures;

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#### 170 *Ongoing initiatives*

- (i) Areas exhibiting resistance to raised sea temperatures and/or high resilience to coral bleaching have been identified, for example in the Indian Ocean, through coral-reef monitoring programmes.
- (ii) Management regimes to enhance post-bleaching coral recruitment in key areas have been tested, for example with regard to control of coral-grazing species.
- (iii) A users manual for building resistance and resilience to climate change in natural systems, entitled “Buying time” was launched at the World Parks Congress, and is being tested in tropical marine ecosystems.

- (ii) Identification, development, testing and refinement of management regimes to enhance reef resilience to and recovery from raised sea temperatures and/or coral bleaching, through the application of, *inter alia*, appropriate protective status, reduction of reef stressors, management of reef communities, etc;

*Other priority actions*

- (iii) Investigation of factors that enable such resistance such as, *inter alia*, cool currents, cold up-wellings, genetic tolerance in certain species and genotypes of corals to raised sea temperatures, presence and necessary abundance of reef associated biodiversity that imbues reef systems with resilience to raised sea temperatures and/or coral bleaching;
  - (iv) Investigation of the role(s) of sea currents, local and larger scale, in the resistance and/or resilience of coral reefs to raised sea temperatures and/or coral bleaching.
- (b) The recognition of the urgent need to supplement coral-reef information gathering and monitoring schemes with focused management activities and the need to assist, support and enable such activities.

*Highest priority action for implementation*

- (i) Establish or expand as appropriate, and begin to implement, international support programmes to developing countries, countries with economies in transition, and in particular, least developed countries and small island developing states, to support such activities;
- (c) Identify and develop pilot projects for management interventions that promise to increase reef resilience to bleaching in both the short and long-term and/or strengthen reef recovery post-bleaching:<sup>171</sup>

*Highest priority actions for implementation*

- (i) Explore utility and feasibility of short-term management interventions to reduce severity of bleaching or to facilitate recovery after bleaching;
  - (ii) Instigate and support initiatives for marine protected areas managers where resilience principles are being actively applied and tested;
  - (iii) Encourage the application of resilience principles in coral reef areas outside marine protected areas.
- (d) Integrate bleaching resilience principles into marine protected areas network design of networks of marine protected areas, and management approaches,

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<sup>171</sup> *Ongoing initiatives*

- (i) The Nature Conservancy Reef Resilience Program is launching a programme aimed at establishing pilot projects that will test the application of resilience principles in coral-reef MPAs.
- (ii) The benefits of reducing fishing pressure during post-bleaching recovery of damaged coral reefs are being experimentally evaluated in East Africa.

such as improving water quality, preventing overfishing and protecting biodiversity.<sup>172</sup>

*Highest priority action for implementation*

- (i) Establish programmes that provide information and resources to support understanding and application of resilience principles into the design.
- (e) Increase implementation of management actions, including identifying and promoting key demonstration sites that reduce localized stressors on reefs in order to increase reef resilience to mass bleaching.<sup>173</sup>

*Highest priority action for implementation*

- (i) Assist reef managers to identify, implement and justify actions that can reduce localized stressors on reefs that will increase reef resilience to mass bleaching.

## 2. INFORMATION GATHERING

- (a) Implement and coordinate targeted research programmes, including predictive modelling, that increase understanding of:
  - (i) The *mechanisms* that cause mass coral bleaching, including:
    - (a) Mechanisms that lead to variation in bleaching symptoms;
    - (b) Bleaching thresholds for varying geographic locations and reef types for acute and chronic increases in sea temperature;
    - (c) Synergistic relationships between global stressors, such as warming, increased exposure to ultraviolet radiation and localized threats that already place reefs at risk, such as pollution and overfishing;
  - (ii) The *long-term consequences* of mass coral bleaching under different warming scenarios, including:
    - (a) Understanding of acclimation and adaptation potential;
    - (b) Prediction of the frequency and extent of mass bleaching;
    - (c) Predict the impacts of mass bleaching on ecological, social, and economic systems;

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### 172 *Ongoing initiatives*

- (i) The Nature Conservancy Reef Resilience Toolkit provides guidance for MPA managers to integrate bleaching resilience principles into MPA design and management.
- (ii) The Great Barrier Reef Marine Park Authority (GBRMPA) has included resilience principles among the major considerations informing the recent rezoning process for the entire Great Barrier Reef Marine Park.

### 173 *Ongoing initiatives*

- (i) The United States Coral Reef Task Force (CRTF) has implemented a program of Local Action Strategies to guide and support local management actions that reduce localized stressors on reefs.
- (ii) The GBRMPA is implementing a range of management initiatives within a framework designed to reduce local stressors and therefore improve reef resilience to climate change. Key actions have included a program to reduce land-based sources of pollution (Great Barrier Reef water quality protection plan) and a full revision of marine park zoning to improve biodiversity protection (representative areas programme).

- (iii) The *management* of mass coral bleaching, including:
  - (a) Effectiveness of short-term management interventions in promoting reef resilience to bleaching and/or recovery after mass bleaching events;
  - (b) Understanding of strategies to support long-term resilience to bleaching, including connectivity, removal of localized stressors, etc.

While many of the information needs for the work plan will require a longer term commitment, the work plan recognizes the need to act now to minimize the impacts of coral bleaching through effective management initiatives.<sup>174</sup>

### *Highest priority actions for implementation*

- (i) Document instances of mass bleaching, and the impacts of coral-bleaching and coral-mortality events on social and economic systems.

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#### 174 *Ongoing initiatives*

- (i) The Ad Hoc Study Group on Indicators of Coral Bleaching and Subsequent Effects was established September 2000 under the auspices of 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; examine potential mechanisms of reef corals for adaptation/acclimatization to global environmental change; 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). The World Fish Center also host ReefBase, the official database of GCRMN, with data of over 8,000 coral reefs over the world. 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, with the most recent edition published in October 2002.
- (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 and the Wider Caribbean funded by 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. Monitoring programs dedicated to detect impacts from coral bleaching are being implemented within the Asia Pacific region (including the Great Barrier Reef), with a program underway currently to maximise their compatibility for regional summaries.
- (vi) Under the International Coral Reef Action Network (ICRAN), the World Conservation Monitoring Centre (WCMC) and the World Fish Center are exploring the integration and availability of map-based products through the WCMC website and through ReefBase.
- (vii) 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.

- tems, and provide relevant information to the Secretariat through the Global Coral Reef Monitoring Network (GCRMN);
- (ii) Compile, and disseminate through the clearing-house mechanism, current scientific information on the survival of reef-building corals under global warming to allow some prediction of the adaptation and survival of the biological diversity of coral reefs in coming decades;
  - (iii) Collaborate with the Global Coral Reef Monitoring Network to compile information on existing networks, databases and Websites which can provide up-to-date information of the status of coral reefs and their threats; and assess the quality of the data they contain and methodologies used for data collection and analysis.

*Other priority actions*

- (iv) 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;
  - (v) Support further targeted research programmes that investigate:
    - (a) The mechanisms that cause mass bleaching specifically, explanations for variation in bleaching patterns, identification of bleaching thresholds, and synergistic relationships between local threats and warming seas;
    - (b) The impacts of coral-bleaching and coral-mortality events on social and economic systems;
    - (c) Management options to building reef resilience to mass bleaching on both short- and long-time frames.
- (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.<sup>175</sup>

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175 *Ongoing initiatives*

- (i) The objectives of the Ad Hoc Study Group on Indicators of Coral Bleaching and Subsequent Effects 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 variable relevant to coral bleaching, mortality and recovery, as well as many socio-economic parameters associated with coral-reef services (see activity (a)).
- (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. The Great Barrier Reef Marine Park Authority has implemented a baseline monitoring program to detect long term impacts of coral bleaching on the Great Barrier Reef.
- (v) GCRMN is currently developing rapid assessment methodology for socio-economic and biophysical parameters in the Eastern African region, especially for

*continues...*

*Highest priority actions for implementation*

- (i) Implement baseline assessments and long-term monitoring to measure the extent and severity of coral bleaching, mortality and recovery and identify reef areas that exhibit resistance and/or resilience to raised sea temperatures;
- (ii) Compile information on the socio-economic impacts of coral bleaching on communities dependent on coral reefs;
- (iii) Widen, as necessary, the research on socio-economic impacts of coral bleaching on communities dependent on coral reefs;
- (iv) 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.

*Other priority actions*

- (v) Support ongoing assessment and monitoring initiatives, such as those of UNESCO, ICRAN, the regional seas conventions and action plans, GCRMN, UNEP and CORDIO;
  - (vi) Encourage and facilitate large-scale (ecosystem) monitoring programs that can generate an understanding of the large scale (both temporal and spatial) impacts of coral bleaching, with a particular focus on the cumulative ecosystem-level impacts of successive coral-bleaching events (The WWF Global Protocol to be released 2004 provides a framework for this).
- (c) Develop a rapid response capability to document coral bleaching and mortality, including in developing countries and remote areas, encompassing establish-

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use in developing countries where limited resources do not always allow for regular high-intensive monitoring.

- (vi) WWF are leading a collaboration with ReefBase and the Great Barrier Reef Marine Park Authority to release in 2004, a global toolkit containing standardised methods for assessment and monitoring impacts of coral-bleaching events.
- (vii) The United States CRTE, GBRMPA and IUCN are producing a publication *Responding to Global Change: A Reef Manager's Guide to Coral Bleaching* for release in 2004. The Guide builds on the IUCN/CBD publication *Management of Bleached and Severely Degraded Coral Reefs*. It will assist reef managers to predict, understand and respond to coral-bleaching events, and take action to minimise the severity and irreversibility of damage from climate change through supporting the natural resilience of reef ecosystems. The publication evaluates and synthesises current and emerging experience and knowledge to guide efforts to reduce the impact of climate change on coral reefs.
- (viii) 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 coordinate assessment of meteorological variables relevant to coral bleaching, mortality and recovery.
- (ix) WCMC and ICLARM are exploring the integration and availability of map-based products through the WCMC Website and through ReefBase.



ment of training programmes, survey protocols, expert advice, and contingency funds or rapid release of special project funding.<sup>176</sup>

*Highest priority actions for implementation*

- (i) Support the development of standardized training modules and manuals on detection and documentation of coral-bleaching events, mortality or recovery monitoring;
- (ii) Build capacity and facilitate the development and implementation of coral-bleaching response plans, taking into account expert guidance, by organisations responsible for managing and conserving coral reefs.

*Other priority actions*

- (iii) Organize, in conjunction with relevant agencies and organizations, 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.<sup>177</sup>

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*176 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 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.
- (vi) The Great Barrier Reef Marine Park Authority has developed a comprehensive Coral Bleaching Response Program, which is being used as a model for development of other regional response programs (Program document can be downloaded from <[www.gbrmpa.gov.au](http://www.gbrmpa.gov.au)>).
- (vii) The *Reef Manager's Guide to Coral Bleaching* being released in 2004 by the US Coral Reef Task Force and GBRMPA provides protocols, advice and a framework for planning and implementing rapid responses to coral-bleaching events. The plan for dissemination of the guide includes targeted capacity building in partnership with NOAA and The Nature Conservancy.

*177 Ongoing initiatives*

- (i) GCRMN has developed a comprehensive Status of Coral Reefs of the World report to be updated every two years, with the most recent edition published in October 2002. This report is largely based of national and regional contributions.  
*continues...*

*Highest priority action for implementation*

- (i) 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).

*Other priority actions*

- (ii) Include coral bleaching in existing national biodiversity strategies and action plans under the Convention on Biological Diversity;
  - (iii) Support and collaborate with GCRMN the expansion of existing networks and initiatives at the regional and national level conducting coral-reef status assessments and monitoring.
- (e) 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, and expand the use of early-warning systems for coral bleaching.<sup>178</sup>

*Highest priority action for implementation*

- (i) Recognizing that coral bleaching is a cumulative-stress response (i.e., global warming is the most widespread stressor, but known localized human-induced stresses exacerbate events), develop education programmes addressing an ecosystem approach to coral-reef management and the relation between coral-reef health, resilience and other human-induced stresses.

*Other priority actions*

- (ii) Encourage space agencies and private entities to maintain deployment of relevant sensors and to initiate design and deployment of specialized technology for shallow-oceans monitoring;

- (ii) The Secretariat of the Convention on Biological Diversity, in accordance with decision V/3, paragraph 7 of the Conference of the Parties, 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 Reports offer 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.

178 *Ongoing activities*

- (i) The UNEP Division of Environmental Information, Assessment and Early Warning coordinates a variety of information available from remote sensing technologies and organizations that facilitate dissemination of such information.
- (ii) Under the International Coral Reef Action Network, 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.
- (iii) HotSpots satellite temperature monitoring programme.

- (iii) Expand the use of existing early warning systems and support the development of Web-based early warning systems and other means (for example, *in situ* temperature loggers);
  - (iv) Encourage mechanisms to make accessible high-resolution multi-spectrum imagery at low cost to coral-reef scientists and managers worldwide with a view to those scientists and managers that are based in developing countries;
  - (v) Work with the UNEP Division of Environmental Information, Assessment and Early Warning, GCRMN and other relevant organisations to develop local community capacity for remote and local level validation exercises, and training in interpretation of weather patterns related to the onset of bleaching;
  - (vi) Assist in developing and enhancing national and regional capacities of developing coastal States, and in particular small island developing States, on monitoring, interpretation, and application of climatic and oceanographic data related to the onset of bleaching.
- (f) Facilitate initiatives that develop partnerships between scientists and managers to generate management-relevant information and products that support local management actions in response to global change.<sup>179</sup>

*Highest priority action for implementation*

- (i) Support initiatives to build capacity among reef managers to access and apply scientific information relevant to climate change and coral bleaching.

*Other priority actions*

- (ii) Develop and support initiatives to foster active working relations between scientists and managers that can increase capacity to effectively respond to global change threats to local reefs;
- (iii) Encourage investigations into the relationship between coral-bleaching events and long-term meteorological data.

### 3. CAPACITY-BUILDING

- (a) Support training for reef managers globally on existing tools for responding to mass bleaching events, including early warning prediction, rapid assessment, communication, and management interventions.<sup>180</sup>

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179 *Ongoing initiatives*

- (i) The CORDIO programme links reef managers and scientists in efforts to understand and respond to coral bleaching.
- (ii) The GEF/World Bank targeted research programme on coral bleaching has a strong focus on supporting high quality science to generate management-relevant information.
- (iii) The *Reef Manager's Guide to Coral Bleaching* released 2004 provides current and emerging information to support local management actions in response to global change.

180 *Ongoing initiatives*

The *Reef Manager's Guide to Coral Bleaching* released in 2004 compiles currently available and emerging tools for responding to mass bleaching events.

*Highest priority action for implementation*

- (i) Support activities aimed at building awareness and capacity relating to implementation of tools for responding to mass bleaching events.
- (b) Support the training of and career opportunities for relevant marine taxonomists, ecologists, and members of other relevant disciplines, particularly at the national and regional level.<sup>181</sup>

*Highest priority actions for implementation*

- (i) Develop and/or expand training opportunities for protected area managers, fishery 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;
- (ii) Encourage a network of reef management agencies in developed and developing countries, and encourage relevant exchange programmes between countries and/or regions involved in coral-reef management with particular emphasis on coral bleaching, bleaching related mortality and subsequent recovery;
- (iii) Gather, and disseminate through the clearing-house mechanism, information on existing training programmes on integrated coastal area management, best practices and related issues to sustainable management of coral reefs.

*Other priority actions*

- (iv) In recognition of the important implication of climate change for coral reefs, encourage and facilitate greater understanding within agencies responsible for reef management about coral bleaching and related global change issues for coral reefs;
- (v) Encourage incorporation 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;
- (vi) Collaborate with GCRMN and other relevant organisations to develop standardized training modules and facilitate programs to build capacity in detection and documentation of coral-bleaching events and subsequent recovery, based on international Protocols and Manager's Guides currently under development;

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181 *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 areas 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.

- (vii) Organize, in conjunction with relevant agencies and organisations, regular 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;
  - (viii) Create scholarship trust funds in each region of the regional seas programmes to provide scholarships at graduate/postgraduate level for studies on coral-reef conservation and management, giving special consideration to small island developing States;
  - (ix) 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 a section for reporting of ecological and socio-economic impacts of coral-bleaching events.
- (c) Encourage and support multidisciplinary approaches to coral-reef research, monitoring, socio-economics and management.<sup>182</sup>

*Highest priority action for implementation*

- (i) Support ICRI and GCRMN activities that encourage and support multidisciplinary approaches to coral-reef research, monitoring, socio-economics and management.
- (d) Build stakeholder partnerships, community participation programmes, and public-education campaigns and information products that address the causes and consequences of coral bleaching.<sup>183</sup>

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182 *Ongoing initiatives*

Regional seas programmes through the ICRAN strategic plan and existing programmes like CORDIO, and the UNEP Caribbean Environment Programme are increasing regional capacity towards monitoring, socio-economics and management, as related to coral bleaching. The four regions currently active under the ICRAN strategic plans are South-East Asia, Pacific, Caribbean and Eastern Africa.

183 *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 includes 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.

*Other priority actions*

- (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) Collaborate with relevant organisations to compile and disseminate relevant information from status-of-reefs reports, *Reefs at Risk*, etc., and examples of effective practical materials for general public, the media, private sector and policy makers;
- (iii) Collaborate with relevant organisations to 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).

4. POLICY DEVELOPMENT/IMPLEMENTATION

- (a) 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.<sup>184</sup>

*Other priority actions*

- (i) 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);
- (ii) Assess relevant actions of existing policy frameworks and how these are directly addressing the integrated marine and coastal areas management, in particular coral-reef issues;
- (iii) Make use of the regional seas programmes and other regional agreements (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;
- (iv) Identify and institute additional and alternative measures for securing the livelihoods of people who directly depend on coral-reef services.<sup>185</sup>

184 *Ongoing initiatives*

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

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

185 *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.

*Highest priority actions for implementation*

- (v) 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;
  - (vi) Develop pilot projects for transitioning dependent communities to alternative and sustainable livelihoods.
- (b) Initiate efforts to develop joint actions, including between national focal points, among the Convention on Biological Diversity, the United Nations Framework Convention on Climate Change, and the Convention on Wetlands to:
- (i) Develop approaches for assessing the vulnerability of coral-reef species to global warming;
  - (ii) Build capacity for predicting, monitoring and managing the impacts of coral bleaching and related mortality;
  - (iii) Identify approaches for developing response measures to coral bleaching;
  - (iv) Provide guidance to financial institutions, including the Global Environment Facility (GEF), to support such activities.<sup>186</sup>

*Other priority actions*

- (v) 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;
- (vi) Gather the outputs of the Caribbean GEF project on climate change adaptation (CPACC project) as a contribution to activities (i)–(iv) above, and disseminate relevant findings through the clearing-house mechanism and other mechanisms;
- (vii) Further development of response measures to coral bleaching and potential guidance to financial institutions, including the GEF may be needed;

*186 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).
- (iii) GEF/World Bank Targeted Research Project on Coral Bleaching.

- (viii) Develop, through a transparent consultative process, a list of international research priorities to support reef management information needs and to guide funding institutions.
- (c) Encourage FAO and regional fisheries organizations to develop and implement measures to assess and mitigate the impacts of sea-surface temperature rise on fisheries:

*Highest priority actions for implementation*

- (i) Establish no-fishing zones and limitations on fishing gear to protect breeding grounds and provide fish with refuges as well as increase reef resilience;
- (ii) Enforce legislation prohibiting destructive fishing practices that further damage coral-reef ecosystems and reduce reef resilience.

*Other priority actions*

- (iii) Encourage investigations of potentially deleterious effects of changes in oceanographic patterns and resulting impacts on target fish stocks resulting from sea-surface temperature rise;
- (iv) In collaboration with FAO, investigate strategies for management of coral-reef fisheries that are demonstrably sustainable with respect to fished stocks and the ecosystems that produce them.

## 5. FINANCING

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

*Highest priority actions for implementation*

- (i) Identify financial and technical assistance for the implementation of this work program;
- (ii) Identify financial and technical assistance mechanisms of national and private sources to assistance communities impacted by coral bleaching.

*Other priority actions*

- (iii) Promote programmes that identify the relationships among financial and technical development assistance and environmental project funding.

## Appendix 2

### **Elements of a work plan on physical degradation and destruction of coral reefs, including cold water corals**

1. *Assessments and indicators.* To provide a comprehensive analysis of the status and trends of global coral-reef ecosystems, including determination of indicators



for continued monitoring and determination of ecological and socio-economic impacts of coral-reef degradation and destruction.

2. *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.

3. *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 its effects on marine biological diversity.

4. *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.

5. *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.

## Appendix 3

### Elements of a marine and coastal biodiversity management framework

#### A. PURPOSE OF THE FRAMEWORK

1. The overall marine and coastal biodiversity management framework should fulfil the three objectives of the Convention, namely 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.

2. The framework would play a precautionary approach role to help halt losses in biodiversity and encourage recovery, notwithstanding our imperfect knowledge of the marine environment.

3. The framework should address all elements of biodiversity, as reflected in Annex I to the Convention, including the genetic, species and ecosystem levels.

4. Marine ecosystems include both benthic and pelagic elements. Most species have a mobile stage in their life cycle. As a consequence, marine systems are considered open and dispersing larvae can link distant marine, coastal and inland water habitats. This means that connectivity issues are significant in designing a marine biodiversity management framework, and one marine and coastal protected area will not be able to protect all the biodiversity within the area. A network approach is therefore essential. The network should be at an appropriate scale, which may in some cases require a regional approach. That regional approach should address

proportionality issues on a regional rather than a national scale, for example when one or a handful of countries possess most or all of a particular habitat type or the world population of a particular species.

## B. ELEMENTS OF THE FRAMEWORK

5. An effective marine and coastal biodiversity management framework would comprise sustainable management practices and actions to protect biodiversity over the wider marine and coastal environment, including integrated networks of marine and coastal protected areas consisting of:

- (a) Marine and coastal protected areas, where threats are managed for the purpose of biodiversity conservation and/or sustainable use and where extractive uses may be allowed; and
- (b) Representative marine and coastal protected areas, where extractive uses are excluded, and other significant human pressures are removed or minimized, to enable the integrity, structure and functioning of ecosystems to be maintained or recovered.

6. The balance between category (a) and (b) marine and coastal protected areas in paragraph 5 above would be selected by the country concerned.

7. This framework should respect national legislation and also respect the interests of indigenous and local communities, such as spiritual and cultural practices and socio-economic interests and, as appropriate, opportunities for the participation of indigenous and local communities in the establishment and management of marine and coastal protected areas, and in accordance with Article 8(j) and related provisions should respect, preserve and maintain traditional knowledge, innovations and practices.

## C. MARINE AND COASTAL PROTECTED AREAS WHERE EXTRACTIVE USES ARE PERMITTED

8. Marine and coastal protected areas where extractive uses are permitted would contain areas that are subject to site-specific controls that have an explicit biodiversity objective or recognized biodiversity effect. Those controls may also have other objectives (e.g., economic or social objectives). In many countries these may comprise the majority of areas within networks of marine and coastal protected areas and deliver most biodiversity benefits. Examples of such controls include controls on fishing methods (e.g., restricting bottom trawling), controls on the removal of certain species (e.g., habitat forming species), rotational closures, and controls on pollution and sedimentation.

9. Amongst the roles for these areas may be to maintain connectivity across the overall network, protect life cycle stages (e.g. as a result of spawning behaviour), and buffer the representative areas where extractive uses have been excluded.

## D. REPRESENTATIVE AREAS FROM WHICH EXTRACTION IS EXCLUDED

10. Such representative areas would be managed to maintain their integrity, structure, functioning, resilience and persistence, or to take restorative or rehabilitative

steps for biodiversity. They would encompass a full range of marine and coastal ecosystems (including those that are also unique or special), and be protected from human impacts and the effects of alien species. The key purpose of these areas would be to provide for intrinsic values, to allow us to better understand the marine and coastal environment by acting as scientific reference areas, to contribute towards marine environmental recovery, and to act as insurance against failures in management. But they will also contribute to other objectives, including socio-economic well-being, sustainable use of fisheries in adjacent areas, and public enjoyment.

11. They should be representative of all marine and coastal ecosystems and should attempt to cover centers of endemism. They should contain sufficient area and replicates to ensure that they can fulfil their objectives and be ecologically viable over time. Although the application of criteria for representativeness in the marine environment is a complex issue, experience in terrestrial protected area work, the work on marine and coastal protected areas to date, and the literature all indicate that the ‘representative’ concept will not be provided by a few small marine and coastal protected areas.

12. Protection from human impacts would mean that extraction of indigenous biota would be prevented except to the extent necessary to allow essential scientific research and education (i.e., these would be no-take reserves applying to the area or to a specified element of the ecosystem), but also that other practices which significantly impact on biodiversity (e.g. substrate alteration, changes in sediment movements, pollution, visitor disturbance of sensitive species) would be prevented or minimized.

13. These marine and coastal protected areas would be permanent, subject to any necessary changes to allow them to better achieve their objectives, taking into account natural dynamics. They would need to be viable, in the face of changing threats and long-term environmental change (e.g. climate change). Viability might depend on matters such as the nature of the legal protection, the presence of replicates, the design of the individual marine and coastal protected areas, and the connectivity between marine and coastal protected areas (directly or using other marine and coastal protected areas as stepping stones).

14. Although public access may be encouraged in order to generate educational and enjoyment benefits, these benefits would be treated as secondary to the primary purposes listed above. Public access may need to be controlled to prevent unacceptable impacts.

15. Areas would need to be geographically dispersed across biogeographic regions and would need to be ecosystem-based, rather than focus on single species.

## E. SUSTAINABLE MANAGEMENT OF THE WIDER ENVIRONMENT

16. The marine and coastal protected areas network would be sitting within a framework of sustainable-management practices over the wider marine and coastal environment.

17. Sustainable management practices over the wider marine and coastal environment could include general restrictions that would apply to the entire area (e.g., bans on certain destructive fishing methods), and site-specific restrictions imposed

for non-biodiversity purposes (e.g., trawling restrictions to protect cables, restricted areas for defence purposes). These practices can contribute to biodiversity protection in a number of ways, including:

- (a) The management of more widespread issues that pose a threat to the effectiveness of individual marine and coastal protected areas, and ultimately, the aim of regional networks. These threats usually arise from land-based sources, and include issues such as water quality, sedimentation and shipping/transport;
- (b) Providing direct benefits to biodiversity (e.g., restrictions on trawling to prevent cable damage can also protect sensitive biodiversity such as corals and sponges);
- (c) Protecting wide-ranging marine and coastal biodiversity species which are difficult to address through site-specific measures (e.g., restrictions on fishing practices that cause a by-catch of species such as albatross, marine mammals and turtles); and
- (d) Reducing impacts on the connections between marine and coastal protected areas, (e.g., by allowing the movement of larvae and wide ranging species between marine and coastal protected areas).

#### F. INTERNATIONAL SUPPORT FOR CREATION AND MANAGEMENT OF NETWORKS OF MARINE AND COASTAL PROTECTED AREAS

18. There are a large number of identified impediments to the creation and management of marine and coastal protected areas at the national level. There are a number of ways in which the international community can help to overcome these impediments. In particular, it can:

- (a) Provide active financial, technical and other support for marine and coastal protected areas work; and
- (b) Help to identify and remove both the barriers to the creation of marine and coastal protected areas, and perverse incentives for unsustainable activities in the marine and coastal environment.

#### **Appendix 4**

#### **Research priorities, including research and monitoring projects associated with programme element 3: marine and coastal protected areas**

The following research priorities and pilot projects are designed to both explore and enhance the linkages between marine and coastal protected areas and the sustainable use of marine and coastal living resources. Achieving the goal of sustainable use of living resources is dependent on the social, economic and cultural context of each marine and coastal protected area, and therefore a number of the research priorities focus on this aspect of marine and coastal protected areas. The effects of marine and coastal protected areas on population size and dynamics are investigated through priority 2.1 (connectivity and proportionality), priority 2.3(d) (climate change), priority 3.1 (size and location of marine and coastal protected areas vs. species & habitat dynamics), and priority 3.6(b) (percentage of protection required vs. size and dynamics of local population).

## A. ESTABLISHING A GLOBAL NETWORK<sup>187</sup> OF MARINE AND COASTAL PROTECTED AREAS

**PRIORITY 1.1:** Developing and implementing national, regional and global strategies towards establishing networks of marine and coastal protected areas.

*Pilot project:*

- (a) Parties, regional bodies and relevant organizations to bring to the attention of the Secretariat of the Convention on Biological Diversity existing and planned initiatives towards the development of networks of marine and coastal protected areas.
- (b) Draft action-oriented strategies for establishing marine and coastal protected areas networks, and implement those strategies in line with regional initiatives, for example by holding regional workshops.

## B. INVENTORY AND ASSESSMENT OF MARINE AND COASTAL PROTECTED AREAS AND THE GLOBAL SYSTEM

**PRIORITY 2.1:** Assessing the representativeness, connectivity and proportionality of the existing marine and coastal protected areas system.

*Pilot projects:*

- (a) Undertake initiatives to map ecosystems and habitats within regions and biogeographic areas, and determine the minimum level of broad habitat categories required for assessing representativeness of marine and coastal protected areas networks. Use this as a basis for assessing representativeness of the existing marine and coastal protected areas network. This work should use a high-level framework that is compatible with the basis for global inventory work. One possible approach to this work is to hold regional workshops.
- (b) Assess connectivity to determine bioregions, and apply this information for evaluation of the existing marine and coastal protected areas network, as well as for identifying priority areas for the future.
- (c) Assess the effectiveness of the current marine and coastal protected areas network regionally and globally for the conservation and sustainable use of migratory species.

**PRIORITY 2.2:** Developing appropriate databases at the national level to allow for an assessment of marine and coastal protected areas frameworks on a larger (regional/global) scale. Using these data to identify patterns among marine and coastal protected areas to generate priority needs for future research and approaches for adaptive management.

<sup>187</sup> A global network provides for the connections between Parties, with collaboration of others, for the exchange of ideas and experiences, scientific and technical cooperation, capacity-building and cooperative action that mutually support national and regional systems of protected areas which collectively contribute to the achievement of the programme of work. This network has no authority or mandate over national or regional systems.

*Pilot projects:*

- (a) Develop the high-level framework for the global inventory (see annex IV below), and related advice to national managers on national inventories.
- (b) Develop national databases for assessment of selected existing national/regional networks, selecting examples from the range of political, economic and biogeographic situations.
- (c) Undertake a global review of the current state of knowledge of marine and coastal protected areas by region. Provide output in a format understandable for managers and policy makers.
- (d) Compiling information that illustrates the values, benefits and unique contributions of marine and coastal biodiversity, *inter alia*, breeding, migration patterns of marine species, and spawning sites.

**PRIORITY 2.3:** Identifying the best indicators for assessing management effectiveness at various scales within an overall system.

*Pilot projects:*

- (a) Develop and test a suite of effective assessment measures, including indicators, on a number of existing sites (biological, socio-economic and governance-based indicators). Selected pilot sites must cover the range of cold, temperate and tropical regions.
- (b) Develop methods for evaluating the effectiveness of entire networks of marine and coastal protected areas.
- (c) Develop methods for adapting marine and coastal protected areas management in response to possible changing species and habitat distribution patterns, which may result from climate change.

**C. IMPLEMENTATION OF MARINE AND COASTAL PROTECTED AREAS NETWORKS**

**PRIORITY 3.1:** Develop methods to manage conflicts and generate support for adequate protection of biodiversity through area-specific approaches.

*Pilot project:*

- (a) Evaluate the long-term benefits (for example species changes, habitat changes and ecosystem changes) of protecting large-enough/significant-enough critical habitats and ecosystems, by developing case-studies.

**PRIORITY 3.2:** Establishing criteria for choosing marine and coastal protected areas in countries that lack such criteria.

*Pilot project:*

- (a) Provide a conceptual model and best practice examples of criteria for selecting marine and coastal protected areas, by undertaking linked work in a small number of selected countries.

PRIORITY 3.3: Enhancing social and economic effects of marine and coastal protected areas, particularly in terms of poverty alleviation.

*Pilot projects:*

- (a) Development of culturally sensitive marine and coastal protected areas development/management approaches to achieve effective participation, as appropriate, of indigenous and local communities and relevant stakeholders.
- (b) Develop adaptive approaches to marine and coastal protected areas establishment and management. This could be done by collection and dissemination of case studies of both best and worst-case examples of the degree to which an understanding of how target communities operate (socially/culturally) and “do business” can affect the success of the establishment and management of marine and coastal protected areas.

PRIORITY 3.4: Developing effective “learning networks”—networking among marine and coastal protected areas at the national/international level. Develop and test such networks in a representative range of test countries/regions.

*Pilot projects:*

- (a) Develop networks of communities/stakeholders to enable them to share and learn from experiences.
- (b) Compile information on existing learning networks, and develop guidance for the operation of such networks based on these experiences.

PRIORITY 3.5: Developing effective methods for integrating traditional knowledge into the establishment and management of marine and coastal protected areas.

*Pilot project:*

- (a) Develop guidelines for integration of traditional knowledge, practices and innovation, with the participation of indigenous and local communities and with their prior informed consent in accordance with national legislation, into marine and coastal protected areas establishment and management, and support these by compiling and disseminating case-studies on a wide range of examples from places where such initiatives have been undertaken (for example, New Zealand, Chile, the Wider Caribbean).

PRIORITY 3.6: Developing strategies for integrating marine and coastal protected areas and network development into long-term national and regional planning.

*Pilot projects:*

- (a) Develop strategies based on past experience and future needs for the range of geographical regions.
- (b) Develop methods for estimating the percentage of non-extractive protection required, in conjunction with national monitoring programmes, depending on the size and dynamics of local populations.

- (c) Incorporate considerations of sedimentation and water quality into planning and management processes.

## **Appendix 5**

### **Research and monitoring priorities associated with Programme Element 4: Mariculture**

At the present time there is insufficient information available about the effects of mariculture on biodiversity and its mitigation. Therefore, additional efforts, including through the use of the knowledge, innovations and practices of indigenous and local communities as appropriate, should be developed in the following areas:

(a) *General research needs:*

- (i) Development of research programmes to support establishment of efficient monitoring programmes to monitor impacts of mariculture on marine and coastal biological diversity;
- (ii) Development of criteria for judging the seriousness of biodiversity effects of mariculture;
- (iii) Subsequent establishment of monitoring programmes to detect effects of mariculture biodiversity;
- (iv) Research on the impact of escaped mariculture species on biodiversity;
- (v) Development of criteria for when environmental impact assessments are required, and for the application of environmental impact assessments at all levels of biodiversity (genes, species, ecosystems), in the context of the guidelines endorsed by the Conference of the Parties in decision VI/7 A and the recommendations endorsed in decision VI/10, annex II;
- (vi) Noting that the FAO glossary of terms is skewed towards marine capture fisheries, expansion of this glossary with regard to its terminology related to aquaculture;
- (vii) Reinforcement of global assessments of marine and coastal biological diversity.

(b) *Research related to impacts of mariculture on genetic diversity:*

- (i) Development of genetic resource management plans for broodstock;
- (ii) Research aimed at understanding genetic effects of biotechnology developments in aquaculture;
- (iii) Research aimed at understanding genetic structure of both the farmed and wild populations, including:
  - a. Effects of genetic pollution from farmed populations on wild populations;
  - b. Maintenance of genetic viability of farmed populations;
  - c. Studies of (genetics of) wild populations as potential new candidates for mariculture.



- (c) *Research related to impacts of mariculture on species diversity:*
- (i) Support for basic global-scale taxonomic studies, possibly in conjunction with the Global Taxonomy Initiative (GTI);
  - (ii) Support for studies aimed at development of responsible aquaculture using native species, including through consideration of traditional knowledge;
  - (iii) Development of methods and techniques for limiting by-catch of seed collection.
- (d) *Research related to impacts of mariculture on ecosystem diversity:*
- (i) Research on carrying capacity and carrying capacity models for planning aquaculture, especially stocking rates;
  - (ii) Comprehensive studies to quantitatively and qualitatively assess effects of mariculture on biodiversity for various aquatic ecosystems, selected by their sensitiveness degree;
  - (iii) Research on the competitive nature imposed on marine fisheries by capture and culture fisheries;
  - (iv) Studies aimed at improved understanding of the effects of inputs, such as chemicals, hormones, antibiotics and feeds on biodiversity;
  - (v) Research on the impact of diseases in cultured and wild species on biodiversity.
- (e) *Research related to socio-economics, culture, policy and legislation:*
- (i) Comparative studies on legislation, economic and financial mechanisms for regulating mariculture activity;
  - (ii) Development of quantitative and qualitative criteria to assess mariculture impacts on the environment, including cultural and social impacts, as outlined in the recommendations contained in decision VI/10, annex II.
- (f) *Monitoring programmes:*
- (i) Support for mariculture-related disease monitoring programmes at the global level;
  - (ii) Support for the transfer of biotechnological diagnostic tools for wide use;
  - (iii) Update of taxonomic database including genetic diversity at the intra-specific level.

## **ANNEX II GUIDANCE FOR THE DEVELOPMENT OF A NATIONAL MARINE AND COASTAL BIODIVERSITY MANAGEMENT FRAMEWORK<sup>188</sup>**

1. For countries with no marine and coastal protected areas or no highly protected marine and coastal protected areas, the first step should be to develop the first few marine and coastal protected areas, and the necessary mechanisms to

<sup>188</sup> Further elaboration is provided in CBD Technical Document No. 13.

allow future marine and coastal protected areas and networks to be developed. The goals and objectives of each marine and coastal protected areas should be clearly established when they are created.

2. A strategic planning approach should be adopted at the national and regional levels when developing an ecologically viable framework for the development of marine and coastal protected areas. This should be based on past experiences in effective management, large-scale factors affecting the viability and long-term goals of marine and coastal protected areas.

3. Management should focus on ensuring that each marine and coastal protected areas, and the network, are fulfilling the identified goals and objectives. This will require evaluation of effectiveness, and adaptive management over time.

4. Key factors for achieving effective management of marine and coastal protected areas include good governance, clear legal or customary frameworks to prevent damaging activities, effective compliance and enforcement, ability to control external activities that affect the marine and coastal protected areas, strategic planning, and sustainable financing.

5. Good governance will depend on having one or more bodies, each with the authority and capacity to undertake their responsibilities. When there is more than one body, including, in the case of transboundary areas, bodies in different countries, mechanisms for coordinating and integrating management will be vital.

6. The legal or customary framework should clearly identify:

- (a) Prohibited activities that will be contrary to the objectives of the marine and coastal protected areas;
- (b) Those activities which will be allowed with clear restrictions or conditions to ensure that they will not be contrary to the objectives; and
- (c) A decision-making process for all other activities.

7. Minimizing the number of discretionary activities is desirable in order to minimize potential harmful impacts in the marine and coastal protected areas.

8. Effective enforcement will depend on:

- (a) Adequate enforcement capacity, including clear responsibilities, inter-agency coordination, trained and equipped personnel and the necessary legal or customary powers;
- (b) Appropriate penalties and associated legal provisions; and
- (c) Integration between enforcement, voluntary compliance and management.

9. Governments should be encouraged to urgently address, through appropriate integrated marine and coastal management approaches, all threats, including those arising from the land (e.g., water quality, sedimentation and marine debris), and shipping/transport in order to maximize the effectiveness of marine and coastal protected areas and the network in achieving their objectives for marine and coastal biodiversity.

10. The Ad Hoc Technical Expert Group identified stakeholder participation as essential for achieving the global goal and for the establishment and maintenance of individual marine and coastal protected areas and regional networks. Stakeholder participation would be particularly important in establishing equitable sharing of benefits accruing from creation of marine and coastal protected areas. In addition, stakeholder participation would:

- (a) Allow decisions to be made in an inclusive and transparent way;
- (b) Facilitate the involvement in decision-making and management of a wide range of players, increasing the likelihood of success;
- (c) Recognize traditional rights and customs, and other interests of indigenous and local communities and other relevant stakeholders in accordance with national law as appropriate; and
- (d) Allow decisions and management to be undertaken at the appropriate level (e.g., through decentralization).

11. It was recognized that the type and extent of participation will depend on local circumstances, including issues such as the traditional rights, customs and traditions of indigenous and local communities in accordance with national law, available mechanisms and governance approaches, and the degree of interest of stakeholders.

### ANNEX III

#### IMPROVEMENT OF AVAILABLE DATA FOR ASSESSMENT OF PROGRESS TOWARDS THE GLOBAL GOAL

1. Since 1981, UNEP-WCMC has developed and maintained a global database on protected areas. The importance of this database, which is managed in collaboration with the IUCN World Commission on Protected Areas, has been broadly recognized. Within the database is a subset of clearly identified marine and coastal protected areas.

2. The Ad Hoc Technical Expert Group examined available information, consulted UNEP-WCMC (and indirectly WWF-International), and concluded that global data on marine and coastal protected areas should be improved and/or gathered in the following critical categories:

- (a) *Location* (physical coordinates and country or political unit, including the names of neighbouring country/countries where the marine and coastal protected areas is transboundary);
- (b) *Total size* of the protected area, the relative size of the marine and coastal component and, where transboundary, the total area under country jurisdiction;
- (c) *Temporal aspects* (e.g., permanency or seasonality of protection or management);
- (d) *Type of protection and management* proposed or being implemented, using a simple three-tier system:
  - (i) Representative highly-protected areas where extractive uses are excluded;

- (ii) Additional marine and coastal protected areas;
  - (iii) Sustainable-management practice in the wider coastal and marine environment;
- (e) *Effectiveness of protection and management* gauged against the regime being proposed or being implemented, using a simple three-tier system:
- (i) Currently fully effective—no significant problems known;
  - (ii) Currently partially effective—some deficiencies;
  - (iii) Currently ineffective—significant implementation problems;
- (f) *Nationally-designated names* for type of protection and management (e.g., marine park, marine and coastal nature reserve, etc.);
- (g) *Habitats protected and managed* (3D not just benthic);
- (h) *Species protected and managed* (3D not just benthic);
- (i) *Habitats and species specifically excluded from protection/management within the marine and coastal protected area* (i.e., that have no legal protection);
- (j) *Nature of threats to habitats/species*—see table 1;
- (k) *Name and contact details* of person(s) providing the above information and date on which this was done.

3. These data categories are a core set, which would provide the key information needed to evaluate progress, and success. They consist of sufficiently few categories to make data collection rapid, easy and hopefully achievable. They would not only underpin the actions of the Convention in the marine and coastal environments but are also considered to be of value to the wider conservation community at global, regional and national levels.

4. The collection of information on habitats being protected and managed would need to be structured from a standard list. This would speed up and standardize data collection. This would need to consist of no more than 15 categories and would need to take a very high level approach. Such an approach needs to be developed but could use terms such as “coral, sea grass, mangrove, estuary, seamounts, etc.” A similar approach would need to be taken over high-level categories to collect information on threats. Some first thoughts on such categories are provided in table 1 below. In both cases, a decision at the time of data collection would need to be made on which categories were relevant. Whilst this may cause difficulty on occasions, ‘fitting’ a site into this proposed management framework, any errors would be insignificant at the network, regional and global scales.

5. Data in other fields currently held within the world database on protected area of proven value to a wider audience, such as the IUCN management categories and GIS boundary data, could also be gathered but are not considered to be as important. IUCN category information will be collected for all sites on the United Nations list and so could be integrated into the above “global” categories.

6. It is also important, in the context of the Convention on Biological Diversity, that additional contextual information be gathered for each signatory country on the nature of their marine and coastal environments. This would provide bench-

marks against which data return would be analysed, progress tracked and future Convention policy determined. This information should include:

- (a) *Total area of seas under country jurisdiction in km<sup>2</sup>* in accordance with the United Nations Convention on the Law of the Sea, and the criteria against which this measurement was made (e.g., high water to seaward limit of jurisdiction, low water to seaward limit); and
- (b) *Habitat and species inventories*. In order to assess whether adequate action is being taken, habitat and species inventories to establish global extent and distribution will be required.

7. The former would enable coverage of the marine and coastal protected area network being established under the Convention on Biological Diversity at local, regional and global scales to be tracked, whilst the latter would provide a reference point against which to set future priorities for action under the Convention to address deficiencies. Both are essential for assessing achievement of the proposed global goal.

8. UNEP-WCMC and the IUCN World Commission on Protected Areas (WCPA), working in collaboration with UNEP regional seas offices and other relevant bodies, provide a vehicle by which such a consolidation and updating of global data on marine and coastal protected areas could be achieved. The United States National Oceanographic and Atmospheric Administration currently chairs the marine and coastal protected areas marine programme, and is interested in using its resources and experience of marine and coastal issues to help develop the information base for making decisions on marine and coastal protected areas.

9. The advent of Internet-based tools will greatly ease data-gathering and increase the accessibility of the information and its analysis to advise on local, regional and global progress and trends. Internet-based initiatives, and the predominate use of drop-down menus when gathering data from managers and practitioners, will also reduce data entry time and provide major advantages for the consistency and coherency, and ultimately reliability, of the dataset that needs to be gathered.

**TABLE 1: EXAMPLES OF SIX POSSIBLE HIGH-LEVEL CATEGORIES THAT COULD BE USED GLOBALLY TO STRUCTURE COLLECTION OF INFORMATION ON THE NATURE OF THE PRINCIPAL THREATS TO HABITATS/SPECIES WITHIN MARINE AND COASTAL PROTECTED AREAS\***

HIGH LEVEL CATEGORY	SUB-CATEGORIES
<b>Physical loss</b>	<ul style="list-style-type: none"> <li>• Removal (e.g., harvesting, draining to create dry land)</li> <li>• Smothering (e.g., by artificial structures, disposal of dredge spoil)</li> </ul>
<b>Physical damage</b>	<ul style="list-style-type: none"> <li>• Siltation (e.g., run-off, dredging, outfalls)</li> <li>• Abrasion (e.g., boating, anchoring, trampling)</li> <li>• Selective extraction (e.g., aggregate dredging, entanglement, turf cutting)</li> </ul>
<b>Non-physical disturbance</b>	<ul style="list-style-type: none"> <li>• Noise (e.g., boat activity)</li> <li>• Visual (e.g., recreational activity)</li> </ul>
<b>Toxic contamination</b>	<ul style="list-style-type: none"> <li>• Introduction of synthetic compounds (e.g., pesticides, antifoulants, PCBs)</li> <li>• Introduction of non-synthetic compounds (e.g., heavy metals, hydrocarbons)</li> <li>• Introduction of radio nuclides</li> </ul>
<b>Non-toxic contamination</b>	<ul style="list-style-type: none"> <li>• Nutrient enrichment (e.g., agricultural run-off, outfalls)</li> <li>• Organic enrichment (e.g., mariculture, outfalls)</li> <li>• Changes in thermal regime (e.g., outfalls, power stations)</li> <li>• Changes in turbidity (e.g., run-off, dredging)</li> <li>• Changes in salinity (e.g., water abstraction, outfalls)</li> </ul>
<b>Biological disturbance</b>	<ul style="list-style-type: none"> <li>• Introduction of microbial pathogens</li> <li>• Introduction of non-native species and translocations</li> <li>• Selective extraction of species (e.g., bait collection, wildfowling, commercial &amp; recreational fishing)</li> </ul>

\* NOTE: ONE MARINE AND COASTAL PROTECTED AREA COULD QUALIFY FOR A NUMBER OF HIGH-LEVEL CATEGORIES.

**DECISION VII/6 | Assessment processes***The Conference of the Parties*

1. *Urges* Parties and other Governments to participate actively in the relevant review processes under the Global Forest Resources Assessment and the Millennium Ecosystem Assessment, as required;
2. *Takes note* of the progress of the Millennium Ecosystem Assessment and the outline for the synthesis report that will be prepared for the Convention on Biological Diversity as contained in annex I of the progress report of the Millennium Assessment submitted to the Conference of the Parties at its seventh meeting (UNEP/CBD/COP/7/INF/34);
3. *Encourages* national focal points to participate in the review of the Millennium Ecosystem Assessment reports;
4. *Requests* the Subsidiary Body for Scientific, Technical and Technological Advice to review the findings of the Millennium Ecosystem Assessment including the synthesis report on biodiversity, to be taken into account by the Millennium Ecosystem Assessment in finalizing its reports; and to prepare recommendations to the eighth meeting of the Conference of the Parties;
5. Recognizing the need to strengthen the scientific base for decisions, *requests* the Executive Secretary to cooperate with the United Nations Environment Programme on the follow-up of the process of international environmental governance;
6. *Encourages* the Executive Secretary to continue collaborating with the international assessment of agricultural science and technology for development (UNEP/CBD/SBSTTA/9/INF/38).

**DECISION VII/7 | Environmental impact assessment and strategic environment assessment***The Conference of the Parties,*

*Noting* that, in paragraph 4 of its recommendation IX/1, the Subsidiary Body on Scientific, Technical and Technological Advice decided to follow up on decision VI/7 A at one of its future meetings, in line with the multi-year programme of work of the Conference of the Parties up to 2010;

*Urges* Parties and other Governments that have not done so to contribute case-studies on current experiences in environmental impact assessment and strategic environmental assessment procedures that incorporate biodiversity-related issues as well as experiences in applying the guidelines contained in the annex to decision VI/7 A.

**DECISION VII/8 | Monitoring and indicators: designing national-level monitoring programmes and indicators**

*The Conference of the Parties*

1. *Welcomes* the progress made by the ninth meeting of the SBSTTA on monitoring and indicators;
2. *Notes* the indicators already in use by Parties and ongoing regional and biome-related initiatives and cooperation, as reported in annex I to the note by the Executive Secretary on designing national-level monitoring programmes and indicators prepared for the ninth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (UNEP/CBD/SBSTTA/9/10), and *welcomes* the ongoing efforts on the development of biodiversity indicators within the various thematic programmes and cross-cutting themes of the Convention;
3. *Also welcomes* the report prepared by the expert meeting on indicators of biological diversity including indicators for rapid assessment of inland water ecosystems (UNEP/CBD/SBSTTA/9/INF/7);
4. *Expresses its gratitude to* the Government of the United Kingdom of Great Britain and Northern Ireland for its financial support for the expert meeting on indicators of biological diversity, the co-chairs and all the experts for their contributions to the meeting;
5. *Notes and encourages* the increased collaboration between the Convention on Biological Diversity and other conventions and organizations in facilitating the development of national-level indicators and monitoring programmes that Parties may draw upon if they so wish as well as the development of global indicators on biodiversity;
6. *Requests* the Executive Secretary to continue collaborating with the Food and Agriculture Organization of the United Nations, the Organisation for Economic Cooperation and Development, the European Environment Agency, and other relevant international and regional organizations and initiatives on the further development and consolidation of indicators relevant to the 2010 target in accordance with decision VII/30 and the thematic programmes of work of the Convention;
7. *Recognizes* that regional and national differences and different national priorities on the conservation and sustainable use of biodiversity necessitates a flexible approach at the national level but that there are benefits in promoting a more consistent framework for data gathering, computation and reporting that can contribute to the development of commonly agreed indicators at regional and global levels;
8. *Urges* all Parties that have not done so to develop a set of biodiversity indicators as part of their national strategies and action plans, taking into account, as appropriate, the targets of the Global Strategy for Plant Conservation and the target to achieve by 2010 a significant reduction in the current rate of biodiversity loss at the global, regional and national level, as well as the guidance, lessons learned and list of indicators provided in the note by the Executive Secretary prepared for the ninth meeting of the Subsidiary Body on Scientific, Technical and Technolog-



ical Advice (UNEP/CBD/SBSTTA/9/10) document, and to report on progress to the Conference of the Parties at its eighth meeting;

9. *Invites* Parties, other Governments and relevant organizations to make use of biodiversity indicators in their assessment of biodiversity, in particular in their assessment of progress towards the achievement of globally agreed targets such as those of the Global Strategy for Plant Conservation, the Strategic Plan of the Convention, the Plan of Implementation of the World Summit on Sustainable Development and the Millennium Development Goals;

10. *Agrees* that the framework contained in annex II to the note by the Executive Secretary (UNEP/CBD/SBSTTA/9/10) provides useful guidance for the development of national-level biodiversity indicators and monitoring, emphasizing the use of existing national data, indicators and evaluation methods in a participatory and accessible approach;

11. *Recognizes* that the development and use of indicators, particularly in the development phase, requires a financial and technical commitment from Parties, and therefore *encourages* bi-lateral and multilateral funding agencies to assist developing countries, in particular the least developed and small island developing States among them, and countries with economies in transition through the provision of financial assistance and training, as required and as appropriate, to develop and implement effective biodiversity indicators;

12. *Acknowledges* that the project funded by the Global Environment Facility on biodiversity indicators in national use, might illustrate how each step proposed in the guidelines for indicator development contained in this document could be carried out in practice and thereby provides lessons on the practical development of biodiversity indicators;

13. *Encourages* Parties to share experience in the development and use of indicators and monitoring and to cooperate and promote, where useful, harmonized procedures and formats for data acquisition, computation and reporting, especially at subregional and regional levels;

14. *Requests* the clearing-house mechanism of the Convention to develop an effective system of information-sharing on lessons learned on the development of national-level biodiversity indicators and monitoring, including through the presentation of worked examples and case-studies;

15. *Requests* the Executive Secretary to further develop the identification, development and testing of indicators based on accrued experience and making particular efforts on indicators: (i) concerning the fair and equitable sharing of the benefits arising out of the utilization of genetic resources; and (ii) on the status and trends of biodiversity at the genetic level, taking into account the ongoing work of the Food and Agriculture Organization of the United Nations (FAO), the International Plant Genetic Resources Institute (IPGRI), the Organisation for Economic Co-operation and Development (OECD) and other relevant organizations, and *invites* him to report on progress for the ninth meeting of the Conference of the Parties;

16. *Also requests* the Executive Secretary to identify, and bring to the attention of Parties, areas with potential for better coordination and integration, as applicable,

between sets of indicators prepared within the various programmes of work and cross-cutting themes of the Convention to avoid duplication of efforts in developing indicators, data-gathering and reporting, particularly at the national level;

17. *Further requests* the Executive Secretary to update, complete and make available, through the clearing-house mechanism and other appropriate means, the indicative list of indicator initiatives and sources of information contained in appendix 2 to annex II to the note by the Executive Secretary (UNEP/CBD/SBSTTA/9/10).

## **DECISION VII/9 | Global Taxonomy Initiative**

### *The Conference of the Parties*

1. *Notes* the progress and commitment being made in implementing the programme of work for the Global Taxonomy Initiative;
2. *Invites* Parties, other Governments, regional and international organizations to take full account of the importance of taxonomic capacities in achieving the goals of the Convention, to support taxonomic activities to attain the 2010 target, and to provide all necessary support to national, and where appropriate regional, taxonomic centres of research and expertise; and *urges* Parties, other Governments and relevant funding organizations to provide adequate and timely support to developing countries to assist in the implementation of the Global Taxonomy Initiative, and for integrating taxonomic capacity-building activities into thematic and cross-cutting programmes, including supporting activities and projects, such as, where appropriate, stand alone capacity-building projects;
3. *Invites* Parties to appoint national focal points for the Global Taxonomy Initiative as called for in decision V/9, and *urges* all Parties to ensure that those focal points work with their taxonomic communities taking into account the programme of work for the Global Taxonomy Initiative;
4. *Requests* Parties to appropriately include and give full support to the taxonomic work needed to accomplish the thematic and cross-cutting programmes of work and activities under the Convention;
5. *Invites* developed country Parties to provide technical and financial support for the operations of the Coordination Mechanism of the Global Taxonomy Initiative;
6. *Requests* Parties to report on the status of implementation of the programme of work for the Global Taxonomy Initiative and further *invites* national and international, taxonomic institutions, funding organisations, financial agencies, and the financial mechanism of the Convention to contribute information on their relevant activities to the review of the Global Taxonomy Initiative for consideration by the Conference of the Parties at its eighth meeting;
7. *Requests* the Executive Secretary, in collaboration with the Coordination Mechanism for the Global Taxonomy Initiative to:

- (a) Ensure that appropriate taxonomic expertise with balanced regional representation is included in inter-sessional meetings and expert groups convened by the Secretariat as appropriate;
  - (b) Develop the process and guidelines for the in-depth review, including mechanisms for monitoring progress in the implementation of the programme of work for the Global Taxonomy Initiative, to be finalized during the tenth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice for consideration at the eleventh meeting of the Subsidiary Body; and
  - (c) Undertake an analysis of the existing thematic programmes of work and cross-cutting issues with respect to taxonomic components, in order to more effectively build taxonomy into the work programmes and to develop an understanding of the taxonomic capacity necessary to accomplish the targets of these programmes of work.
  - (d) Undertake a gap analysis of missing elements of the existing programme of work for the Global Taxonomy Initiative in the light of the decisions at the sixth and seventh meetings of the Conference of the Parties, considering also the result of the regional workshops held after the adoption of the programme of work.
  - (e) Further facilitate the synergistic collaboration between existing initiatives, including the clearing-house mechanism, the Global Biodiversity Information Facility, and regional and sub-regional taxonomic networks in order to develop more accessible information sources for countries on their biodiversity;
  - (f) Ensure that there are linkages between Articles 15 and 8(j) of the Convention, decisions VII/19 A–F of the Conference of the Parties, on access and benefit-sharing, and taxonomy;
8. *Welcomes* the contribution offered by the Government of Belgium through the Directorate-General for Development Cooperation for training in taxonomy and collection management for developing countries.

## DECISION VII/10 | Global Strategy for Plant Conservation

### *The Conference of the Parties*

1. *Notes with satisfaction* the progress achieved in the further development and implementation of the Strategy in line with decision VI/9;
2. *Expresses appreciation* to the organizations that are facilitating stakeholder consultations in relation to the various targets of the Strategy, and to Botanic Gardens Conservation International for supporting the process of developing and implementing the Strategy, including through the secondment of a Programme Officer to the Secretariat of the Convention on Biological Diversity;
3. *Welcomes* the establishment of the global partnership for plant conservation and encourages the participating organizations to continue to contribute to the

implementation of the Strategy, invites other organizations to join the partnership, and encourages Botanic Gardens Conservation International to continue its support for the partnership;

4. *Welcomes* the establishment, by the Executive Secretary, of a flexible coordination mechanism for the Strategy, comprising: liaison groups to be convened as necessary according to established procedures; national focal points, as determined by Parties; the Global Partnership for Plant Conservation; and the Secretariat, including the Programme Officer supported by Botanic Gardens Conservation International;

5. *Invites* the World Conservation Monitoring Centre of the United Nations Environment Programme to support the Executive Secretary in monitoring implementation of the Strategy, working in collaboration with the Global Partnership for Plant Conservation;

6. *Encourages* Parties to nominate focal points for the Strategy, or designate from among existing focal points, in order to:

- (a) Promote and facilitate implementation and monitoring of the Strategy at national level, including the identification of national targets and their integration in national biodiversity strategies and action plans and sectoral and cross-sectoral plans programmes and activities;
- (b) Promote the participation of national stakeholders in the implementation and monitoring of the Strategy at national level; and
- (c) Facilitate communication between national stakeholders and the Secretariat and Global Partnership for Plant Conservation;

7. *Requests* the Executive Secretary, with the support of members of the global partnership for plant conservation, to elaborate proposals for a toolkit, including a checklist to assist Parties in integrating the targets into their strategies, plans and programmes, for review by the Subsidiary Body on Scientific, Technical and Technological Advice prior to the ninth meeting of the Conference of the Parties;

8. *Decides* to integrate the targets of the Strategy into all the thematic and relevant cross-cutting programmes of work of the Convention and *requests* the Subsidiary Body on Scientific, Technical and Technological Advice to prepare proposals for the respective programmes of work when they are due for review according to the multiyear programme of work of the Conference of the Parties (decision VII/31). This process should be consistent with decision VII/30. In particular, the following targets should be integrated:

- (a) Target 1 into the Global Taxonomy Initiative;
- (b) Targets 4 and 5, 7 and 8 into the programme of work on protected areas;
- (c) Target 10 into work on invasive alien species;
- (d) Targets 11, 12 and 13 in the work on sustainable use;
- (e) Targets 9 and 13 into work on Article 8(j) and related provisions;

- (f) Target 14 into the programme for communication, education and public awareness; and
- (g) Targets 6, 9 and 12 into the thematic programmes for agricultural biodiversity and forest biodiversity;
9. *Emphasizes* that, in line with paragraphs 3, 4, 6 and 7 of decision VI/9, the Strategy is to be implemented in a flexible way, and with due regard to the need for capacity building in identifying and achieving national targets, particularly in developing countries, especially the least developed and small island States among them, and countries with economies in transition;
10. *Decides* to integrate the targets of the Strategy into the reporting framework for the third national reports; while reflecting the fact that the targets are a flexible framework within which national and/or regional targets may be developed, in line with paragraphs 3 and 4 of decision VI/9;
11. *Welcomes* the decisions of the Conference of the Parties and Plants Committee of the Convention on Trade in Endangered Species of Wild Flora and Fauna (CITES) to consider how they can contribute to the implementation of the Strategy, especially regarding target 11 (“No species of wild flora endangered by international trade”);
12. *Invites* the Commission on Genetic Resources for Food and Agriculture of the Food and Agriculture Organization of the United Nations to consider how the Global Plan of Action for the Conservation and Sustainable Use of Plant Genetic Resources for Food and Agriculture contributes to the implementation of the Strategy, in particular 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”).

## DECISION VII/11 | Ecosystem approach

### *The Conference of the Parties*

1. *Notes* that there has been significant experience in implementing the ecosystem approach by some Parties operating under the Convention, as well as experience in implementation of similar approaches to management under other national, regional and international processes, but that additional efforts are needed to ensure effective implementation of the approach by all Parties and other Governments. The scale of application of the ecosystem approach should be decided within countries according to their needs and circumstances;
2. *Agrees* that the priority at this time should be on facilitating the implementation of the ecosystem approach as the primary framework for addressing the three objectives of the Convention in a balanced way, and that a potential revision of the principles of the ecosystem approach should take place only at a later stage, when the application of the ecosystem approach has been more fully tested;

3. *Welcomes* the implementation guidelines and annotations to rationale as outlined in annex I to the present decision and calls on parties and other governments to implement the ecosystem approach, keeping in mind that in applying the ecosystem approach, all principles need to be considered, with appropriate weight given to each, in accordance with local conditions, and keeping in mind also that the implementation of the ecosystem approach and all principles need to be considered as voluntary instruments and should be adapted to local conditions and implemented in accordance with national legislation;
4. *Recognizes* that the implementation of the ecosystem approach is facilitated by the conditions, *inter alia*, for the transfer of “know-how” to enable the relevant actors to develop environmentally-sound adaptive technologies;
5. *Welcomes* the progress in developing the practical principles, operational guidance and associated instruments for sustainable use (the Addis Ababa Principles and Guidelines), which are based on the ecosystem approach as their overarching conceptual framework;
6. *Notes* the relevance of the conceptual framework of the Millennium Ecosystem Assessment in supporting the implementation of the ecosystem approach;
7. *Notes* that sustainable forest management, as developed within the framework established by the Rio Forest Principles, can be considered as a means of applying the ecosystem approach to forests (see annex II to the present decision). Further, there is potential for the tools developed under sustainable forest management to be used to help implement the ecosystem approach. These tools include *inter alia* the criteria and indicators developed under various regional and international processes, national forest programmes, “model forests” and certification schemes (as relating to decision VI/22 on forest biodiversity). There is substantial potential for mutual learning among those implementing both the ecosystem approach and sustainable forest management;
8. *Notes* that, in addition to sustainable forest management, some existing approaches, which are also relevant to other environmental conventions, including “ecosystem based management”, “integrated river-basin management”, “integrated marine and coastal area management”, and “responsible fisheries approaches”, may be consistent with the application of the Convention’s ecosystem approach, and support its implementation in various sectors or biomes. Implementation of the ecosystem approach in various sectors can be promoted by building upon the approaches and tools developed specifically for such sectors;
9. *Requests the* Executive Secretary, in collaboration with Parties and relevant international and regional organizations, to facilitate the undertaking of the following activities, and report on progress made to the Subsidiary Body on Scientific, Technical and Technological Advice prior to the eighth meeting of the Conference of the Parties:
  - (a) Undertake an analysis of the range of existing tools and approaches, that are consistent with the Convention’s ecosystem approach, but operate on different levels and belong to a variety of sectors/communities, and are applied in programmes of work of the Convention on Biological Diversity, in order to

learn from their experiences and build upon their approaches, and identify any gaps in the coverage of such tools;

- (b) Where needed, facilitate development of new tools and techniques to enable the implementation of the ecosystem approach, and in collaboration with appropriate regional and international organization develop tools specific to each sector and biome;
- (c) Continue collection of case-studies at national, sub-regional, regional and international level on the implementation of the ecosystem approach, and develop, in cooperation with the clearing-house mechanism, a database of case-studies, searchable by biome/ecoregion and sector;
- (d) Make the above widely available to Parties through the development of a web-based “sourcebook” for the ecosystem approach, accessible through the clearing-house mechanism. This sourcebook should be non-prescriptive and allow adaptation to differing regional, national and local needs. It should be prepared in a language that is brief, non-technical and simple, ensuring its accessibility to practitioners working to implement the ecosystem approach on the ground. A supporting summary explanation of the ecosystem approach will also be prepared. It should be developed in collaboration with other relevant organizations, peer-reviewed and field tested as appropriate, and made available through the clearing-house mechanism, in hard copy and on CD-ROM, and periodically revised;

10. *Recommends* that Parties and other Governments, facilitate the full and effective participation of indigenous and local communities and other stakeholders and continue or start implementation of the ecosystem approach, including the implementation guidelines and annotations to the rationale as outlined in annex I to the present decision, and:

- (a) Provide feedback on their experiences to the Executive Secretary and to other Parties, including by submitting further annotated case-studies and lessons learned for dissemination through the clearing-house mechanism;
- (b) Provide technical input to the development and field testing of the “sourcebook”;
- (c) Promote the application of the ecosystem approach in all sectors with potential impacts on biodiversity and ecosystems, as well as inter-sectoral integration;
- (d) Enhance and facilitate the sharing of experiences and expertise through approaches such as undertaking workshops to bring together experts and practitioners from different sectors and approaches;
- (e) Undertake focused activities and initiatives in partnership with indigenous and local communities and the private sector and other relevant stakeholders under various thematic programmes of work where applicable to deepen understanding and further application of the ecosystem approach;
- (f) Promote better understanding of the ecosystem approach through programmes of communication, education and public awareness;

11. *Requests* that the Executive Secretary collaborate with the Coordinator and Head of the United Nations Forum on Forests Secretariat and members of the Col-

laborative Partnership on Forests in order to further integrate the concepts of ecosystem approach and sustainable forest management, in particular with respect to:

- (a) Considering lessons learnt from sustainable forest management particularly the application of tools such as the criteria and indicators as an outcomes oriented application of the ecosystem approach;
- (b) Considering, within sustainable forest management, placing greater emphasis on:
  - (i) Better cross-sectoral integration and inter-sectoral collaboration;
  - (ii) The interactions between forests and other biome/habitat types within a landscape; and
  - (iii) Biodiversity conservation issues, in particular through continued development of criteria, indicators and forest management certification programmes (as relating to decision VI/22 on forest biodiversity), and including protected areas;

12. *Requests* the Executive Secretary, in collaboration with Parties and relevant international and regional organisations, to assess the implementation of the ecosystem approach in light of the experiences gained from the activities under paragraphs 8, 9 and 10 above for the consideration of the Subsidiary Body on Scientific, Technical and Technological Advice prior to the ninth meeting of the Conference of the Parties;

13. *Invites* funding institutions and development agencies to provide financial support for the implementation of the ecosystem approach.

14. *Invites* the Executive Secretary, Parties and international organizations to initiate and facilitate as appropriate capacity-building, technology transfer, and awareness raising to assist implementation of the ecosystem approach. In addition, *urges* Parties to create an enabling environment for the implementation of the ecosystem approach, including through development of appropriate institutional frameworks.

15. *Noting* the importance of applying the ecosystem approach to management of dry and sub-humid lands ecosystems, *agrees* that special efforts to facilitate its application should be made.

## **ANNEX I REFINEMENT AND ELABORATION OF THE ECOSYSTEM APPROACH, BASED ON ASSESSMENT OF EXPERIENCE OF PARTIES IN IMPLEMENTATION**

### **A. Further guidance on the implementation of the ecosystem approach principles**

1. The ecosystem approach is a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way. The application of the ecosystem approach will help to reach a balance of the three objectives of the Convention: conservation; sustainable use; and the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources. In addition the ecosystem approach has been recognized by the World



Summit on Sustainable Development as an important instrument for enhancing sustainable development and poverty alleviation.

2. The ecosystem approach is based on the application of appropriate scientific methodologies focused on levels of biological organisation, which encompass the essential structure, processes, functions and interactions among organisms and their environment. It recognizes that humans, with their cultural diversity, are an integral component of many ecosystems.

3. The ecosystem approach provides an integrating framework for implementation of objectives of the Convention on Biological Diversity. The approach incorporates three important considerations:

- (a) Management of living components is considered alongside economic and social considerations at the ecosystem level of organisation, not simply a focus on managing species and habitats;
- (b) If management of land, water, and living resources in equitable ways is to be sustainable, it must be integrated and work within the natural limits and utilize the natural functioning of ecosystems;
- (c) Ecosystem management is a social process. There are many interested communities, which must be involved through the development of efficient and effective structures and processes for decision-making and management.

4. The approach is an overall methodological framework for supporting decisions in policy-making and planning, within which those implementing the Convention can develop more specific approaches appropriate to their particular circumstances. The ecosystem approach is a tool that contributes to the implementation of various issues addressed under the Convention, including the work on, *inter alia*, protected areas and ecological networks.<sup>189</sup> There is no single correct way to achieve the ecosystem approach to management of land, water, and living resources. The underlying principles can be translated flexibly to address management issues in different social contexts. Already, there are sectors and governments that have developed sets of guidelines that are partially consistent, complementary or even equivalent to the ecosystem approach (e.g., the Code for Responsible Fisheries, the Sustainable Forest Management approach, adaptive forest management).

5. There are a number of options for implementing the ecosystem approach. One is the incorporation of the principles into the design and implementation of national biodiversity strategies and action plans and regional strategies. Others include incorporation of the ecosystem approach principles into policy instruments, mainstreaming in planning processes, and sectoral plans (e.g., in forest, fisheries, agriculture). In addition, Parties and the various bodies of the Convention on Biological Diversity should be encouraged to work to achieve synergies at the national level between the ecosystem approach and the various programmes of work of the Convention on Biological Diversity, as well as promoting linkages with

<sup>189</sup> A generic term used in some countries and regions, as appropriate, to encompass the application of the ecosystem approach that integrates protected areas into the broader land- and/or seascapes for effective conservation of biodiversity and sustainable use.

other international initiatives. To implement the ecosystem approach, countries should incorporate its principles or identify pre-existing, consistent or equivalent guidelines, in the appropriate institutional, legal and budgetary channels. Work by Convention bodies and other relevant organizations should be focused on supporting local and regional efforts as a contribution to achieving the Millennium Development Goals.

6. It should be stressed that in applying the ecosystem approach, all its principles need to be considered in a holistic way, and appropriate weight given to each, according to local circumstances.

7. Notwithstanding the need for implementation to be designed to fit with the particular circumstances of the relevant problems, there is strong potential for shared experiences and expertise between ecosystems and countries. The clearing-house mechanism established under Article 18 should be the primary focus for facilitating that cooperation. A solid and broad understanding of the principles, their intentions and their consequences, is an essential condition for their application. A communication strategy for promoting the ecosystem approach to relevant target groups, within and outside the conservation sector, can be a useful tool.

8. The donor community, like governments, while noting the value of the ecosystem approach in fostering better ecosystem stewardship, should also be encouraged to be flexible in promoting its application in setting priorities and funding decisions, to allow for other perspectives, and different capacities to respond to the principles.

9. After assessing the experience of Parties in implementing the ecosystem approach decisions of the Conference of the Parties, it was noted that while the principles were not always precisely worded expressions of the concepts they incorporated, they nevertheless reflected the meaning of important concepts. The experience of Parties did not suggest a need for change to the decisions of the Conference of the Parties, but simply for the provision of additional advice and elaboration to overcome any problems of clarity and interpretation.

10. With this in mind, the following text and table 1 provide some suggestions on approaches for implementation and implementation support. These include annotations to the rationale, implementation guidelines for each principle and clarification of crosscutting aspects of the ecosystem approach.

## **B. Additional explanatory notes on cross-cutting issues related to operational guidance**

11. In applying the operational guidance of the ecosystem approach ecosystem approach, the following cross-cutting issues need to be considered.

### *Initiating the approach*

12. When initiating the ecosystem approach, the first task is to define the problem that is being addressed. In doing so the scope of the problem and the task to be undertaken has to be well specified. The strategy to be followed to promote the ecosystem approach has to be clearly defined with contingencies for unforeseen situations incorporated into the strategy. The approach should consider all principles as a package but depending upon the task at hand emphasis on particular principles

may be warranted. A collective ownership for the vision, strategy and parameters for the ecosystem approach relevant to the task has to be developed, communicated, and facilitated among partners and sponsors. Collectively developing the overarching goals, objectives, targets for the exercise is important before applying the ecosystem approach.

#### *Capacity-building and collegiate will*

13. To apply the ecosystem approach successfully it is critical to investigate what resources and sponsorship are required to undertake the exercise. This can be in the form of capacity-building and fostering collegiate will.

14. Collegiate will can be in terms of community partnerships, stakeholder engagement, political and institutional will, and the commitment of donors or sponsors. An important consideration is the length of time such collegiate will is required; that is, it may be required in the initiation phase, assessment phase or the phase associated with implementation of outcomes. Examples of where the ecosystem approach has been compromised can be from a loss of allegiance from one or more of the community, other stakeholders, the political establishment and institutions, or sponsors and donors.

15. Capacity-building is also important for the success of the ecosystem approach. Adequate financial support and appropriate infrastructure support are important requirements to the success of an approach. So too is access to suitable expertise and the sharing of knowledge and experience. In undertaking the ecosystem approach it is useful to build from lessons learnt from other undertakings applying the ecosystem approach. Technology, including decision support tools and inventory systems, which have been developed in other applications of the ecosystem approach, may be transferable or can be adapted.

#### *Information, research and development*

16. The collection of resource, biophysical, social, and economic information is important to the successful completion of the ecosystem approach. Research and development is needed to target strategic gaps in knowledge that are important for addressing the exercise at hand. Knowledge derived from research and information from other sources has to be integrated and packaged into information products (including decision-support systems) that allow and provide for interpretation, and which facilitate their use in applying the ecosystem approach. Information products are necessary for communicating with stakeholders, planners, managers and decision makers. Consideration should be given to enhancing the access of stakeholders to information because the more transparent the decision-making is, based on information at hand, the better the ownership of the resultant decisions between partners, stakeholders and sponsors. Priorities for research and development are likely to be clearer once the ecosystem approach begins to be applied and implementing actions are put in place.

#### *Monitoring and review*

17. Monitoring and review are crucial components in implementing the ecosystem approach. They allow a responsive and adaptive management capability to be

developed. Monitoring and review are also useful in reporting performance and the resultant outcomes of the approach. Indicators of performance should be defined, developed and implemented. Appropriate monitoring and auditing systems need to be implemented to support reporting on indicators of performance. Periodic reviews of these indicators need to be undertaken to assess performance and whether adaptive management needs to be applied. Strategies, practices and processes may need to be modified depending upon the findings from monitoring and auditing.

*Good governance*

18. Good governance is essential for successful application of the ecosystem approach. Good governance includes sound environmental, resource and economic policies and administrative institutions that are responsive to the needs of the people. Robust and sound resource management systems and practices are required to support these policies and institutions. Decision-making should account for societal choices, be transparent and accountable and involve society. Accountability for making decisions has to be placed at the appropriate level that reflects that community of interest. For example, strategic land-use planning and management might be taken by central government, operational decisions taken by local government or management agency, whereas decisions associated with the sharing of benefits could be taken by a community organization.

19. Good governance at all levels is fundamental for achieving sustainable use and conservation of biodiversity. It is important to ensure intersectoral cooperation. There is a need to integrate the ecosystem approach into agriculture, fisheries, forestry and other production systems that have an effect on biodiversity. Management of natural resources, according to the ecosystem approach, calls for increased intersectoral communication and cooperation at a range of levels (government ministries, management agencies).

**TABLE 1: THE 12 PRINCIPLES OF THE ECOSYSTEM APPROACH AND THEIR RATIONALE (DECISION V/6 OF THE CONFERENCE OF THE PARTIES, <<http://www.biodiv.org/decisions/default.asp?lg=0&dec=V/6>>), SUGGESTED ANNOTATIONS TO THE RATIONALE AND IMPLEMENTATION GUIDELINES.**

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**PRINCIPLE 1:** The objectives of management of land, water and living resources are a matter of societal choice.

**RATIONALE:** Different sectors of society view ecosystems in terms of their own economic, cultural and societal needs. Indigenous peoples and other local communities living on the land are important stakeholders and their rights and interests should be recognized. Both cultural and biological diversity are central components of the ecosystem approach, and management should take this into account. Societal choices should be expressed as clearly as possible. Ecosystems should be managed for their intrinsic values and for the tangible or intangible benefits for humans, in a fair and equitable way.

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**Annotations to the rationale:**

The objectives for managing land, water, and living resources is a matter of societal choice, determined through negotiations and trade-offs among stakeholders having different perceptions, interests, and intentions. In this regard it should be noted that:

Human society is diverse in the kind and manner of relationships that different groups have with the natural world, each viewing the world around them in different ways and emphasising their own economic, cultural, and societal interests and needs.

All relevant sectors of society need to have their interests equitably treated, which may involve providing for different outcomes in separate locations or at different times.

It is also necessary to ensure that the needs of future generations and the natural world are adequately represented.

Given this diversity, good decision-making processes that provide for negotiations and trade-offs are necessary to establish broadly acceptable objectives for the management of particular areas and their living resources.

Good decision-making processes incorporate the following characteristics:

- All interested parties (particularly including indigenous and local communities) should be involved in the process,
- It needs to be a clear how decisions are reached and who the decision-maker(s) is (are),
- The decision-makers should be accountable to the appropriate communities of interest,
- The criteria for decisions should be appropriate and transparent, and
- Decisions should be based on, and contribute to, inter-sectoral communication and coordination.

Good decisions depend on those involved having access to accurate and timely information and the capacity to apply this knowledge.

**Implementation guidelines**

1.1 Involve all stakeholders (interested parties) (including indigenous and local communities) in:

- clearly articulating, defining and agreeing upon the goals of management
- defining problems
- making choices (in principle 12).

1.2 There need to be clearly defined boundaries (in time and space) for the management unit that is the subject of the societal choice process.

1.3 Ensure that those stakeholders that cannot directly represent themselves are adequately represented by someone else.

1.4 Ensure that all stakeholders have an equitable capacity to be effectively involved, including through ensuring equitable access to information, ability to participate in the processes, etc.

1.5 Ensure that the decision-making process compensates for any inequities of power in society, in order to ensure that those who are normally marginalized (e.g., women, the poor, indigenous people) are not excluded or stifled in their participation.

1.6 Determine who the decision-makers are for each decision, how the decisions will be taken (what process will be used), and what are the limits on the discretion of the decision-maker (e.g., what are the criteria for the decision in law, what is the overall policy guidance within which the decision must fit, etc).

1.7 Ensure that the recognition of stakeholder interests occurs within the full range of decisions over time and space and levels. In doing so, however, ensure that “stakeholder fatigue” does not develop, by incorporating known stakeholder views into future decisions, and allowing efficient stakeholder input.

1.8 Where possible, use existing societal mechanisms, or build new mechanisms that are compatible with existing or desired societal conditions.

1.9 Ensure that decision-makers are accountable to the appropriate communities of interest.

1.10 Develop the capacity to broker negotiations and trade-offs, and manage conflicts, among relevant stakeholder groups in reaching decisions about management, use and conservation of biological resources.

1.11 There need to be mechanisms in place to ensure that, once an appropriate societal choice has been made, the decision will be able to be implemented over the long term, i.e., policy, legislative and control structures need to be in place.

1.12 Undertake assessment at the national level to analyse effects of ecosystem management practices on society, with a view to find ways and means to mitigate possible constraints between stakeholders in the implementation phase.

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**PRINCIPLE 2:** Management should be decentralized to the lowest appropriate level.

**RATIONALE:** Decentralized systems may lead to greater efficiency, effectiveness and equity. Management should involve all stakeholders and balance local interests with the wider public interest. The closer management is to the ecosystem, the greater the responsibility, ownership, accountability, participation, and use of local knowledge.

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**Annotations to the rationale:**

Decisions should be made by those who represent the appropriate communities of interest, while management should be undertaken by those with the capacity to implement the decisions. In this regard it should be noted that:

There are usually many communities-of-interest in ecosystem management. These can be compatible, complimentary, or contradictory. It is important to ensure that the level of decision-making and management selected maintains an appropriate balance among these interests.

Often, but not always, the closer the decision-making and management are to the ecosystem, the greater the participation, responsibility, ownership, accountability and use of local knowledge will be, all of which are critical to the success of management.

Because there are several levels of interests with people who have varying capacities to address different aspects of ecosystem management, there are often multiple decision-makers and managers with different roles for any individual place or resource.

Decisions made by local resource managers are often affected by, or even subordinate to, environmental, social, economic and political processes that lie outside their sphere of influ-

ence, at higher levels of organisation. Therefore there is a need for mechanisms to coordinate decisions and management actions at a number of different organisational levels.

### Implementation guidelines

2.1 The multiple communities of interest should be identified, and decisions about particular aspects of management assigned to the body that represents the most appropriate community of interest. If necessary, management functions/decisions should be subdivided. For example, strategic decisions might be taken by central government, operational decisions by a local government or local management agency, and decisions about allocation of benefits between members of a community by the community itself.

2.2 The potential adverse effects of fragmented decision-making and management responsibilities should be compensated for by:

- ensuring that decisions are appropriately nested and linked
- sharing information and expertise
- ensuring good communication between the different management bodies
- presentation of the overall combination of decisions/management to the community in an understandable and consolidated form so they can effectively interact with the overall system
- supportive relationships between the levels.

2.3 Good governance arrangements are essential, particularly:

- clear accountabilities
- accountabilities of the necessary authorities
- accountabilities of competent bodies or persons.

Note that this is not a complete enough list, and there seems no good reason to particularly identify these.

2.4 Achieving an appropriate level of decentralization requires taking decisions at a higher level to create an enabling and supportive environment, as well as a commitment to devolve those decision-making responsibilities that are currently situated at too high a level.

2.5 In choosing the appropriate level of decentralization, the following are relevant factors that should be taken into account in choosing the appropriate body. .

- whether the body represents the appropriate community of interest
- whether the body has a commitment to the intent of the function
- whether the body has the necessary capacity for management
- efficiency (e.g., by moving the function to a higher level you may have sufficient work to allow maintenance of the necessary level of expertise to do the function efficiently and effectively)
- whether the body has other functions which represent a conflict of interest
- the effect on marginalized members of society (e.g., women, marginalized tribal groups).

In some cases problems could be corrected, such as through capacity-building. If no appropriate body is available at the level, a new body might be created, or an existing body modified, or a different level chosen.

2.6 Where functions are to be moved to another level, it is necessary to ensure that the body receiving the responsibility has sufficient capacity to fulfil that responsibility (e.g., resources, systems, authority), and that any risks arising from the transition can be managed. This means doing capacity-building if necessary to allow the decentralization to occur.

Institutional arrangements are the key. If you don't have the institutional structure that supports and coordinates the decision-making authorities then their work is worthless.

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**PRINCIPLE 3:** Ecosystem managers should consider the effects (actual or potential) of their activities on adjacent and other ecosystems.

**RATIONALE:** Management interventions in ecosystems often have unknown or unpredictable effects on other ecosystems; therefore, possible impacts need careful consideration and analysis. This may require new arrangements or ways of organization for institutions involved in decision-making to make, if necessary, appropriate compromises.

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**Annotations to the rationale:**

Ecosystems are not closed systems, but rather open and often connected to other ecosystems. This open structure and connectedness of ecosystems ensures that effects on ecosystem functioning are seldom confined to the point of impact or only to one system. In this regard it should be noted that:

- The effects of management interventions, or decisions not to intervene, are therefore not confined solely to the point of impact.
- The effects between ecosystems are frequently non-linear and will likely have associated time-lags.
- Management systems need to be designed to cope with these issues.

There is a need for this to reflect the fact that impacts are in both directions—into and out of a particular ecosystem. Not just adjacent and downstream, but those have other connections as well (e.g., systems linked by migratory species).

**Implementation guidelines**

3.1 Natural resource managers, decision makers and politicians should consider the possible effects that their actions could have on adjacent and downstream ecosystems (river basins and coastal zones) so that effects inside and outside the ecosystem are determined.

3.2 Where impacts of management or use of one ecosystem has or is projected to have effects elsewhere, bring together relevant stakeholders and technical expertise to consider how best to minimize adverse consequences.

3.3 Environmental impact assessment (EIAs), including strategic environmental assessments (SEAs) should be carried out for developments that may have substantial environmental impacts taking into account all the components of biological diversity. These assessments should adequately consider the potential offsite impacts. The results of these assessments, which can also include social impact assessment, should subsequently acted upon. When identifying existing and potential risks or threats to ecosystem, different scales need to be considered.

3.4 Establish and/or maintain national and regional, where applicable, feed-back mechanisms to monitor the effects of management practices across ecosystems.



**PRINCIPLE 4:** Recognizing potential gains from management, there is usually a need to understand and manage the ecosystem in an economic context. Any such ecosystem-management programme should:

- (a) Reduce those market distortions that adversely affect biological diversity;
- (b) Align incentives to promote biodiversity conservation and sustainable use;
- (c) Internalize costs and benefits in the given ecosystem to the extent feasible.

**RATIONALE:** The greatest threat to biological diversity lies in its replacement by alternative systems of land use. This often arises through market distortions, which undervalue natural systems and populations and provide perverse incentives and subsidies to favour the conversion of land to less diverse systems. Often those who benefit from conservation do not pay the costs associated with conservation and, similarly, those who generate environmental costs (e.g., pollution) escape responsibility. Alignment of incentives allows those who control the resource to benefit and ensures that those who generate environmental costs will pay.

**Annotations to the rationale:**

Many ecosystems provide economically valuable goods and services and it is therefore necessary to understand and manage ecosystems in an economic context. Frequently economic systems do not make provision for the many, often, intangible values derived from ecological systems. In this regard it should be noted that:

Ecosystem goods and services are frequently undervalued in economic systems.

Even when valuation is complete, most environmental goods and services have the characteristic of “public goods” in an economic sense, which are difficult to incorporate into markets.

It is often difficult to introduce new uses of ecosystems, even where these are less impacting or provide wider benefits to society, because economic and social systems exhibit significant inertia, particularly where strong existing interests are affected by and resist change.

Many stakeholders with strong interests in the ecosystem, but having limited political and economic influence, may be marginalized from the relevant economic systems.

Where those who control use of the land do not receive benefits from maintaining natural ecosystems and processes, they are likely to initiate unsustainable land use practices from which they will benefit directly in the short term. To counter this, more equitable sharing of benefits is advised.

International, national and sub-national policies, laws and regulations, including subsidies may provide perverse incentives for unsustainable management of ecosystems. Economic systems therefore need to be redesigned to accommodate environmental management objectives.

Addressing the issue of market distortions that adversely affect biodiversity will require establishing dialogue with other sectors.

Deriving economic benefits is not necessarily inconsistent with attaining biodiversity conservation and improvement of environmental quality.

### Implementation guidelines

- 4.1 Develop an understanding of the social and economic context of the issue to which the ecosystem approach is being applied.
- 4.2 Apply appropriate practical economic valuation methodologies for ecosystem goods and services (direct, indirect and intrinsic values); and for the environmental impacts (effects or externalities).
- 4.3 Aim to reduce those market distortions that adversely affect biological diversity.
- 4.4 Align economic and social incentives to promote biodiversity conservation and sustainable use.
- 4.5 Internalize costs and benefits in the given ecosystem to the extent feasible.
- 4.6 Evaluate the direct as well as indirect economic benefits associated with good ecosystem management including biodiversity conservation and environmental quality.
- 4.7 Enhance benefits of using biological diversity.
- 4.8 Ensure equitable sharing of costs and benefits.

Incorporate social and economic values of ecosystem goods and services into National Accounts, policy, planning, education and resource management decisions.

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**PRINCIPLE 5:** Conservation of ecosystem structure and functioning, in order to maintain ecosystem services, should be a priority target of the ecosystem approach.

**RATIONALE:** Ecosystem functioning and resilience depends on a dynamic relationship within species, among species and between species and their abiotic environment, as well as the physical and chemical interactions within the environment. The conservation and, where appropriate, restoration of these interactions and processes is of greater significance for the long-term maintenance of biological diversity than simply protection of species.

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#### Annotations to the rationale:

Biodiversity conservation and the maintenance of human wellbeing depend on the functioning and resilience of natural ecosystems. In this regard it should be noted that:

Ecosystem services—the benefits people obtain from ecosystems by way of resources, environmental regulation including, support of biospheric processes, inputs to culture, and the intrinsic values of the systems themselves—depend on maintaining and, where appropriate, restoring particular ecological structures and functions.

Ecosystem functioning and resilience depend on inter-relationships within and among species, between species and their abiotic environments, and on the physical and chemical interactions within these environments.

Given this complexity, management must focus on maintaining, and where appropriate restoring, the key structures and ecological processes (e.g., hydrological systems, pollination systems, habitats and food webs) rather than just individual species.

Given that the loss of genetic diversity predisposes populations and species to local extinction, the conservation of ecosystem composition and structure requires monitoring of population sizes of vulnerable and economically important species.

Management of ecosystem processes has to be carried out despite incomplete knowledge of ecosystem functioning.

### Implementation guidelines

- 5.1 Improve understanding of the interrelationship among ecosystem composition, structure and function with respect to (i) human interaction, needs and values (including cultural aspects), (ii) conservation management of biodiversity, and (iii) environmental quality, integrity and vitality.
- 5.2 Determine and define conservation, social and economic objectives and goals that can be used to guide policy, management and planning using participatory processes.
- 5.3 Assess the extent to which ecosystem composition, structure can function contribute to the delivery of goods and services to meet the desired balance of conservation, social and economic outcomes.
- 5.4 Expand knowledge of the responses of ecosystems, in terms of changes in composition, structure and function, to both internally and externally induced stresses caused by, *inter alia*, human use, disturbance, pollution, fire, alien species, disease abnormal climatic variations (drought, flood), etc.
- 5.5 Develop and promote management strategies and practices that enable and ensure conservation of ecosystem service and take account of, or minimize, risks/threats to ecosystem function and structure.
- 5.6 Apply instruments to maintain and/or restore ecosystem service.
- 5.7 Where required, develop management strategies and practices to facilitate recovery of ecosystem structure and function (including threatened components) to generate or enhance ecosystem services and biodiversity benefits.
- 5.8 Develop and apply instruments that contribute to achievement of conservation management goals through a combination of managing protected area networks, ecological networks and areas outside of such networks to meet both short-term and long-term requirements and conservation outcome in accordance with VII/28.
- 5.9 Monitoring population sizes of vulnerable and important species should be linked to a management plan that identifies appropriate response measures and actions.

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**PRINCIPLE 6:** Ecosystems must be managed within the limits of their functioning.

**RATIONALE:** In considering the likelihood or ease of attaining the management objectives, attention should be given to the environmental conditions that limit natural productivity, ecosystem structure, functioning and diversity. The limits to ecosystem functioning may be affected to different degrees by temporary, unpredictable or artificially maintained conditions and, accordingly, management should be appropriately cautious.

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#### Annotations to the rationale:

There are limits to the level of demand that can be placed on an ecosystem while maintaining its integrity and capacity to continue providing the goods and services that provide the basis for human wellbeing and environmental sustainability. Our current understanding is insufficient to allow these limits to be precisely defined, and therefore a precautionary approach coupled with adaptive management, is advised. In this regard it should be noted that:

Just as there are limits to the demands (production, off-take, assimilation, detoxification) that can be made on ecosystems, so too there are limits to the amount of disturbance

that ecosystems can tolerate, depending on the magnitude, intensity, frequency and kind of disturbance.

These limits are not static but may vary across sites, through time, and in relation to past circumstances and events.

Cumulative effects of interventions over time and space should be assessed when considering ecosystem limits.

If these limits are exceeded, an ecosystem undergoes substantial change in composition, structure and functioning, usually with a loss of biodiversity and a resulting lower productivity and capacity to process wastes and contaminants.

There is considerable lack of knowledge and uncertainty about the actual limits (thresholds for change) in different ecosystems. While further research can reduce these uncertainties, given the dynamic and complex nature of ecosystems we may never have perfect understanding.

Given the pervasiveness of uncertainties in managing ecosystems, management will need to be adaptive, with a focus on active learning derived from monitoring the outcomes of planned interventions using a sound experimental approach that allow the effects of the intervention to be accurately determined.

Management to restore lost capacities or control use should be appropriately cautious and apply an adaptive management approach.

### **Implementation guidelines**

- 6.1 Identify practices that are not sustainable and develop appropriate mechanisms for improvement involving all stakeholders.
- 6.2 Given the uncertainty associated with defining the limits to ecosystem functioning under most circumstances, the precautionary approach should be applied.
- 6.3 Implement an adaptive management approach.
- 6.4 Develop understanding of the limits of ecosystem functioning and the effects of various human use on the delivery of ecosystem goods and services.
- 6.5 Where permissible limits to change in specific ecosystem components can be agreed, manage within these but monitor and assess the ecosystem response. Feedback the information at regular intervals to those responsible for setting the off-take or other limits.
- 6.6 Encourage the use of environmental assessments and monitoring to establish ecosystem responses to disturbance, in order to provide management feedback and develop appropriate responses.
- 6.7 Develop and promote appropriate management strategies and practices that sustain resources and maintain ecosystems within the limits of their functioning.
- 6.8 Sustainable use management goals and practices should avoid or minimize adverse impacts on ecosystem services, structure and functions as well as other components of ecosystems.
- 6.9 Formulate, review and implement regulatory framework, codes of practice and other instruments to avoid using ecosystems beyond their limits.

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**PRINCIPLE 7:** The ecosystem approach should be undertaken at the appropriate spatial and temporal scales.

**RATIONALE:** The approach should be bounded by spatial and temporal scales that are appropriate to the objectives. Boundaries for management will be defined operationally by users, managers, scientists and indigenous and local peoples. Connectivity between areas should be promoted where necessary. The ecosystem approach is based upon the hierarchical nature of biological diversity characterized by the interaction and integration of genes, species and ecosystems.

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#### Annotations to the rationale:

The driving forces of ecosystems, including those due to human activities, vary spatially and through time, necessitating management at more than one scale to meet management objectives. In this regard it should be noted that:

Ecosystems are made up of biotic and abiotic components and processes, which function at a range of spatial and temporal scales, within a nested hierarchy.

The dynamics of human social and economic systems also vary across scales of space, time and quality.

How components are perceived spatially depends partly on the scale of observation. At one scale, individuals of a species may seem relatively regularly and continuously distributed; at another the distribution may be discontinuous. Likewise with time, for example, at one time scale (e.g., monthly, annually) a component or process may appear predictable; at another, longer or shorter time scale, the temporal dynamics may be unpredictable.

Management processes and institutions should be designed to match the scales of the aspects of the ecosystem being managed. More importantly, perhaps, given that ecosystem components and processes are linked across scales of both space and time, management interventions need to be planned to transcend these scales.

Failure to take scale into account can result in mismatches between the spatial and time frames of the management and those of the ecosystem being managed. For example, policy makers and planners sometimes may have to consider shorter time frames than the time frames of major ecosystem processes. The reverse can also be true, for example, where bureaucratic inertia can delay the quick management response needed to address a rapidly changing environmental condition. Spatial mismatches are also common, such as when administrative boundaries and those of ecosystem properties or related human activities that they are designed to regulate do not coincide.

#### Implementation guidelines

7.1 Enhanced capacity is required to analyse and understand the temporal and spatial scales at which ecosystem processes operate, and the effect of management actions on these processes and the delivery of ecosystem goods and services. Identification of spatial patterns and gaps in connectivity should be included in this analysis.

7.2 Functional mismatches in the administration and management of natural resources should be avoided by readjusting the scale of the institutional response to coincide more closely with spatial and temporal scales of processes in the area under management. This logic underpins the current global trend towards decentralized natural resource management.

7.3 Given that ecosystem components and processes are linked across scales of both time and space, management interventions need to be planned to transcend these scales. Developing a nested hierarchy of spatial scales may be appropriate in some circumstances.

7.4 Managing large areas such as river basins or large marine areas may require development of new institutional mechanisms to engage stakeholders across administrative borders and different levels of administration.

7.5 Attention to spatial and temporal scales is needed in the design of assessment and monitoring efforts.

7.6 Concepts of stewardship, intergenerational equity and sustainable yield need to be applied to considerations of the temporal scale.

7.7 Regional collaboration is necessary to deal with large-scale changes.

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**PRINCIPLE 8:** Recognizing the varying temporal scales and lag-effects that characterize ecosystem processes, objectives for ecosystem management should be set for the long term.

**RATIONALE:** Ecosystem processes are characterized by varying temporal scales and lag-effects. This inherently conflicts with the tendency of humans to favour short-term gains and immediate benefits over future ones.

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**Annotations to the rationale:**

Time needs to be considered explicitly in formulating management plans, and in longer-scale processes need to especially considered and planned for because these are otherwise often neglected. In this regard it should be noted that:

People find long-term trends more difficult to detect than short term trends, particularly in complex systems.

Management systems tend to operate at relatively short time scales, often much shorter than the timescales for change in ecosystem processes.

Where there is a lag between management actions and their outcomes, it is difficult to take reasoned management decisions.

Long-term ecological processes, which can be very important, are therefore likely to be poorly accommodated in management systems, unless these are explicitly and carefully designed to address long-term issues.

Awareness of long-term processes is important because it is the long-term, spatially, extensive processes that both characterize and determine the broad ecosystem properties.

**Implementation guidelines**

8.1 Adaptive management processes should include the development of long-term visions, plans and goals that address inter-generational equity, while taking into account immediate and critical needs (e.g., hunger, poverty, shelter).

8.2 Adaptive management should take into account trade-offs between short-term benefits and long-term goals in decision-making processes.

8.3 Adaptive management should take into account the lag between management actions and their outcomes.

8.4 Monitoring systems should be designed to accommodate the time scale for change in the ecosystem variables selected for monitoring. Alternatively, if the monitoring cannot

be adjusted, a more appropriately scaled but still relevant variable should be selected to monitor.

8.5 The capacity to monitor and detect long-term, low frequency changes in ecosystem structure and functioning should be strengthened.

8.6 To implement long-term management requires stability of institutions, legal and policy frameworks, monitoring programs, and extension and awareness-raising programs.

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**PRINCIPLE 9:** Management must recognize that change is inevitable.

**RATIONALE:** Ecosystems change, including species composition and population abundance. Hence, management should adapt to the changes. Apart from their inherent dynamics of change, ecosystems are beset by a complex of uncertainties and potential “surprises” in the human, biological and environmental realms. Traditional disturbance regimes may be important for ecosystem structure and functioning, and may need to be maintained or restored. The ecosystem approach must utilize adaptive management in order to anticipate and cater for such changes and events and should be cautious in making any decision that may foreclose options, but, at the same time, consider mitigating actions to cope with long-term changes such as climate change.

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**Annotations to the rationale:**

Change in ecosystems is both natural and inevitable, and therefore management objectives should not be construed as fixed outcomes but rather the maintenance of natural ecological processes. In this regard it should be noted that:

Ecosystems change constantly as a result of natural processes. Those changes include shifts in species composition, population abundance, and physical characteristics.

Such changes are not necessarily constant, variable, dynamic and usually difficult to predict at any point in time.

It is therefore difficult to select an appropriate outcome or future state of an ecosystem as a static management goal. Instead, in addressing this and Principle 8, management should focus on maintaining the natural processes, which drive those changes.

This focus on processes requires a management approach that is flexible and adaptive, both as a response to changing circumstances and to take account of new knowledge and understanding. Adaptive management should generate new knowledge and reduce uncertainties, thereby allowing the manager to anticipate and cater for change.

Ecosystem management must therefore involve a learning process that will help to adapt methods and practices to improve the ways in which these systems are being managed and monitored. Flexibility is also needed in policy-making and implementation. Long-term, inflexible decisions are likely to be ineffective or detrimental.

**Implementation guidelines**

9.1 Adaptive management is needed to respond to changing social and ecological conditions, and to allow management plans and actions to evolve in light of experience.

9.2 Natural resource managers must recognise that natural and human-induced change is inevitable and take this into account in their management plans.

9.3 Adaptive management should be encouraged when there is a risk degradation or loss of habitats, as it can facilitate taking early actions in response to change.

9.4 Monitoring systems, both socio-economic and ecological, are an integral part of adaptive management, and should not be developed in isolation from the goals and objectives of management activities.

9.5 Adaptive management must identify and take account of risks and uncertainties.

9.6 Where changes occur across national borders, the scale of adaptive management may need to be adjusted.

9.7 While ecosystems are inherently dynamic and resilient, special adaptation and mitigation measures are needed when ecosystems may be pushed beyond the limits of natural variation. Capacity-building efforts are needed to address highly vulnerable areas such as small island states and coastal areas.

9.8 Capacity-building efforts are needed to address highly vulnerable areas such as small island states and coastal areas.

9.9 Traditional knowledge and practice should be used to enable better detection and understanding of ecosystem change, and to develop appropriate adaptation measures.

9.10 Adaptive management should recognize the resilient capacity of ecosystems in response to natural disturbances, and should be aimed at maintaining or restoring this capacity so as to reduce the risk of adverse social and economic consequences of natural variability in ecosystems.

9.11 Awareness-raising measures are needed to enhance public knowledge that ecosystem change is a natural phenomenon, and to build support and capacity for adaptive management.

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**PRINCIPLE 10:** The ecosystem approach should seek the appropriate balance between, and integration of, conservation and use of biological diversity.

**RATIONALE:** Biological diversity is critical both for its intrinsic value and because of the key role it plays in providing the ecosystem and other services upon which we all ultimately depend. There has been a tendency in the past to manage components of biological diversity either as protected or non-protected. There is a need for a shift to more flexible situations, where conservation and use are seen in context and the full range of measures is applied in a continuum from strictly protected to human-made ecosystems.

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**Annotations to the rationale:**

Biological resources play a role in providing the ecosystem goods and services on which humans ultimately depend. In this regard it should be noted that:

The ecosystem approach is designed to support the conservation of biodiversity, the sustainable use of its components, and the equitable sharing of benefits derived from the use of biodiversity.

Sustainable use and management depends on also achieving conservation objectives. Management for conservation and sustainable use are not inherently incompatible, and can be integrated.

Integration can be achieved at various scales and in various ways including both spatial and temporal separation across the landscape as well as through integration within a site.



### Implementation guidelines

10.1 Develop integrated natural resource management systems and practices to ensure the appropriate balance between, and integration of, the conservation and use of biological diversity, taking into account long- and short-term, direct and indirect, benefits of protection and sustainable use as well as management scale.

10.2 Develop policy, legal, institutional and economic measures that enable the appropriate balance and integration of conservation and use of ecosystems components to be determined.

10.3 Promote participatory integrated planning, ensuring that the full range of possible values and use options are considered and evaluated.

10.4 Seek innovative mechanisms and develop suitable instruments for achieving balance appropriate to the particular problem and local circumstances.

10.5 Manage areas and landscapes in a way that optimises delivery of ecosystem goods and services to meet human requirements, conservation management and environmental quality.

10.6 Determine and define sustainable use objectives that can be used to guide policy, management, and planning, with broad stakeholder participation.

Identify solutions which relieve sectoral pressure on existing resources.

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**PRINCIPLE 11:** The ecosystem approach should consider all forms of relevant information, including scientific and indigenous and local knowledge, innovations and practices.

**RATIONALE:** Information from all sources is critical to arriving at effective ecosystem management strategies. A much better knowledge of ecosystem functions and the impact of human use is desirable. All relevant information from any concerned area should be shared with all stakeholders and actors, taking into account, *inter alia*, any decision to be taken under Article 8(j) of the Convention on Biological Diversity. Assumptions behind proposed management decisions should be made explicit and checked against available knowledge and views of stakeholders.

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#### Annotations to the rationale:

Ecosystems can be viewed at various scales and from different perspectives, each yielding unique information and insights. Good management should therefore consider all relevant information. In this regard it should be noted that:

The ecosystem approach is designed to accommodate a range of values and associated goals, and the information and perspectives of the communities that hold those values are therefore important in designing and implementing management.

There is no single level of organisation at which one can understand and optimize management of ecosystem functioning. Different information sources will address issues at different levels, providing complementary perspectives to support integrated management.

### Implementation guidelines

11.1 Relevant information should be shared with other stakeholders and actors and technical and scientific information be made available in an accessible way (indigenous and

local knowledge should be treated with full respect of Article 8(j) and further decisions of the CBD).

11.2 Assumptions behind proposed management decisions should be made explicit based on the best available expertise, explicitly regard scenarios of future change and include the knowledge and views of stakeholders.

11.3 Appropriate mechanisms should be developed to document and make more widely available the information from all relevant disciplines (including natural and social sciences) and from relevant knowledge systems, particularly those based on local and traditional practices. This guideline should be implemented consistent with any decision to be taken under Article 8(j) of the CBD.

11.4 The implications for ecosystem management of different “world views” based on different knowledge systems should be evaluated.

11.5 Good management depends upon improving the information base and scientific understanding of ecosystems through the promotion, implementation and application of research and integrating this information into decision-making.

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**PRINCIPLE 12:** The ecosystem approach should involve all relevant sectors of society and scientific disciplines.

**RATIONALE:** Most problems of biological-diversity management are complex, with many interactions, side-effects and implications, and therefore should involve the necessary expertise and stakeholders at the local, national, regional and international level, as appropriate.

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**Annotations to the rationale:**

The complexity of ecosystem management for sustained use and conservation requires integrating the activities and actions of many different stakeholders. In this regard it should be noted that:

The activities of all sectors affect biological diversity, and can contribute to, or detract from, the achievement of the objectives of the Convention.

The management of biodiversity, because of its complexity, and the significance of human impacts, requires a wide range of scientific and management skills, including those located in sectors that have not traditionally been involved in biodiversity conservation or management.

For these reasons the ecosystem approach should provide a framework for fostering greater involvement of all relevant stakeholders and technical expertise in planning and carrying out coordinated activities, sharing management resources, or simply exchanging information.

**Implementation guidelines**

12.1 The integrated management of land, water and living resources requires increased communication and cooperation, (i) between sectors, (ii) at various levels of government (national, provincial, local), and (iii) among governments, civil society and private sector stakeholders. Increased communication among international and regional organisations also.

12.2 Further incorporation of the ecosystem approach as an integral part of planning in, among others, the agriculture, fisheries, forestry and other natural resources management sectors potentially affecting biodiversity and ecosystem functioning, should be encouraged, following the example, for instance, of the Code of Conduct for Responsible Fisheries, Sustainable Forest Management or others. Sectors other than the primary production sectors may also have major effects but are often less recognized in this respect. These include sectors such as the judicial sector, which affects governance, as well as those such as energy and transport, which are managing or affecting resources either directly or indirectly.

12.3 Procedures and mechanisms should be established to ensure effective participation of all relevant stakeholders and actors during the consultation processes, decision making on management goals and actions, and, where appropriate, in implementing the ecosystem approach.

12.4 The effective implementation of the ecosystem approach may require involving multidisciplinary professional and scientific expertise, including such disciplines as economic, social and natural sciences.

12.5 When assessing the costs and benefits of conserving, maintaining, using and restoring ecosystems, the interests of all relevant sectors should be taken into account for equitable sharing of the benefits according to national law.

## **ANNEX II**

### **CONSIDERATION OF THE RELATIONSHIP BETWEEN SUSTAINABLE FOREST MANAGEMENT AND ECOSYSTEM APPROACH, AND REVIEW OF, AND DEVELOPMENT OF STRATEGIES FOR, THE INTEGRATION OF THE ECOSYSTEM APPROACH INTO THE PROGRAMMES OF WORK OF THE CONVENTION**

#### **A. Sustainable forest management**

##### **1. CONCEPTUAL BASIS OF THE ECOSYSTEM APPROACH IN RELATION TO SUSTAINABLE FOREST MANAGEMENT**

1. In 1992, the Non-legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of All Types of Forest of the United Nations Conference on Environment and Development (UNCED), also referred to as “Forest Principles”, defined a new paradigm for forest management, through a set of 15 principles in support to the overall objective of contributing to the management, conservation and sustainable development of forests and their multiple functions and uses. In this regard, the concept of sustainable forest management (SFM) anticipated the ecosystem approach, both of which are based on the tenet of sustainability. SFM incorporates the following key sustainability concepts: (i) stewardship; (ii) enabling environment; (iii) continuous flow of goods and services without undermining the resource base; (iv) maintenance of ecosystem functioning and biodiversity; (v) maintenance of economic, social, and cultural functions; (vi) benefit-sharing; and (vii) stakeholder participation in decision-making.

2. SFM can be considered as a means of applying the ecosystem approach to forests. Although the concept of SFM and the ecosystem approach are not identical,

the two are similar in many respects. Both need to be applied as an integrated whole. Both are also rapidly evolving. Both have a non-legally binding nature, allowing for flexibility and experimentation. SFM and the ecosystem approach are overarching frameworks—both with due consideration to societal, ecological, and governance issues—although the former has undergone substantial refinement over the last decade, being primarily an outcome-based approach. The ecosystem approach is still in need of further elaboration to be translated into good operational practice in a particular situation. As far as challenges are concerned, both SFM and the ecosystem approach need to deal with complex issues such as law enforcement, land tenure rights, and the rights of indigenous and local communities. In this regard, implementation of both approaches requires political will, including that of institutions and communities.

3. The broad overlap between the concepts of SFM and the ecosystem approach is encouraging, but there are yet significant opportunities for mutual learning. Lessons learned should flow both ways. Country-level meetings to examine the relationship between SFM and the ecosystem approach would be useful, and should be commended to Parties to the Convention. These meetings should emphasize mutual learning opportunities.

4. As stated above, SFM is relatively more mature than the ecosystem approach in the sense of being more refined from an operational standpoint; thus it can feed on some aspects of the ecosystem approach to this end. Specifically, there is a clear need for the ecosystem approach to adopt processes that are based upon clear statements of visions, objectives, and goals for defined regions or issues, thereby becoming more outcome-oriented. Conceptual development of the ecosystem approach to date has emphasized a description of the content of the principles. Moving from a content-driven approach to an outcome-driven approach would be beneficial. Tools and approaches developed to implement SFM, which are discussed below, may be useful in other productive sectors as they explore ways to apply the ecosystem approach.

## 2. PROPOSALS FOR INTEGRATION OF THE ECOSYSTEM APPROACH AND SUSTAINABLE FOREST MANAGEMENT

5. Even though the ecosystem approach and sustainable forest management are broadly overlapping concepts, more could be done to ensure their integration. Sustainable forest management could gain insights from the ecosystem approach concepts as cross-sectoral integration is largely missing from SFM, reflecting restricted legal mandates mostly within forest sector institutions. Mechanisms for inter-sectoral collaboration could be strengthened within SFM. Agro-forestry integrates the forest and agriculture sectors but other linkages between the forest sector and the agriculture sector (and other sectors such as water management, transport, and conservation) need to be strengthened.

6. Although there is no pre-defined scale, the ecosystem approach can be applicable over large areas (landscape level), while SFM has historically emphasized forest management-unit levels of work at typically small spatial scales. Although the Forest Principles do not indicate that forest management should be integrated with

management of adjacent areas, and some larger-scale applications (e.g., landscape restoration initiatives and model forests) have been developed within the last decade, greater emphasis could be placed on SFM within a broader spatial context, including protected areas, taking into consideration conservation issues in general, and developing stronger links to adjacent land uses and/or complementary approaches, such as extraction of non-timber forest resources, agriculture, watershed management, and ecological restoration.

7. There are areas where further conceptual development is needed in both SFM and the ecosystem approach. Both approaches, for example, should explicitly incorporate a principle of sustainability. The inter-generational obligation to sustain the provision of ecosystem goods and services to future generations should be clearly stated. Another area warranting further work is to incorporate issues, in both SFM and the ecosystem approach, of consideration of risks and threats. Global climate change creates risks and uncertainties for all sectors involved in applying the ecosystem approach. Concerns in the forest sector include insecure land tenure, increased forest fire incidence, and the spread of forest pests and diseases into higher latitudes.

8. As stated in the previous section, there is a need for the ecosystem approach to adopt a more outcome-based approach. As such, lessons learned from implementation of SFM through the application of criteria and indicators would be particularly beneficial. In addition, the experiences of applying the ecosystem approach through Global Environmental Facility projects should be taken into account.

9. In general, tools and approaches developed to implement SFM may be useful in other productive sectors as they explore ways to implement the ecosystem approach. The processes of developing and using criteria and indicators for sustainable forest management (including local-level indicators), designing and setting up model forests and demonstration forests, and drawing up national forest programs, action-oriented forest management plans, environmental management systems, and codes of conduct and practice, are all tools with broader potential relevance. For example, codes of practice for sustainable agricultural systems are not as advanced as for SFM. Approaches and tools developed for community forestry and social forestry to achieve broader stakeholder engagement, also have considerable potential for application in other sectors.

10. In particular, the use of criteria and indicators is considered a key tool for implementing and monitoring SFM, and the approach is being applied both nationally and at the forest management unit level. Criteria and indicators can be used for setting goals, assessing management outcomes and policy effectiveness, orienting forest certification systems, and for communicating progress to policy makers. Although nine regional and international processes to develop and implement criteria and indicators for sustainable forest management have largely developed independently, to date, 149 countries, encompassing 95% of the world's forests, are in the process of applying the criteria and indicators approach. Criteria and indicators for sustainable forest management represent a detailed expression of the elements of SFM when taken as a integrated whole, and bear many points of similarity to the ecosystem approach. Criteria and indicators can be adapted towards on-the-

ground action, as illustrated by the development of local-level indicators applicable at the forest management unit level by ITTO.

11. Local-level indicator work is one of the most interesting developments in the criteria and indicators approach. This work helps engage stakeholders in developing a longer-term vision and objectives for defined management areas, generating indicators that are meaningful to local needs. Their goal is to provide useful feedback to management, rather than to fulfil national monitoring and reporting requirements. Monitoring systems that can provide on-the-ground feedback and verify sustainability are essential for implementing adaptive management, a central concept within the ecosystem approach. These monitoring systems support the management-feedback process and allow it to evolve through time. Model forests and demonstration forests (such as the work undertaken by ITTO) are providing further valuable opportunities to test adaptive management concepts and to promote their wider application.

12. While existing efforts in SFM/criteria and indicators are currently focused on the national level and the forest-management unit level, some recent efforts (such as work undertaken by IUCN) are focusing at the landscape level. The development of criteria and indicators for the landscape level should be further pursued. In this context, it is worth noting that restoration actions are starting to be undertaken at the landscape level, and that the ITTO Guidelines for the Restoration, Management and Rehabilitation of Degraded Secondary Tropical Forests have been developed for guiding policy makers on forest restoration at this spatial scale. The assessment through criteria and indicators tools could be used to determine flows of specific ecosystem services (e.g., carbon capture in plantations).

13. In this regard, the potential for application of forest criteria and indicators to the ecosystem approach is high, particularly in regions where forests are an integral part of the resource base being used. In a recent effort at summarizing the state of knowledge of the contribution of criteria and indicators for sustainable forest management, seven thematic areas were identified in which the development of criteria and indicators can suit specific management needs; these areas can easily be applied to many principles of the ecosystem approach.<sup>190</sup>

14. Forest certification is another rapidly evolving approach that involves the use of criteria and indicators as primary tools. Globally, about 120 million hectares of forest have been certified. Certification is more limited in scope than SFM as it tends to focus on production forests only, to the exclusion of protected areas and landscape-level considerations as mentioned earlier. However, some certified forests currently exist in protected areas, and some certification schemes require, in turn, that a proportion of the managed forest be set aside for protection. Therefore the potential of forest certification to link with protected areas is high.<sup>191</sup> In

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190 International Conference on the Contribution of criteria and indicators for sustainable forest management: the way forward. Guatemala City, 3-7 February 2003. The common thematic areas are: (1) extent of forest resources; (2) biological diversity; (3) forest health and vitality; (4) productive functions of forest resources; (5) protective functions of forest resources; (6) socio-economic functions; (7) legal, policy and institutional framework.

191 Certification of good forest management and its relationship to protected areas. IUCN forest case-study number 3. April 2003.

this context, forest certification programmes could benefit from moving in the direction of the ecosystem approach being broader in scope.

15. Nevertheless, certification systems have found limited application in some developing countries, notably in the tropics, where enabling conditions to implement these systems are generally lacking. There are various barriers to tropical forest certification, such as limited institutional and technical capacity, and poor development of markets for certified wood. Efforts to overcome these barriers could be a priority for the ecosystem approach. ITTO's efforts to develop a phased approach to tropical forest certification should be noted in this context.

16. In addition, and of direct relevance for the integration of the ecosystem approach with SFM, ITTO has also developed policy guidelines for sustainable forest management. The guidelines contain a set of principles and recommended actions and relate to sustainable natural and planted tropical forests; conservation of biological diversity in tropical production forests; fire management in tropical forests; and restoration, management and rehabilitation of degraded secondary tropical forests. ITTO has also been promoting demonstration sites and demonstration watersheds.

17. If SFM were to explicitly examine tools and approaches that could be applied to other sectors—such as criteria and indicators, certification, and Model Forests—it would promote cross-fertilization, and help strengthen cross-sectoral integration. Developing institutional mechanisms to get people from different sectors around the table on an ongoing basis is a challenge in all countries. In addition to wider dissemination of useful tools, cross-sectoral meetings on SFM and the ecosystem approach would help demystify concepts and support mutual recognition, allowing people to use their own vocabulary.

18. The FAO is actively developing tools relevant to implementing SFM and the ecosystem approach. The FAO and World Bank have a support programme for facilitating stakeholder participation in the development of national forest programmes. Increased knowledge sharing is a major focus of FAO's efforts. The FAO Model Code of Forest Harvesting Practices has led to development of regional codes and country codes. The non-legally binding nature of these codes is a key to wider acceptance. Codes for integrated pest management, fire management, and integrated watershed management should also be noted. In addition, the recent FAO initiative, "In Search of Excellence in Forest Management," with its call for nominations of well-managed forests, has generated an excellent response. Multiple use, stakeholder participation, good information and monitoring systems, and good governance are recurring themes in well-managed forests, and they are as well key issues for the ecosystem approach.

19. In summary, in order to achieve greater harmonization of the SFM and ecosystem approach concepts, there is a need for SFM to strengthen cross-sectoral integration, which can be undertaken at least in part through application of SFM tools into other sectors. Developing and implementing biodiversity indicators would also help strengthen the contribution of SFM to biodiversity conservation. The development of criteria and indicators as well as certification programmes within SFM at the landscape level should also be pursued.

20. The ecosystem approach, should, in turn, consider lessons learned from application of SFM tools and approaches, such as criteria and indicators, certification systems, and model and demonstration forests in its effort to move towards an outcome-oriented approach. In addition, both approaches should explicitly incorporate the principle of sustainability.

## **B. Integration of ecosystem approach into sectors and biomes corresponding to the thematic programmes of work of the Convention**

### 1. INTRODUCTION

21. There has been considerable progress in the development of sector-specific approaches incorporating many elements of the ecosystem approach. In particular, relevant tools have been developed in forestry, fisheries management, and watershed management—sectors associated with the Convention’s programmes of work on forest biological diversity, marine and coastal areas, and inland water ecosystems, respectively. These sectors have recognized principles that are consistent with the ecosystem approach, and are moving to develop goal- or target-oriented approaches that include stakeholder participation, adaptive management, and monitoring/feedback systems. These sectors also deal with resources that tend to be under communal or public management rather than private management. This may help facilitate the development and implementation of sector-specific tools. The progress to date should be acknowledged, and further elaboration of the ecosystem approach in individual sectors should be encouraged.

### 2. MARINE AND COASTAL BIOLOGICAL DIVERSITY

22. The 1995 Code of Conduct for Responsible Fisheries includes principles that anticipate many of those in the ecosystem approach. In addition, there has been a movement towards the ecosystem approach in marine fisheries. The World Summit on Sustainable Development referred to the need to incorporate the ecosystem approach in responsible fisheries management, setting a target of 2010 for its achievement. The 2001 Reykjavik Declaration called for “guidelines for best practices with regard to introducing ecosystem considerations into fisheries management.” This led FAO in 2003 to update and revise its 1995 Code in the form of a new manual called “Fisheries management: the ecosystem approach to fisheries.” The World Wide Fund for Nature (WWF) has also developed a guide to ecosystem-based management for fisheries, and helped launch an effort to develop a certification program for marine fisheries under the Marine Stewardship Council. The Global Environment Facility (GEF) has provided financial support to 15 Large Marine Ecosystem (LME) projects involving more than 100 countries around the world. The LME projects build on an ecosystem approach in developing capacity and infrastructure for integrated management of marine and coastal environment and resources. Marine and coastal protected areas (MCPAs) are another significant cross-cutting approach in the context of marine and coastal areas. A CBD ad hoc technical expert group prepared detailed guidance, in line with the ecosystem approach, on this topic that was discussed at the eighth meeting of the SBSTTA (recommendation VIII/3). This guidance reflects the spirit of the ecosystem approach, and is available in document



UNEP/CBD/SBSTTA/8/INF/11. Current thinking emphasizes a need to combine integrated marine and coastal area management (IMCAM) with a core network of highly protected areas, which act as baselines and an insurance policy. The SBSTTA accepted this notion at its eighth meeting, while indicating that the balance between highly protected zones and other areas where extractive uses are allowed is a choice for individual countries. The concept of IMCAM covers both marine areas and coastal portions of the land. These approaches are area-based, and are explained by detailed sets of guidelines such as those developed by Ramsar and FAO, and those under development within the framework of the Convention on Biological Diversity. UNEP is trying to bring together ocean management and river basin management in the project on integrated watershed and coastal area management (IWCAM) in small island developing States of the Caribbean.

### 3. INLAND WATER ECOSYSTEMS BIOLOGICAL DIVERSITY

23. The concepts of integrated watershed management and river basin management present multidisciplinary approaches to the management of biophysical, social, and economic issues affecting water resources and their uses, and as such are consistent with the ecosystem approach. The River Basin Initiative operates under the framework of the joint work plan between the Convention on Biological Diversity and the Ramsar Convention, to support implementation of convention decisions related to better management of inland water ecosystems and associated biodiversity, water resources and wetlands. The Ramsar Convention, as the lead partner of the Convention on Biological Diversity in the implementation of activities under the Convention on inland water ecosystems, has developed a tool kit that includes practical guidance for integrated planning and management of river basins and coastal zones. In addition, the Ramsar Convention has developed guidelines for Global Action on Peatlands, and for “allocation and management of water for maintaining the ecological functions of wetlands.”<sup>192</sup> These guidelines make connections between ecological functions, hydrology, economic demands and institutional responses.

### 4. AGRICULTURAL BIOLOGICAL DIVERSITY

24. The programme of work on agricultural biodiversity recognizes the ecosystem approach and addresses many of the twelve principles individually. However, there is a potential deficiency in that the agricultural biodiversity programme of work does not apply the ecosystem approach in an integrated way. Furthermore, there has been less progress in development of relevant tools within the agricultural sector than in other sectors. This may partly reflect the fact that agriculture is practiced largely on lands under private ownership. Participants at the expert meeting suggested that the issue of integrating the ecosystem approach within the agricultural sector be addressed in a comprehensive manner the next time that the programme of work in agricultural biodiversity is reviewed. Consideration might also be given to developing an addendum to the existing programme of work on use of the ecosystem approach.

192 Turkey notes that goal of Ramsar Convention is not the management and allocation of water.

25. Examples of initiatives and tools include efforts by FAO to codify “good agricultural practices,” and development of a manual on integrated production and protection (IPP) crop management, with specific IPP guidelines for various crops. An information document prepared for the fifth meeting of the Conference of the Parties to the Convention on Biological Diversity entitled “The ecosystem approach: toward its application to agricultural biodiversity” (UNEP/CBD/COP/5/INF/11) discussed approaches or tools that can contribute to ecosystem approach objectives, with a focus on integrated pest management and farmer field schools. An integrated natural resource management (INRM) approach has been adopted throughout the Consultative Group on International Agricultural Research (CGIAR) system. INRM has been conceptually defined as “the responsible and broad-based management of the land, water, forest and biological resource base—including genes—needed to sustain agricultural productivity and avert degradation of potential productivity.” Research and applications development are under way related to adaptive management, multiple scales and stakeholders, and measurable outcomes. Certification schemes, such as those for organic agriculture, are evolving in directions consistent with the ecosystem approach.

#### 5. DRY AND SUB-HUMID LANDS BIOLOGICAL DIVERSITY

26. The programme of work on dry and sub-humid lands explicitly addresses the twelve principles of the ecosystem approach in an integrated way. An important consideration is the interaction between the Convention on Biological Diversity and the Convention to Combat Desertification (CCD). The CCD does not use the term “ecosystem approach,” but embraces many of the principles, especially participatory aspects. There may be opportunities to bring ecosystem approach concepts into certain CCD-specific initiatives such as those in drought resistance and early warning systems. Considerations related to developing alternative livelihoods, which are conceptually similar to the ecosystem approach, are central to work in drylands. Maintenance of a multi-biome perspective is also important, and therefore existing tools such as integrated river basin management are broadly applicable. A major reason for applying the ecosystem approach is to break down sectoral and institutional barriers.

### **DECISION VII/12 | Sustainable Use (Article 10)**

*The Conference of the Parties,*

*Underlining* that the proposals for the application of ways and means to remove or mitigate perverse incentives elaborated by the Workshop on Incentive Measures for the Conservation and Sustainable Use of Components of Biological Diversity, held in Montreal from 3 to 5 June 2003, provide further guidance on the implementation of principle 3 of the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity,

*Stressing* that the ecosystem approach is the primary framework for action in the Convention on Biological Diversity and that there is a need to consider the inter-

linkages between the Addis Ababa Principles and Guidelines for the Sustainable Use of Biological Diversity and the ecosystem approach in the conservation and sustainable management of biodiversity,

*Noting* the ongoing work on impact assessment under the Convention on Biological Diversity,

*Recognizing* that agricultural biodiversity was not fully addressed in the process leading up to the development of the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity and that there is a need for their further elaboration specifically with respect to domesticated species, breeds and varieties in the context of the programme of work on agricultural biodiversity,

*Recognizing* that the Addis Ababa Principles and Guidelines would provide Parties with an important tool to achieve the 2010 target endorsed by the World Summit on Sustainable Development, the Millennium Development Goals and the three objectives of the Convention,

*Emphasizing* further the need for technology transfer and cooperation, and support as well as capacity building activities to assist Governments to apply the Addis Ababa Principles and Guidelines,

1. *Adopts* the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity, as contained in annex II to the present decision;<sup>193</sup>

2. *Invites* Parties, other Governments and relevant organizations to initiate a process for the implementation of the Addis Ababa Principles and Guidelines, in accordance with Article 10 of the Convention which provides that Contracting Parties undertake specified actions as far as possible, and as appropriate, at the national and local levels, and in line with Article 6 of the Convention on Biological Diversity, taking into account obligations under other international agreements and conventions and existing frameworks for sustainable use of components of biodiversity, including the concept of sustainable forest management, e.g., by developing pilot projects, with a view to:

- (a) Integrating and mainstreaming the Addis Ababa Principles and Guidelines into a range of measures including policies, programmes, national legislation and other regulations, sectoral and cross-sectoral plans and programmes addressing consumptive and non consumptive use of components of biological diversity, including plans and programmes addressing the removal or mitigation of perverse incentives that undermine the conservation and sustainable use of biodiversity, as deemed necessary by individual Parties; and
- (b) Gathering and disseminating through the clearing-house mechanism and other means relevant information on experiences and lessons learned for the further improvement of the guidelines;

3. *Requests* the Subsidiary Body on Scientific Technical and Technological Advice, prior to the ninth meeting of the Conference of the Parties, to explore the applicability of these principles and guidelines to agricultural biodiversity, in

<sup>193</sup> The implementation of this programme of work should not provide incentives that negatively affect the biodiversity of other countries.

particular domesticated species, breeds and varieties, and make appropriate recommendations,<sup>194</sup>

4. *Requests* the Executive Secretary to collect information and experiences on successful efforts made to implement Article 10 of the Convention and, as they are developed, success stories, best practices and lessons learned in the application of the Addis Ababa Principles and Guidelines, including information and experiences on how sustainable use of biodiversity can contribute to the achievement of the target of significantly reducing the rate of biodiversity loss by 2010 for consideration by the Subsidiary Body on Scientific, Technical and Technological Advice prior to the ninth meeting of the Conference of the Parties;

5. *Requests* the Executive Secretary to undertake further work on issues pertaining to use of terms for sustainable use, adaptive management, monitoring and indicators building on the outcome of the Addis Ababa workshop, and in particular and in line with Article 7 of the Convention, to further consolidate the work on the use of terms and on associated instruments based on sections I D and II D together with appendix I of annex I to the report of the Addis Ababa Workshop (UNEP/CBD/SBSTTA/9/INF/8), for consideration by the Subsidiary Body on Scientific, Technical and Technological Advice prior to the eighth meeting of the Conference of the Parties and, recalling decisions V/15 and V/24, *requests* the Executive Secretary to convene a series of technical experts workshops on ecosystem services assessment, financial costs and benefits associated with conservation of biodiversity, and sustainable use of biological resources, taking into account decision VII/12 on sustainable use;

6. *Invites* Parties and Governments, in collaboration with other relevant international organisations and agreements, indigenous and local communities and stakeholders to undertake further research including, through, *inter alia*, the compilation and analysis of case-studies and existing literature on sustainable use consistent with practical principle 6:

- (a) The impacts of sustainable use and non-sustainable use on livelihoods, and ecosystems goods and services;
- (b) The role of indigenous and local communities, and women in the sustainable use of components of biodiversity;
- (c) The relationship between resilience of ecosystems and the sustainable use of biodiversity;
- (d) The terms used in the description of sustainable use, , taking into account the aspirations of present and future generations in different regions and situations; building on the consensus reached in the Addis Ababa report (UNEP/CBD/SBSTTA/9/INF/8);
- (e) The elaboration of management plans at time scales appropriate to the life history of species or populations;
- (f) The applicability of the Addis Ababa Principles and Guidelines on the use of components of biological diversity in a transboundary context, (e.g., a

194 SBSTTA will also consider the range of use options and management practices covered by the term agricultural biodiversity.

resource shared between different countries, or migratory species moving across national jurisdictions);

- (g) The functional relationships between different components of biological diversity in the context of sustainable use;
- (h) The socio-economic factors that influence pattern and intensity of use of biological resources, economic and social values of goods and services provided by ecosystems;
- (i) Methods and mechanisms to determine sustainability of various intensities of use and participatory methods for determining appropriate levels of sustainable use;
- (j) Ways of enhancing equitable distribution of benefits derived from the sustainable use of components of biodiversity, including genetic resources;

7. *Requests* the Executive Secretary to integrate the work on indicators for monitoring sustainable use referred to in section III of the note by the Executive Secretary on sustainable use (UNEP/CBD/SBSTTA/9/9) (see annex I to the present decision) also into the broader work undertaken pursuant to decision IV/7 on “identification, monitoring, indicators and assessment.” In particular, social, economic and ecological indicators of external disturbances should be identified and developed. Existing indicator frameworks, monitoring systems and inventories of natural resources should be utilized, as appropriate;

8. *Invites* Parties and Governments, in collaboration with relevant organizations, including the private sector, to develop and transfer technologies and provide financial support to assist in the implementation of the Addis Ababa Principles and Guidelines at the national level to ensure that the use of biological diversity is sustainable.

## ANNEX I

### EXTRACT FROM THE NOTE BY THE EXECUTIVE SECRETARY ON SUSTAINABLE USE PREPARED FOR THE NINTH MEETING OF THE SUBSIDIARY BODY ON SCIENTIFIC, TECHNICAL AND TECHNOLOGICAL ADVICE (UNEP/CBD/SBSTTA/9/9)

#### I. Introduction

1. In recent decades, biodiversity components have been used in a way leading to degradation of habitats, loss of species and erosion of genetic diversity, thus jeopardizing present and future livelihoods. Sustainable use of components of biodiversity, one of the three objectives of the Convention, is a key to achieving the broader goal of sustainable development and is a cross-cutting issue relevant to all thematic issues and areas addressed by the Convention and to all biological resources. It entails the application of methods and processes in the utilization of biodiversity to maintain its potential to meet current and future human needs and aspirations and to prevent its long-term decline.

2. Sustainable use of the components of biological diversity is defined in Article 2 of the Convention as the use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future gen-

erations. Provisions relating to sustainable use are given in Article 10, which, *inter alia*, requests Parties to “adopt measures relating to the use of biological diversity to avoid or minimize impacts on biological diversity.” In order to assist Governments in their implementation of Article 10, the Conference of the Parties at its fifth meeting requested the Executive Secretary “to assemble practical principles, operational guidelines and associated instruments, and guidance specific to sectors and biomes, which would assist Parties and Governments to develop ways to achieve the sustainable use of biological diversity, within the framework of the ecosystem approach” (decision V/24).

3. In response to that decision, the Executive Secretary, in collaboration with the Governments of Mozambique, Viet Nam and Ecuador and with financial support from the Government of the Netherlands, convened three regional expert workshops in 2001-2002 designed to develop a set of practical principles and operational guidelines and associated enabling instruments for Parties, resource managers and other stakeholders.

4. The first workshop, held in Maputo in September 2001, focused on key elements relating to the sustainable use of dryland resources and wildlife utilization in Africa.<sup>195</sup> The second workshop was held in Hanoi in January 2002 and addressed in particular the uses of forest biological diversity, including timber and non-wood forest products in Asia, with references to agricultural biological diversity.<sup>196</sup> The third workshop, held in Salinas, Ecuador, in February 2002, focused on marine and freshwater fisheries uses particularly in Latin America and the Caribbean.<sup>197</sup>

5. At its sixth meeting, the Conference of the Parties, in its decision VI/13, called for a fourth open-ended workshop in order to:

- (a) Synthesize the outcomes of the three workshops;
- (b) Integrate different views and regional differences; and
- (c) Develop a set of practical principles and operational guidelines for the sustainable use of biological diversity.

6. The fourth open-ended workshop was organized in Addis Ababa, Ethiopia, from 6 to 8 May 2003. The report of the meeting is available to the ninth meeting of the SBSTTA as an information document (UNEP/CBD/SBSTTA/9/INF/8).

7. Information contained in the present note as well as the suggested recommendations are based on the outcome of the aforementioned fourth workshop.

## II. Overview of the Addis Ababa Principles and Guidelines for the Sustainable use of Biodiversity

8. The Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity are annexed to the present note. A preamble to the principles is gives a list

195 The report of the Maputo workshop is contained in document UNEP/CBD/COP/6/INF/24/Add.1.

196 The report of the Hanoi workshop is contained in document UNEP/CBD/COP/6/INF/24/Add.2.

197 The report of the Salinas workshop is contained in document UNEP/CBD/COP/6/INF/24/Add.3.

of seven underlying conditions that should be taken into account in government and natural resources planning. This list is followed by the fourteen principles, which provide a framework for advising Governments, indigenous and local communities, resource managers, the private sector and other stakeholders, about how they can ensure that their uses of biodiversity components will not lead to the long-term decline of biological diversity. Each principle is followed by the rationale, a thorough explanation and exemplification of the motivation and meaning of the principle, and the operational guidelines, which provide functional advice on the implementation of the principle.

9. The principles are intended to be of general relevance, although not all principles will apply equally to all situations, nor will they apply with equal rigour. Their application will vary according to the biodiversity being used, the conditions under which they are being used, and the institutional and cultural context in which the use is taking place. The practical principles in most instances apply to both consumptive and non-consumptive uses of biodiversity components. They take into account requirements related to:

- (a) Policies, laws, and regulations;
- (b) Management of biological diversity;
- (c) Socio-economic conditions; and
- (d) Information, research and education.

### III. Associated Instruments<sup>198</sup>

10. Implementation of the principles and guidelines for the sustainable use of biodiversity will depend on many inter-related factors including, but not limited to, existence of appropriate incentive measures, ability to manage and exchange information and sufficient capacity with which to implement sustainable management plans, and, the capacity to adapt to changing conditions based on monitoring and feedback. In particular, because in ecosystem management, circumstances change and thus uncertainties are inherent in all managed uses of components of biodiversity, adaptive management must be an essential part of any management for sustainable use. The successful application of adaptive management is dependent on monitoring changes in the indicators being used, which could lead to changes in an array of activities associated with the management system. The issues of adaptive management and monitoring and indicators for sustainable use are addressed below.

#### 3.1. ADAPTIVE MANAGEMENT

11. Sustainable use is not a fixed state, but rather the consequence of balancing an array of factors, which vary according to the context of the use. In addition, sustainability of uses cannot be expressed with certainty, but rather as a probability

<sup>198</sup> Information contained in this section is based on information contained in the report of the Fourth Open-ended Workshop on the Sustainable Use of Biological Diversity (Addis Ababa, 6–8 May 2003 (UNEP/CBD/SBSTTA/9/INF/8)).

that may have to change if the conditions in which management is taking place change. In this context, adaptive management deals with the complex and dynamic nature of ecosystems and their uses and the absence of complete knowledge of their functioning, it is able to respond to uncertainties and it contains elements of “learning-by-doing” or research feedback. Achievement of sustainability is also dependent on institutional capacities to adapt to changing conditions based on monitoring and feedback. Given the uncertainties, sudden changes and different contexts in which the use of biodiversity is taking place, sustainable use entails the adaptive management of biological resources.

12. Briefly, adaptive management is considered the appropriate approach toward the management of biological resources because of its ability to deal with the uncertainty and natural variation, its iterative nature of monitoring biological resource through the management cycles, and the feedback/decision-making mechanisms to alter the management. Adaptive management can be applied at each of the recognized components of biological diversity, where the scale of management (and adaptive-management needs) is determined by the component being used.

### 3.2. MONITORING AND INDICATORS

13. Monitoring is a key component of adaptive management and managers should be accountable and responsible for developing and implementing the monitoring programme. The indicators and benchmarks that form part of that monitoring programme should be agreed upon by all relevant stakeholders including Governments and scientists.

14. A series of criteria and characteristics should be taken into consideration in developing a monitoring system. For instance, monitoring should be bounded by spatial and temporal scales that are relevant to the potential impact, but should not ignore “downstream,” indirect side effects of management. There are also different levels at which consumptive and non-consumptive uses should be conducted. For instance, harvest efforts should be monitored, in order to determine changes in the yield per unit effort as an index of the impact of the management programme, taking into account improvements in technology and practice relating to the efficiency of harvesting.

15. Monitoring of both consumptive and non-consumptive use should be conducted at the same frequency and by the same agencies, although the combination of monitoring may result in a greater probability that use-related impacts will be detected and that monitoring systems will be maintained in the long term. Monitoring at multiple levels is particularly important in cases where limited information is available about the current status of the component of biological diversity that is being used, or to avoid bias resulting from information derived as the result of use (e.g., harvesting is most often targeted at specific components only). It is also important to consider impacts on a resource other than influence by direct management actions, such as illegal off-takes, and to use all other relevant sources of information to verify conclusions about the trends in resource status and recommendations concerning its management.



16. There is the need to identify/further develop indicators<sup>199</sup> within the context of sustainable use in order to describe; status of a system, change in a system, trends in a system, combinations of the above. Desirable characteristics of indicators should also be identified.

17. Indicators should be developed at various scales. Some will be national in context; some will be management-area indicators. It is important for managers/planners to include in the monitoring system indicators relevant to their specific situation. Managers should be aware that there are many existing sources of information on indicators (e.g., the Food and Agriculture Organization of the United Nations (FAO), Agenda 21, the United Nations System Wide Earth Watch Indicators, the World Bank).

18. For each of the components of biological diversity a set of indicators to measure their decline should be finalized. In this biological context, indicators should be identified for the components of biological diversity that can be subject to use. The assessment of the sustainability of use on a particular component will largely depend on the scale and extent of use. Indicators of sustainability should be applied to the component of biological diversity that approximates the unit of management.

19. The indicators identified should be suitable to demonstrate the impact of use, and only refer to the biological status of each component of biological diversity, as they should be built to detect decline in the status of biodiversity components.

20. Economic indicators will be also essential in indicating status, change and trends of use of biological components of biodiversity in economic terms. Indicators identified should be used to assess sustainability of the use. For example, the degree to which biological resources are priced and reflect true value, being a condition for effective management, may serve as an economic indicator.

21. In addition, social indicators that reflect social values with respect to the sustainable use of biological components. The indicators identified should be suitable examples to demonstrate:

- (a) The incorporation of social values into the use of biological resources;
- (b) How unique needs of individuals and indigenous and local communities are considered in policy-making and management decisions; and
- (c) The extent to which the allocation of resources can be considered to be fair and equitable.

22. All cultures use aspects of biological diversity for the maintenance of their cultures. Using indicators to monitor sustainable use in a cultural context is important to understand the impact of the use upon cultures, and vice versa. Cultures need to be defined beyond indigenous groups; to include beliefs, customs, practices and social behaviour of all people. Some cultural indicators should therefore be identified.

<sup>199</sup> See also the note by the Executive Secretary on designing national-level monitoring programmes and indicators (UNEP/CBD/SBSTTA/9/10).

**ANNEX II****ADDIS ABABA PRINCIPLES AND GUIDELINES FOR THE SUSTAINABLE USE OF BIODIVERSITY**

1. The Addis Ababa Principles and Guidelines for the Sustainable use of Biodiversity consist of fourteen interdependent practical principles, operational guidelines and a few instruments for their implementation that govern the uses of components of biodiversity to ensure the sustainability of such uses. The principles provide a framework for advising Governments, resource managers, indigenous and local communities, the private sector and other stakeholders about how they can ensure that their use of the components of biodiversity will not lead to the long-term decline of biological diversity. The principles are intended to be of general relevance, although not all principles will apply equally to all situations, nor will they apply with equal rigour. Their application will vary according to the biodiversity being used, the conditions under which they are being used, and the institutional and cultural context in which the use is taking place.
2. Sustainable use is a valuable tool to promote conservation of biological diversity, since in many instances it provides incentives for conservation and restoration because of the social, cultural and economic benefits that people derive from that use. In turn, sustainable use cannot be achieved without effective conservation measures. In this context, and as recognized in the Plan of Implementation of the World Summit on Sustainable Development, sustainable use is an effective tool to combat poverty, and, consequently, to achieve sustainable development.
3. Agricultural biodiversity was not fully addressed in the process leading up to the development of the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity and there is a need for their further elaboration specifically with respect to domesticated species, breeds and varieties in the context of the programme of work on agricultural biodiversity.
4. The practical principles in most instances apply to both consumptive and non-consumptive uses of biodiversity components. They take into account requirements related to: (i) policies, laws, and regulations; (ii) management of biological diversity; (iii) socio-economic conditions; and (iv) information, research and education.
5. It is a fundamental assumption that the application of the practical principles and operational guidelines is set within the context of the ecosystem approach (decision V/6 of the Conference of the Parties). For the practical principles, footnotes provide cross references to the relevant principle(s) of the ecosystem approach.
6. Progress towards sustainability will require the political will to bring about changes to create the necessary enabling environment at all levels of government and society. The operational guidelines are intended to provide functional advice on the implementation of the principles. These guidelines have been developed taking into account regional and thematic differences and best practices and lessons learned that have been documented in case-studies on the sustainable use of biological diversity in different biomes as well as existing codes of conduct.
7. The operationalization of the principles will require an enabling institutional, legal and administrative structure at all levels of government and society within

each Party. Further, to be effective, policies and regulations that are adopted should ensure that the application of the principles is flexible and adaptable to different local realities and adjustable to specific ecosystems. In this context, seven underlying conditions should be taken into account as a framework for the correct implementation of the principles and guidelines, as listed in section A below.

### **A. Underlying conditions for sustainable use**

8. In structuring a sustainable use programme and the attendant policies, laws and regulations to implement such a programme, there are a few underlying conditions that should be taken into account in government and natural resource management planning:

- (a) It is possible to use biodiversity components in a manner in which ecological processes, species and genetic variability remain above thresholds needed for long-term viability, and thus all resource managers and users have the responsibility to ensure that use does not exceed these capacities. It is crucial that the biodiversity in ecosystems is maintained, or in some cases recovered, to ensure that those ecosystems are capable to sustain the ecological services on which both biodiversity and people depend;
- (b) Ecosystems, ecological processes within them, species variability and genetic variation change over time whether or not they are used. Therefore, governments, resource managers and users should take into account the need to accommodate change, including stochastic events that may adversely affect biodiversity and influence the sustainability of a use;
- (c) In circumstances where the risk of converting natural landscapes to other purposes is high, encouraging sustainable use can provide incentives to maintain habitats and ecosystems, the species within them, and the genetic variability of the species. Also, for particular species, such as crocodiles, sustainable use has provided substantial incentives for conserving a dangerous animal that represents a threat to humans;
- (d) The basic necessities of life, such as food, shelter, freshwater and clean air are produced either directly or indirectly from using biological diversity. In addition, biodiversity provides many direct benefits and ecosystem services necessary for life. In many countries, there is complete or substantial dependence on harvested plants and animals by millions of people, often among the poorest, for their livelihoods. Increasingly other uses such as pharmaceuticals for disease prevention and cure are becoming evident and are also met from using biological diversity. Finally, indigenous and local communities and their cultures often depend directly on the uses of biological diversity for their livelihoods. In all of these instances, governments should have adequate policies and capacities in place to ensure that such uses are sustainable;
- (e) The supply of biological products and ecological services available for use is limited by intrinsic biological characteristics of both species and ecosystems, including productivity, resilience, and stability. Biological systems, which are dependent on cycling of finite resources, have limits on the goods they can pro-

vide and services they can render. Although certain limits can be extended to some degree through technological breakthroughs, there are still limits, and constraints, imposed by the availability and accessibility of endogenous and exogenous resources;

- (f) To ameliorate any potential negative long-term effects of uses it is incumbent on all resource users, to apply precaution in their management decisions and to opt for sustainable use management strategies and policies that favour uses that provide increased sustainable benefits while not adversely affecting biodiversity. Likewise, Governments should be certain that licensed or authorized sustainable uses of biological diversity are taking such precaution in their management;
- (g) In considering individual guidelines provided below, it is necessary to refer to and apply the provisions of Article 8(j), Article 10(c) and other related provisions and their development in relevant decisions of the Conference of the Parties in all matters that relate to indigenous and local communities.

## **B. Practical principles, rationale and operational guidelines for the sustainable use of biodiversity**

9. Sustainability of use of biodiversity components will be enhanced if the following practical principles and related operational guidelines are applied:

**PRACTICAL PRINCIPLE 1:** *Supportive policies, laws, and institutions are in place at all levels of governance and there are effective linkages between these levels.*

**RATIONALE:** There is need to have congruence in policies and laws at all levels of governance associated with a particular use. For example, when an international agreement adopts a policy regarding use of biodiversity, national<sup>200</sup> laws must be compatible if sustainability is to be enhanced. There must be clear and effective linkages between different jurisdictional levels to enable a “pathway” to be developed which allows timely and effective response to unsustainable use and allows sustainable use of a resource to proceed from collection or harvest through to final use without unnecessary impediment. In most cases the primary means for achieving congruence between local and international levels of governance should be through national Governments.

### *Operational guidelines*

Consider local customs and traditions (and customary law where recognized) when drafting new legislation and regulations;

Identify existing and develop new supportive incentives measures, policies, laws and institutions, as required, within the jurisdiction in which a use will take place, also taking into account Articles 8(j) and 10(c), as appropriate;

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200 It is recognized that, throughout the principles, rationale and operational guidelines, the term “national” may mean either national or, as appropriate in some countries, subnational.

Identify any overlaps, omissions and contradictions in existing laws and policies and initiate concrete actions to resolve them;

Strengthen and/or create cooperative and supportive linkages between all levels of governance in order to avoid duplication of efforts or inconsistencies.

**PRACTICAL PRINCIPLE 2:** *Recognizing the need for a governing framework consistent with international<sup>201</sup> national laws, local users of biodiversity components should be sufficiently empowered and supported by rights to be responsible and accountable for use of the resources concerned.*<sup>202</sup>

**RATIONALE:** Uncontrolled access to biodiversity components often leads to over-utilization as people try to maximize their personal benefits from the resource while it is available. Resources for which individuals or communities have use, non-use, or transfer rights are usually used more responsibly because they no longer need to maximise benefits before someone else removes the resources. Therefore sustainability is generally enhanced if Governments recognize and respect the “rights” or “stewardship” authority, responsibility and accountability to the people who use and manage the resource, which may include indigenous and local communities, private landowners, conservation organizations and the business sector. Moreover, to reinforce local rights or stewardship of biological diversity and responsibility for its conservation, resource users should participate in making decisions about the resource use and have the authority to carry out any actions arising from those decisions.

### *Operational guidelines*

Where possible adopt means that aim toward delegating rights, responsibility, and accountability to those who use and/or manage biological resources;

Review existing regulations to see if they can be used for delegating rights; amend regulations where needed and possible; and/or draft new regulations where needed. Throughout local customs and traditions (including customary law where recognized) should be considered;

Refer to the programme of work related to the implementation of Article 8(j) with regard to indigenous and local community issues (decision V/16), implement and integrate tasks relevant for the sustainable use of biodiversity components, in particular element 3, tasks 6, 13 and 14;

201 Where consistency with international law is referred to this recognizes: (i) that there are cases where a country will not be a party to a specific international convention and accordingly that law will not apply directly to them; and (ii) that from time to time countries are not able to achieve full compliance with the conventions to which they are a party and may need assistance.

202 See principle 2 of the ecosystem approach.

Provide training and extension services to enhance the capacity of people to enter into effective decision-making arrangements as well as in implementation of sustainable use methods;

Protect and encourage customary use of biological resources that is sustainable, in accordance with traditional and cultural practices (Article 10(c)).

**PRACTICAL PRINCIPLE 3:** *International, national policies, laws and regulations that distort markets which contribute to habitat degradation or otherwise generate perverse incentives that undermine conservation and sustainable use of biodiversity, should be identified and removed or mitigated.*<sup>203</sup>

**RATIONALE:** Some policies or practices induce unsustainable behaviours that reduce biodiversity, often as unanticipated side effects as they were initially designed to attain other objectives. For example, some policies that encourage domestic over production often generate perverse incentives that undermine the conservation and sustainable use of biological diversity. Eliminating subsidies that contribute to illegal, unreported and unregulated fishing and to over-capacity, as required by the WSSD Plan of Implementation in order to achieve sustainable fisheries, is a further instance of the recognition of the need to remove perverse incentives.

### *Operational guidelines*

Identify economic mechanisms, including incentive systems and subsidies at international, national levels that are having a negative impact on the potential sustainability of uses of biological diversity;

Remove those systems leading to market distortions that result in unsustainable uses of biodiversity components;

Avoid unnecessary and inadequate regulations of uses of biological diversity because they can increase costs, foreclose opportunities, and encourage unregulated uses thus decreasing the sustainability of the use.

**PRACTICAL PRINCIPLE 4:** *Adaptive management should be practiced, based on:*  
 (a) *Science and traditional and local knowledge;*  
 (b) *Iterative, timely and transparent feedback derived from monitoring the use, environmental, socio-economic impacts, and the status of the resource being used; and*  
 (c) *Adjusting management based on timely feedback from the monitoring procedures.*<sup>204</sup>

**RATIONALE:** Biological systems and the economic and social factors that can affect the sustainability of use of biological diversity are highly variable. It is not possible to have knowledge of all aspects of such systems before a use of biological diversity begins. There-

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203 See principle 4 of the ecosystem approach.

204 See principles 9 and 11 of the ecosystem approach.

fore, it is necessary for the management to monitor the effects of that use and allow adjustment of the use as appropriate, including modification, and if necessary suspension of unsustainable practices. In this context, it is preferable to use all sources of information about a resource when deciding how it can be used. In many societies traditional and local knowledge has led to much use of biological diversity being sustainable over long time-periods without detriment to the environment or the resource. Incorporation of such knowledge into modern use systems can do much to avoid inappropriate use and enhance sustainable use of components of biodiversity.

### *Operational guidelines*

Ensure that for particular uses adaptive management schemes are in place;

Require adaptive management plans to incorporate systems to generate sustainable revenue, where the benefits go to indigenous and local communities and local stakeholders to support successful implementation;

Provide extension assistance in setting up and maintaining monitoring and feedback systems;

Include clear descriptions of their adaptive management system, which includes means to assess uncertainties;

Respond quickly to unsustainable practices;

Design monitoring system on a temporal scale sufficient to ensure that information about the status of the resource and ecosystem is available to inform management decisions to ensure that the resource is conserved;

When using traditional and local knowledge, ensure that approval of the holder of that knowledge has been obtained.

**PRACTICAL PRINCIPLE 5:** *Sustainable use management goals and practices should avoid or minimize adverse impacts on ecosystem services, structure and functions as well as other components of ecosystems.*<sup>205</sup>

**RATIONALE:** For use of any resource there is a need to take into account the functions that resource may fulfil within the ecosystem in which it occurs, and that use must not adversely affect ecosystem functions. For example, clear felling in a watershed could lead to erosion of soil and impairment of the water filtration function of the ecosystem. Avoidance of this situation would involve setting conservative cutting quotas with appropriate harvesting techniques and monitoring the effects of the harvest as it occurs. As another example, the shrimping industry has developed nets that can separate out juveniles and by-catch and also reduce negative effects on benthic and other associated communities.

205 See principles 3, 5 and 6 of the ecosystem approach.

*Operational guidelines*

Ensure management practices do not impair the capacity of ecosystems to deliver goods and services that may be needed some distance from the site of use. For example, selective cutting of timber in a watershed would help maintain the ecosystem's capacity to prevent soil erosion and provide clean water;

Ensure that consumptive and non-consumptive use does not impair the long-term sustainability of that use by negatively impacting the ecosystem and species on which the use depends, paying special attention to the needs of threatened components of biological diversity;

Apply a precautionary approach in management decisions in accordance with principle 15 of the Rio Declaration on Environment and Development;

Identify successful experiences of management of biodiversity components in other countries in order to adapt and incorporate this knowledge in their efforts to resolve their own difficulties;

Where possible consider the aggregate and cumulative impact of activities on the target species or ecosystem in management decisions related to that species or ecosystem;

Where previous impacts have degraded and reduced biodiversity, support formulation and implementation of remedial action plans (Article 10(d)).

*PRACTICAL PRINCIPLE 6: Interdisciplinary research into all aspects of the use and conservation of biological diversity should be promoted and supported.*

**RATIONALE:** International conventions and national decisions that affect use should always apply the best information on which to base decisions and be aware of the local circumstances where a use is undertaken. In addition, there is need to ensure that research is supported into the biological and ecological requirements of the species to ensure that the use remains within the capacity of the species and ecosystem to sustain that use. Further, to enhance incentives that promote sustainability, there would be value in investing in research to open up new economic opportunities for stakeholders.

*Operational guidelines*

Ensure that the results of research inform and guide international, national policies and decisions;

Invest in research into techniques and technologies of management of biodiversity components that promote sustainability in both consumptive and non-consumptive uses of biodiversity;

Encourage active collaboration between scientific researchers and people with local and traditional knowledge;



Encourage international support and technology transfer, relating to both consumptive and non-consumptive uses of biodiversity;

Develop cooperation between researchers and biodiversity users (private or local communities), in particular, involve indigenous and local communities as research partners and use their expertise to assess management methods and technologies;

Investigate and develop effective ways to improve environmental education and awareness, to encourage public participation and to stimulate the involvement of stakeholders in biodiversity management and sustainable use of resources;

Investigate and develop means of ensuring rights of access and methods for helping to ensure that the benefits derived from using components of biodiversity are equitably shared;

Make research results available in a form which decision makers, users, and other stakeholders can apply;

Promote exchange programmes in scientific and technical areas.

**PRACTICAL PRINCIPLE 7:** *The spatial and temporal scale of management should be compatible with the ecological and socio-economic scales of the use and its impact.*<sup>206</sup>

**RATIONALE:** Management of sustainable use activities should be scaled to the ecological and socio-economic needs of the use. If, for example, fish are harvested from a lake, the owner of the lake should be in charge of, and accountable for, the management of the lake subject to national or, as appropriate, subnational policy and legislation.

### *Operational guidelines*

Link responsibility and accountability to the spatial and temporal scale of use;

Define the management objectives for the resource being used;

Enable full public participation in preparation of management plans to best ensure ecological and socio-economic sustainability.

In case of transboundary resources, it is advisable that appropriate representation from those states participate in the management and decisions about the resources.

**PRACTICAL PRINCIPLE 8:** *There should be arrangements for international cooperation where multinational decision-making and coordination are needed.*

**RATIONALE:** If a biodiversity resource is transboundary between two or more countries then it is advisable to have a bilateral or multilateral agreement between those states to determine how the resource will be used and in what amounts. Absence of such agreements can lead to each state implementing separate management regimes which, when taken together, may mean that the resource is over-utilized.

<sup>206</sup> See principles 2 and 7 of the ecosystem approach.

*Operational guidelines*

Make arrangements for international cooperation when the distribution of populations or communities/habitats being used span two or more nations;

Promote multinational technical committees to prepare recommendations for the sustainable use of transboundary resources;

Have bilateral or multilateral agreements between or among the States for the sustainable use of transboundary resources;

Establish mechanisms involving the collaborating states to ensure that sustainable use of transboundary resources does not negatively impact the ecosystem capacity and resilience.

**PRACTICAL PRINCIPLE 9:** *An interdisciplinary, participatory approach should be applied at the appropriate levels of management and governance related to the use.*

**RATIONALE:** Sustainability of use depends on biological parameters of the resources being utilized. However, it is recognized that social, cultural, political and economic factors are equally important. It is therefore necessary to take such factors into consideration and involve indigenous and local communities and stakeholders, including the private sector, and the people experienced in these different fields, at all levels of the decision making process.

*Operational guidelines*

Consider providing mechanisms that encourage interdisciplinary cooperation in management of biodiversity components;

Set standards for resource management activities that promote interdisciplinary consultations;

Facilitate communication and exchange of information between all levels of decision-making;

Identify all relevant stakeholders and seek their participation in planning and executing of management activities;

Take account of socio-economic, political, biological, ecological, institutional, religious and cultural factors that could influence the sustainability of the management;

Seek guidance from local, traditional and technical specialists in designing the management plan;

Provide adequate channels of negotiations so that potential conflicts arising from the participatory involvement of all people can be quickly and satisfactorily resolved.

**PRACTICAL PRINCIPLE 10:** *International, national policies should take into account:*  
*(a) Current and potential values derived from the use of biological diversity;*

*(b) Intrinsic and other non-economic values of biological diversity and*

*(c) Market forces affecting the values and use.*

**RATIONALE:** Recent work in calculating the potential costs of replacing natural systems with man-made alternatives has shown that such natural systems should be valued very highly. It follows that international and national policies that guide trade and development should compare the real value of natural systems against any intended replacement uses before such development is undertaken. For instance, mangroves have the function of fish-spawning and nursery sites, erosion and storm-surge alleviation and carbon sequestration. Coral reefs provide protection for juvenile fish and many species, as well as coastal zone protection.

### *Operational guidelines*

Promote economic valuation studies of the environmental services of natural ecosystems;

Incorporate this information in policy and decision making processes, as well as educational applications;

Consider this principle in relation to land use/habitat conversion tradeoffs. Recognize that market forces are not always sufficient to improve living conditions or increase sustainability in the use of components of biological diversity;

Encourage governments to take into account biodiversity values in their national accounts;

Encourage and facilitate capacity building for decision makers about concepts related to economic valuation of biodiversity.

**PRACTICAL PRINCIPLE 11:** *Users of biodiversity components should seek to minimize waste and adverse environmental impact and optimize benefits from uses.*

**RATIONALE:** Users should seek to optimize management and to improve selectivity of extractive uses through environmentally friendly techniques, so that waste and environmental impacts are minimized, and socio-economic and ecological benefits from uses are optimized.

### *Operational guidelines*

Eliminate perverse incentives and provide economic incentives for resource managers to invest in development and/or use of more environmentally friendly techniques, e.g., tax exemptions, funds available for productive practices, lower loan interest rates, certification for accessing new markets;

Establish technical cooperation mechanisms in order to guarantee the transfer of improved technologies to communities;

Endeavour to have an independent review of harvests to ensure that greater efficiencies in harvest or other extractive uses do not have a deleterious impact on the status of the resource being used or its ecosystem;

Identify inefficiencies and costs in current methods;

Conduct research and development into improved methods;

Promote or encourage establishment of agreed industry and third party quality standards of biodiversity component processing and management at the international and national levels;

Promote more efficient, ethical and humane use of components of biodiversity, within local and national contexts, and reduce collateral damage to biodiversity.

**PRACTICAL PRINCIPLE 12:** *The needs of indigenous and local communities who live with and are affected by the use and conservation of biological diversity, along with their contributions to its conservation and sustainable use, should be reflected in the equitable distribution of the benefits from the use of those resources.*

**RATIONALE:** Indigenous and local communities and local stakeholders often shoulder significant costs or forgo benefits of potential use of biological diversity, in order to ensure or enhance benefits accruing to others. Many resources (e.g., timber, fisheries) are over-exploited because regulations are ignored and not enforced. When local people are involved as stakeholders such violations are generally reduced. Management regimes are enhanced when constructive programmes that benefit local communities are implemented, such as capacity training that can provide income alternatives, or assistance in diversifying their management capacities.

### *Operational guidelines*

Promote economic incentives that will guarantee additional benefits to indigenous and local communities and stakeholders who are involved in the management of any biodiversity components, e.g., job opportunities for local peoples, equal distribution of returns amongst locals and outside investors/co-management;

Adopt policies and regulations that ensure that indigenous and local communities and local stakeholders who are engaged in the management of a resource for sustainable use receive an equitable share of any benefits derived from that use;

Ensure that national policies and regulation for sustainable use recognize and account for non-monetary values of natural resources;

Consider ways to bring uncontrolled use of biological resources into a legal and sustainable use framework, including promoting alternative non-consumptive uses of these resources;

Ensure that an equitable share of the benefits remain with the local people in those cases where foreign investment is involved;

Involve local stakeholders, including indigenous and local communities, in the management of any natural resource and provide those involved with equitable compensation for their efforts, taking into account monetary and non-monetary benefits; In the event that management dictates a reduction in harvest levels, to the extent practicable assistance should be provided for local stakeholders, including indigenous and local communities, who are directly dependent on the resource to have access to alternatives.

**PRACTICAL PRINCIPLE 13:** *The costs of management and conservation of biological diversity should be internalized within the area of management and reflected in the distribution of the benefits from the use.*<sup>207</sup>

**RATIONALE:** The management and conservation of natural resources incurs costs. If these costs are not adequately covered then management will decline and the amount and value of the natural resources may also decline. It is necessary to ensure that some of the benefits from use flow to the local natural resource management authorities so that essential management to sustain the resources is maintained. Such benefits may be direct, such as entrance fees from visitors to a national park paid directly to, and retained by, the park management authority or indirect, such as stumpage tax revenue from timber harvesting paid by loggers that flows through a national treasury to a local forest service. In some cases licence fees for fishing rights are paid directly to the management authority, or to the national treasury.

### *Operational guidelines*

Ensure that national policies do not provide subsidies that mask true costs of management;

Ensure that harvest levels and quotas are set according to information provided by the monitoring system, not the economic needs of the management system;

Provide guidelines for resource managers to calculate and report the real cost of management in their business plans;

Create other alternative mechanisms to invest revenues from biodiversity management;

Provide economic incentives for managers who have already internalized environmental costs, e.g., certification to access new markets, waiver or deferral of taxes in lieu of environmental investment, promotion of “green-labelling” for marketing.

**PRACTICAL PRINCIPLE 14:** *Education and public awareness programmes on conservation and sustainable use should be implemented and more effective methods of communications should be developed between and among stakeholders and managers.*

207 See the operational guidance for the application of the ecosystem approach (decision V/6, annex, section C, paragraph 11).

**RATIONALE:** To ensure that people are aware of the connectivity between different parts of biological diversity, its relevance to human life, and the effects of uses it is advisable to provide means to engage people in education and awareness of the opportunities and constraints of sustainable use. It is also important to educate people on the relationship of sustainable use and the other two objectives of the Convention. An important way to achieve sustainable use of biological diversity would be to have in place effective means for communications between all stakeholders. Such communications will also facilitate availability of the best (and new) information about the resource.

*Operational guidelines*

Plan education and public-awareness activities concerning: management, values of sustainable use, changing consumptive patterns and the value of biodiversity in the lives of people;

Ensure that public-awareness programmes also inform and guide decision makers;

Target all levels of the chain of production and consumption with such communications;

Report lessons learned about sustainable use activities to the clearing-house mechanism of the Convention on Biological Diversity;

Encourage and facilitate communication of lessons learned and best practices to other nations;

Ensure that resource users report to government on their activities in a manner that facilitates broader communications;

Increase awareness of the contributions of knowledge, practices and innovations of indigenous and local communities for the sustainable use of biological diversity.

**DECISION VII/13 | Alien species that threaten ecosystems, habitats or species (Article 8(h))**

*The Conference of the Parties*

1. *Notes* the importance of mainstreaming activities relating to invasive alien species management, particularly with reference to poverty and inequity, to provide optimal value to such activities;

2. *Welcomes* the collaboration between the Convention on Biological Diversity and other conventions and organizations, in particular the Ramsar Convention on Wetlands of International Importance especially as Waterfowl Habitat and the International Plant Protection Convention, in developing mechanisms to address the threats posed by invasive alien species;

3. *Notes* the adoption of the International Convention for the Control and Management of Ships' Ballast Water and Sediments under the International Maritime

Organization, and recommends that Parties to the Convention on Biological Diversity and other Governments consider ratifying this Convention;

4. *Recognizes* the need to strengthen further institutional coordination among international organizations and *requests* the Executive Secretary to:

- (a) Promote fuller consideration of issues relating to invasive alien species in other international forums, including through the joint liaison group of the Convention on Biological Diversity, the United Nations Framework Convention on Climate Change and the United Nations Convention to Combat Desertification, and the Collaborative Partnership on Forests;
- (b) Further collaborate with relevant organizations and initiatives including, *inter alia* the Food and Agricultural Organization of the United Nations, the World Health Organization and the International Maritime Organization;
- (c) Further collaborate with relevant conventions including the Convention on International Trade in Endangered Species (CITES);
- (d) Support closer coordination between national focal points of relevant international instruments, regional institutions and international conventions and programmes;
- (e) Develop a joint work plan with the secretariat of the International Plant Protection Convention;
- (f) Establish closer linkages with the Office international des épizooties;
- (g) Explore options for closer collaboration with the International Civil Aviation Organization (ICAO) in the development of a preventive strategy for invasive alien species through civil-aviation pathways;
- (h) Cooperate with relevant site-based conventions and other organizations to develop biome-specific practical guidance for site managers;

5. *Noting* the existing international, regional and national frameworks but *recognizing* the need to strengthen institutional coordination at international, regional and national levels on invasive alien species as a trade-related issue:

- (a) *Invites* the World Trade Organization and its relevant bodies to give consideration to the risks from invasive alien species, in their deliberations;
- (b) *Requests* the Executive Secretary to collaborate, whenever feasible and appropriate, with the Secretariat of the World Trade Organization in its training, capacity-building and information activities, with a view to raising awareness of the issues related to invasive alien species, and promoting enhanced cooperation on this issue;
- (c) *Requests* the Executive Secretary to renew his application for observer status in the Committee on Sanitary and Phytosanitary Measures (SPS) of the World Trade Organization with a view to enhancing the exchange of information on deliberations and recent development in the respective bodies of relevance to alien invasive species;

- (d) *Invites* Parties and other Governments to take into consideration, as appropriate, the risks associated with the introduction, use and spread of invasive alien species during the development, expansion and environmental review of international, bilateral and regional arrangements such as trade arrangements, where appropriate; and
  - (e) *Invites* Parties and other Governments to improve communication and cooperation between national environment, plant protection, trade and other relevant authorities with a view to increasing awareness on issues related to the prevention and management of risks from potentially invasive alien species and ensuring consistency of national policies and programmes;
6. *Invites* relevant Parties to the Convention on Biological Diversity and other Governments, as well as national, regional and international organizations to:<sup>208</sup>
- (a) Improve the coordination of regional measures to address transboundary issues through the development and implementation of regional standards, regional support for risk analysis and regional cooperation mechanisms;
  - (b) Support national and regional decision-making and rapid response through the further development of risk analysis which include environmental risk assessment, as well as alert lists, diagnostic tools and capacity development;
  - (c) Incorporate invasive alien species considerations, including monitoring and reporting and notification of new threats, into regional agreements and other instruments, and make information on invasive alien species status and trends available through the clearing-house mechanism and other relevant regional information systems;
  - (d) Allocate, as appropriate, adequate financial resources to developing countries, in particular the least develop countries and small island developing States among them, and countries with economies in transition, and to build capacity for effective mitigation, border control and quarantine measures with a view to improve synergies with policies relating to trade, food security, human health and environmental protection, scientific research and exchange of information;
  - (e) Strengthen, as appropriate the cooperation between biodiversity, agriculture, forestry, land and water management agencies in the application of risk analysis standards and guidance;
  - (f) Consider the introduction of positive incentive measures for the prevention, mitigation, eradication or control of invasive alien species and the use of native species taking into consideration effectiveness in control and impact on the other native species in land and water management and other programmes;
  - (g) Proactively engage relevant stakeholders and indigenous and local communities in the eradication, the prevention of introductions, and mitigation of impacts of invasive alien species, including by awareness-raising and training as well as through the design and implementation of appropriate incentive measures;
- 7 *Notes* that specific gaps in the international regulatory frameworks at global, regional and national levels persist, notably in relation to species that are invasive,

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<sup>208</sup> Implementation of this paragraph should not promote incentives that negatively affect the biodiversity of other countries.



but do not qualify as plant pests under the regulations of the IPPC and other international agreements or animal diseases under the regulations of the Office international des épizooties and other international agreements with regard to the following potential pathways:

- (a) The use of non-native organisms in aquaculture and the restocking of marine and inland water systems for commercial and recreational fisheries taking into account contributions of national codes, and voluntary international efforts such as Codes of Practice on the Introductions and Transfers of Marine Organisms developed by the International Council for the Exploration of the Seas and the FAO Code of Conduct on Responsible Fisheries;
- (b) Unintentional or opportunistic introductions (e.g., “hitchhiker organisms”), including through hull-fouling, packaging material, import consignments, vehicular transport and other means;
- (c) Unintentional introductions of invasive alien species through international assistance and humanitarian programmes, tourism, military, scientific research, cultural and other activities;
- (d) Intentional introductions of alien species for non-food purposes, including certain aspects of horticulture and trade in pets and aquarium species;
- (e) Intentional introduction of alien species, as biocontrol agents for control or eradication of invasive alien species, pests or weeds;
- (f) Transnational and national *ex situ* breeding projects with alien species as sources for intentional or unintentional introduction;
- (g) Intentional introduction of invasive alien species through international assistance programmes, including conservation and development projects and other activities;
- (h) Intentional introduction of potentially invasive alien species through international incentives schemes;
- (i) Introduction of alien species through aquaculture escapes, bait and pet releases, water transfer schemes.

8. *Notes* that there is potential for the application of existing methodologies for risk assessment and risk analysis, including those established in the contexts of plant and animal health, to a wider range of issues related to invasive alien species;

9. *Requests* the Subsidiary Body on Scientific, Technical and Technological Advice to establish an ad hoc technical expert group to address gaps and inconsistencies in the international regulatory frameworks at global, and regional levels, in particular the specific gaps identified in paragraph 7 above, and, on the basis of the work of the expert group, to make recommendations to Subsidiary Body of the Scientific Technical and Technological Advice prior to the ninth meeting of the Conference of the Parties for the full and effective implementation of Article 8(h) of the Convention, and further be considered by the Conference of the Parties. The expert group should:

- (a) Further clarify the gaps and inconsistencies in the international regulatory framework that are significantly hindering countries’ efforts to manage threats

arising from the introduction, establishment and spread from invasive alien species, focusing this analysis on the known major pathways for the spread of invasive alien species, and taking into account past efforts of relevant organizations and initiatives that have considered the issue;

- (b) Develop practical options on how to address these gaps and inconsistencies, where possible within the context of existing international frameworks including identifying, if appropriate, those gaps which should be addressed at the national level, in order to achieve the full and effective implementation of Article 8(h), taking into account the costs/benefits of options for addressing the gaps and inconsistencies and the need for appropriate capacity-building at the national and regional level, to support this work;
  - (c) Also, in the event that it identifies the potential need for standards or other measures, identify the appropriate standard-making authority, if any, or other appropriate options, so that the Conference of the Parties can consider referring the issue to the appropriate standard-making authority and/or any other course of action that it considers appropriate;
10. *Welcomes* the generous offer made by the Government of New Zealand to fund and host the ad hoc technical expert group referred to in paragraph 9 above;
  11. *Requests* the Executive Secretary together with the Global Invasive Species Programme, and its participating organizations, and with other relevant organizations to address the priorities for practical actions identified in the decisions of the Conference of the Parties;
  12. *Requests* the Executive Secretary to facilitate the development of practical processes to allow Parties to share best practice and lessons learned, and to cooperate in the development of new technology, scientific understanding and best practice; and
  13. *Invites* funding institutions and development agencies to provide financial support to developing countries, in particular the least developed countries and small island developing States among them, and countries with economies in transition, to assist in the improved prevention, rapid response and management measures to address threats of alien invasive species.

## **DECISION VII/14 | Biological Diversity and tourism**

### *The Conference of the Parties*

1. *Adopts* the Guidelines on Biodiversity and Tourism Development annexed to the present decision;
2. *Recognizing* that sustainable tourism can provide significant benefits to biodiversity conservation, *notes* that the Guidelines are voluntary and represent a range of opportunities for local, regional, national governments, indigenous and local communities and other stakeholders to manage tourism activities in an ecological, economic and socially sustainable manner;

3. *Recognizing* that these international guidelines have a broad application and audience, *requests* the Executive Secretary, in order to increase clarity and facilitate the detailed understanding of the guidelines and the implementation by Parties and to identify and address specific stakeholders, to:

- (a) Develop a user's manual, checklists and, on the basis of experience gained, including the contribution of indigenous and local communities, produce and make available a streamlined and user-friendly core set of improved voluntary guidelines;
- (b) Prepare a glossary and definitions of terms used in the Guidelines;
- (c) Promote the use of the clearing-house mechanism to collect and disseminate information on:
  - (i) Specific case-studies on the implementation of the Guidelines that make clearer reference to the use and application of specific analytical management tools; and
  - (ii) Best practices, lessons learned and case-studies on the involvement of indigenous and local communities embodying traditional lifestyles in sustainable-tourism and ecotourism activities and projects.

4. *Aware* that the Guidelines should recognize and shall respect the rights of indigenous and local communities, consistent with the provisions of the Convention;

5. *Recalls* Article 8(j) of the Convention and related provisions and *emphasizes* that the Guidelines on Biodiversity and Tourism Development should be consistent with the Akwé: Kon Voluntary Guidelines 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;

6. *Invites* Parties, the Governments and relevant organizations to implement pilot projects, also through public-private partnerships as outlined in the World Summit on Sustainable Development, to test the applicability of the Guidelines, understand their practical implications and provide feedback on their effectiveness (e.g. through the clearing-house mechanism);

7. *Encourages* Parties, Governments and relevant organizations to establish monitoring and reporting systems based on relevant indicators to assess the applicability and status of implementation of the Guidelines;

8. *Invites* Parties, Governments and relevant organizations to provide indigenous and local communities with capacity-building and financial resources to support their active participation in tourism policy-making, development planning, product development and management indicated by the Guidelines and *invites* non-governmental organizations to continue and increase their involvement in fostering effective policy-making for sustainable tourism development;

9. In light of the collaboration between the Convention on Biological Diversity, the United Nations Environment Programme and the United Nations Educational, Scientific and Cultural Organization, *invites* the World Tourism Organization, the United Nations Conference on Trade and Development, the United Nations

Development Programme, the World Bank, World Trade Organization, regional development banks and other relevant international organizations, to:

- (a) Take these Guidelines into account in undertaking their activities;
- (b) Provide technical and financial assistance in the implementation of the Guidelines and pay due regard to the Guidelines when preparing, approving and funding tourism development projects having potential implications on biological diversity, as also recommended in the report of the Workshop on Tourism and Biodiversity, held in Santo Domingo in June 2001. To this end, the Conference of the Parties requests the Executive Secretary to forward the endorsed guidelines to financing agencies, regional development banks and developers;

10. *Invites* all Governments to integrate these Guidelines in the development or review of their strategies and plans for tourism development, national biodiversity strategies and action plans, and other related sectoral strategies, at appropriate levels in consultation with interested stakeholders including tourism operators and all members of the tourism sector;

11. *Calls for* additional efforts to increase awareness and training on the Guidelines and their applicability among the tourism sector and other stakeholders;

12. *Invites* the Executive Secretary to report on progress made in the implementation and improvement of the Guidelines, including the development of relevant tools, to the Conference of the Parties at its eighth meeting.

**ANNEX**  
**GUIDELINES ON BIODIVERSITY AND TOURISM DEVELOPMENT**

*International guidelines for activities related to sustainable tourism development in vulnerable terrestrial, marine and coastal ecosystems and habitats of major importance for biological diversity and protected areas, including fragile riparian and mountain ecosystems.*

**A. Scope**

1. The present Guidelines are voluntary and represent a range of opportunities for local, regional, national governments, indigenous and local communities and other stakeholders to manage tourism activities in an ecological, economic and socially sustainable manner. They can be flexibly applied to suit different circumstances and domestic institutional and legal settings.

2. The Guidelines will assist Parties to the Convention on Biological Diversity, public authorities and stakeholders at all levels, to apply the provisions of the Convention to the sustainable development and management of tourism policies, strategies, projects and activities. They will provide technical guidance to policy makers, decision makers and managers with responsibilities covering tourism and/or biodiversity, whether in national or local government, the private sector, indigenous and local communities,<sup>209</sup> non-governmental organizations or other organizations,

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209 For the purposes of the present Guidelines “indigenous and local communities” means “indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity.”

on a process for working together with key stakeholders involved in tourism and biodiversity.

3. The Guidelines cover all forms and activities of tourism. These activities should be consistent with the principles of conservation and sustainable use of biological diversity. These include, but are not limited to, conventional mass tourism, ecotourism, nature- and culture-based tourism, heritage and traditional tourism, cruise tourism, leisure and sports tourism. Although the primary focus of the Guidelines is vulnerable ecosystems and habitats, they are also appropriate for tourism with impact on biodiversity in all geographical locations and tourist destinations. The guidelines on Biodiversity and Tourism Development can also play a crucial role in incorporating sustainable use and equity strategies within and around protected areas. Furthermore the Guidelines recognize the need for collaboration between originating and receiving countries and should be used to balance local interests and national, regional and international policies.

## **B. The policy-making, development planning and management process**

4. The main elements considered in developing the Guidelines are:

- (a) Framework for management of tourism and biodiversity;
- (b) Notification process in relation to such a management framework;
- (c) Public education, capacity-building and awareness-raising concerning tourism and biodiversity.

5. Policy-making, development planning and the management process need to be undertaken through a multi-stakeholder process. Governments will normally coordinate this process at national level. This process may also be undertaken at more local levels by local government, and should ensure strong involvement of indigenous and local communities throughout the management and decision-making process. In addition, those responsible for tourism development and activities are encouraged to consult with and involve all relevant stakeholders, and especially those who are or may be affected by such developments and activities. The process applies to both new tourism development and the management of the existing tourism operations.

### *Institutions*

6. In order to ensure coordination between the levels of decision-making in government departments and agencies concerned with management of biological diversity and tourism as well as agencies responsible for broader national economic development, inter- and intra-departmental and inter-organizational structures and processes should be established, if they do not already exist, to guide policy development and implementation.

7. There is a need to improve awareness and exchange of knowledge between those responsible for and affected by tourism and nature conservation at a national, subnational and local level. In addition, national biodiversity strategies and action plans should include consideration of tourism issues, and tourism plans should likewise include full consideration of biodiversity issues. Existing docu-

ments, strategies and plans should be coherent or revised and amended to that effect as applicable.

8. A consultative process should be established to ensure ongoing and effective dialogue and information-sharing with stakeholders, as well as to resolve conflicts that might arise in relation to tourism and biological diversity and build consensus. To assist in this process, a multi-stakeholder body should be established including government departments, the tourism sector, non-governmental organizations, indigenous and local communities and other stakeholders, to ensure their engagement and full participation in the whole process, and encourage the establishment of partnerships.

9. The institutional arrangements should provide for the comprehensive involvement of stakeholders in the management process described in these Guidelines.

10. Authorities and managers of protected areas have a special role for the management of tourism and biodiversity. To this end, there is a need for government support and resources for managers, including training to perform their role effectively. In addition, it is necessary to establish and review mechanisms and funding policies to ensure the availability of adequate resources for maintaining biodiversity and promoting sustainable tourism. International institutions and development agencies should be involved as appropriate.

11. To be sustainable, tourism development in any destination requires coordinated policy-making, development planning and management. The policy-making, development planning and management process comprises the following steps:

- (a) Baseline information and review;
- (b) Vision and goals;
- (c) Objectives;
- (d) Review of legislation and control measures;
- (e) Impact assessment;
- (f) Impact management and mitigation;
- (g) Decision-making;
- (h) Implementation;
- (i) Monitoring and reporting;
- (j) Adaptive management.

## 1. BASELINE INFORMATION

12. Baseline information is necessary to enable informed decisions to be taken on any issue. A minimum of baseline information is needed to enable impact assessment and decision-making and it is recommended that its compilation follow the ecosystem approach.

13. For tourism and biodiversity, the baseline information should include information, as appropriate, on:

- (a) Current economic, social and environmental conditions at national and local level, including current and planned tourism development and activities and their overall positive and negative impacts, as well as development and activities in other sectors;
- (b) Structure and trends within the tourism sector, tourism policy and tourism markets and trends, at national, regional and international level, including information based on market research as necessary;
- (c) Environmental and biodiversity resources and processes, including any special features and sites of particular importance and protected areas, and identifying those resources that may be off bounds to development due to their particular fragility and those resources identified by existing analysis of threats;
- (d) Culturally sensitive areas;
- (e) Benefits from, and costs of, tourism to indigenous and local communities;
- (f) Information on damage done to the environment in the past;
- (g) National biodiversity strategies, action plans and reports and other sectoral plans and policies relevant for tourism development and biodiversity;
- (h) National, subnational and local sustainable-development plans.

14. Baseline information should take into consideration all sources of knowledge. The adequacy of the baseline information available will need to be reviewed, and where necessary, further research and information-gathering can be undertaken to fill gaps that may be identified.

15. All stakeholders may contribute relevant information to this process, including indigenous and local communities. To this end, there is a need for capacity-building and training to assist stakeholders in documenting, accessing, analysing and interpreting baseline information.

16. Collation and synthesis of information provided will need to be undertaken by an appropriately qualified team, drawing on a range of expertise, including expertise in tourism and in biodiversity issues, and in traditional knowledge and innovation systems.

17. In order to ensure that all relevant information, its credibility and reliability, are considered, all stakeholders should be involved in review of the collated baseline information available, and in the synthesis of this information.

18. Baseline information should include maps, geographical information systems and other visual tools, including already identified zoning schemes.

19. The baseline information-gathering and review process should make full use of the clearing-house mechanism under the Convention on Biological Diversity, as well as other relevant networks such as the World Network of Biosphere Reserves, World Heritage sites and Ramsar sites.

20. Requirements for site-specific information in relation to proposals for tourism development and activities at particular locations are set out in the notification

process, and its compilation should follow the ecosystem approach. To enable impact assessment and decision making, the basic information required includes:

(a) *Site-specific aspects:*

- (i) The various laws and regulations and plans that may be applicable to the specific site, including overviews of:
  - a. Existing laws at local, subnational and national levels;
  - b. Existing uses, customs and traditions;
  - c. Relevant regional and international conventions or agreements and their status, and cross-boundary agreements or memoranda of understanding (MoUs);
- (ii) Identification of various stakeholders involved in or potentially affected by the proposed project—including stakeholders in governmental, non-governmental, and private sectors (particularly those from the tourism sector), and indigenous and local communities—along with details concerning their participation in and/or consultation on the proposed project during its design, planning, construction and operation;

(b) *Ecological aspects:*

- (i) Detailed indication of the protected and biodiversity significant areas;
- (ii) Specifications on the ecosystems, habitats, species;
- (iii) Quantitative and qualitative information on the loss of habitats and species (main reasons, trends);
- (iv) Indexing of species;
- (v) Identified threats;
- (vi) Existing zones, ecological zones and existing tourism zones within the ecological zones;
- (vii) Ecologically sensitive zones and zones where ecological disasters have or will most likely take place;

(c) *Development aspects:*

- (i) Summary of the proposed project, why and by whom it is proposed, estimated outcomes and possible impacts (including impacts on the surrounding areas and transboundary impacts), and quantitative and qualitative data on these aspects;
- (ii) Description of the stages of development and the various structures and stakeholders that may be involved at each stage;
- (iii) Description of current land-uses, infrastructures, tourism facilities and services and their interaction with proposed operations.

## 2. VISION AND GOALS

### *Vision*

21. An overall vision for sustainable tourism development in harmony with the goals and objectives of the Convention on Biological Diversity and other related conventions, such as the World Heritage Convention, is important for the effective



management of tourism and biodiversity, and for ensuring that this also contributes to income generation and poverty reduction and a reduction of threats to biodiversity. The vision developed at the local level, while reflecting local priorities and realities, should take into account, as appropriate, national and regional tourism development strategies, policies and plans for economic and social development and for land-use, as well as the baseline information and review. It should be based on a multi-stakeholder process including indigenous and local communities that are or may be affected by tourism development.

### Goals

22. The main goals are established to maximize the positive benefits of tourism to biodiversity, ecosystems, and economic and social development, and of biodiversity to tourism, while minimizing negative social and environmental impacts from tourism, and can cover, *inter alia*:

- (a) Maintenance of the structure and functioning of ecosystems;
- (b) Sustainable tourism compatible with biodiversity conservation and sustainable use;
- (c) Fair and equitable sharing of benefits of tourism activities, with emphasis on the specific needs of the indigenous and local communities concerned;
- (d) Integration and interrelation with other plans, developments or activities in the same area;
- (e) Information and capacity-building;
- (f) Poverty reduction, through the generation of sufficient revenues and employment to effectively reduce threats to biodiversity in indigenous and local communities;
- (g) Protection of indigenous livelihoods, resources and of access to those resources;
- (h) Diversification of economic activities beyond tourism to reduce dependency on tourism;
- (i) Prevention of any lasting damage to biological diversity, ecosystems, and natural resources, and of social and cultural damage, and restoration of past damage where appropriate;
- (j) Supporting the effective participation and involvement of representatives of indigenous and local communities in the development, operation and monitoring of tourism activities on lands and waters traditionally occupied by them
- (k) Zoning and control of tourism developments and activities, including licensing and overall targets for and limits to the scale of tourism, to provide a range of activities for user groups that meet overall visions and goals;
- (l) Empowerment through participation in decision-making;
- (m) Access by indigenous and local communities to infrastructure, transport, communications and healthcare provisions laid on for tourists;
- (n) Increased safety for indigenous local communities;

- (o) Increased social pride;
- (p) Control of tourism development and activities including licensing and clear indication on the limits to the scale and type of tourism development.

23. In relation to sharing of benefits arising from tourism and the conservation of biodiversity with indigenous and local communities, it should be noted that benefits may take various forms, including: job creation, fostering local enterprises, participation in tourism enterprises and projects, education, direct investment opportunities, economic linkages and ecological services. Appropriate mechanisms need to be established/evolved to capture the benefits.

24. The vision and goals will form the basis of national strategies or master plans for sustainable development of tourism in relation to biodiversity. Such plans should also incorporate consideration of biodiversity strategies and plans. In addition, biodiversity strategies and plans should include consideration of tourism issues.

25. Governments will normally coordinate this process at national level. This process may also be undertaken at more local levels by local government, and by communities at community level. Where local and community level vision and goals for tourism and biodiversity have been set, these may be taken into account by Governments when preparing the national level vision and goals, for example through workshops at the local level.

### 3. OBJECTIVES

26. The objectives focus on actions to implement specific elements of the overall vision and goals, and may include clear activities and the time by which these will be achieved. Objectives should be performance-based (e.g., construction of an interpretative trail to aid development of local guide services) and process-based (e.g., establishment of an operational management system for tourism and biodiversity). As with the vision and goals, it is important to involve and consult with all relevant stakeholders, and especially the tourism industry and indigenous and local communities that are or may be affected by tourism development, in the process for setting objectives.

27. Objectives should be specific and should include specific areas identified in clearly delineated zones listing the types of activities and infrastructure that would be acceptable and should be developed. It should also outline the impact management measures that would be appropriate, and intended markets (with greater detail, as set out in the notification process, being required for proposals for tourism development or activities at specific locations).

28. Governments may also wish to consider:

- (a) Measures to ensure that sites designated at international level, such as Ramsar or World Heritage Sites or Biosphere Reserves, are accorded appropriate legal recognition and government assistance at the national level;
- (b) Establishing reserves based on the biosphere reserve concept and incorporating sustainable-development objectives, generating income and employment

opportunities for indigenous and local communities, and promoting appropriate product development;

- (c) Measures to ensure that sites, at the national level, such as national parks, reserves and marine conservation areas are accorded appropriate legal recognition, have management plans and are provided necessary government support;
- (d) Strengthening the protected area network and encouraging the role of protected areas as key locations for good practices in the management of sustainable tourism and biodiversity, taking into account the full range of protected area categories;
- (e) Use of political and economic tools and measures to encourage the channelling of part of total tourism revenues towards supporting the conservation and sustainable use of biodiversity, such as conservation of protected areas, education, research programmes, or local community development;
- (f) Encouraging all stakeholders, as well as the private sector, to actively support the conservation of biodiversity and the sustainable use of its components.

29. Governments will normally coordinate this process at national level. This process may also be undertaken at more local levels by local government, and by communities at community level. Where local- and community-level objectives for tourism and biodiversity have been set, these may be taken into account by governments when preparing national level objectives.

#### 4. LEGISLATION AND CONTROL MEASURES

30. Respect for existing national legislation and appropriate regulatory mechanisms and tools, such as land-use planning, protected area management plans, environmental assessment, building regulations and standards for sustainable tourism, are essential for the effective implementation of any overall vision, goals, and objectives. A review of legislation and control measures could consider, as appropriate, the legislation and control measures available for implementation of the overall vision, goals and objectives for tourism and biodiversity, their effectiveness, including enforcement, and any gaps that may need to be addressed for example, by revision of—or the development of additional—legislation and control measures.

31. The review of legislation and control measures may include, *inter alia*, assessment of the effectiveness of any provisions for resource management, access, and/or ownership by communities, especially indigenous and local communities in relation to tourism development or operations on lands and waters traditionally occupied or used by them; addressing legally established rights of indigenous and local communities; and enabling these groups to make decisions about tourism development and activities, amongst other forms of development and activities, in these areas.

32. Legislation and control measures considered could include measures for:

- (a) Effective enforcement of existing laws, including the participation of all stakeholders;
- (b) Approval and licensing processes for tourism development and activities;

- (c) Controlling the planning, siting, design and construction of tourism facilities and infrastructures;
- (d) Management of tourism in relation to biodiversity and ecosystems, including vulnerable areas;
- (e) Application of environmental assessment, including assessment of cumulative impacts and effects on biodiversity, to all proposed tourism developments, and as a tool to develop policies and measure their impacts;
- (f) Setting national standards and/or criteria for tourism that are consistent with overall national or regional plans for sustainable development and national biodiversity strategies and action plans:
  - (i) Environmental quality and land-use criteria in and around tourism sites;
  - (ii) Development of a decision-making process with environmental and cultural sustainability guidelines for new and existing tourism development within the designated goals and objectives of the site's different zones and within the limits of acceptable change;
- (g) Integrated land-use management;
- (h) Ensuring inter-linkages between tourism and cross-cutting issues, including agricultural development, coastal zone management, water resources, etc.;
- (i) Mechanisms to resolve any inconsistencies between policy objectives and/or legislation in a manner that takes into account the interests of all stakeholders;
- (j) Application of economic instruments, including tiered user fees, bonds, taxes or levies, for the management of tourism and biodiversity;
- (k) Creating incentives for sustainable tourism development in line with the provisions of the Convention on Biological Diversity and Agenda 21 through relevant economic mechanisms;
- (l) Supporting private sector voluntary initiatives consistent with these Guidelines, such as certification schemes and providing opportunities for the private tourism sector to contribute to management initiatives through direct donations, in-kind services, and other voluntary initiatives consistent with these Guidelines, and relevant policies;
- (m) Avoiding tourism development or activities outside those areas set out in the objectives;
- (n) Monitoring, control of and provision of information on activities related to collection and trade of biological and related cultural resources within tourism sites.

33. Governments will normally coordinate this process at the national level. It is important to involve and consult with all relevant stakeholders, and especially indigenous and local communities that are or may be affected by tourism development, in the process for reviewing legislation and control measures, assessing their adequacy and effectiveness, and proposing development of new legislation and measures where necessary.

## 5. IMPACT ASSESSMENT

34. Impact assessment for sustainable tourism development in ecosystems should be based on the “Guidelines for incorporating biodiversity-related issues into environmental impact assessment legislation and/or processes and in strategic environmental assessment” developed by the Convention on Biological Diversity and contained in the annex to decision VI/7 A (paras. 1–24) as well as on the Akwé: Kon Voluntary Guidelines 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 (as contained in section F of decision VII/16).

35. At national level, Governments should normally undertake assessment of impacts associated with the overall vision, goals and objectives for tourism and biodiversity. In addition, this process may also be undertaken at more local levels by local government, and by indigenous and local communities.

36. Proposers of tourism developments or activities should assess the potential impacts of their proposals and provide information on this through a notification process.

37. Governments will normally undertake evaluations of the adequacy of impact assessments submitted by proposers of tourism developments or activities. These evaluations will need to be undertaken by an appropriately qualified team, drawing on a range of expertise, including expertise in tourism and in biodiversity management, and also involving those indigenous and local communities that would be affected by the proposals. There should be public access to the documentation.

38. If the information provided is not sufficient, or the impact assessment inadequate, then further impact assessment studies may need to be undertaken. The proposer may be requested to undertake such studies, or the Government may decide to undertake these studies, and may request funds from the proposer for this purpose, as appropriate. Other stakeholders, including biodiversity managers and indigenous and local communities that may be affected by a proposed development, may also provide their assessments of impacts associated with specific proposals for tourism developments or activities, and provisions may be needed to ensure that any such assessments are taken into account by decision-makers.

39. Indigenous and local communities concerned should be involved in impact assessment. Their traditional knowledge should be acknowledged and considered for impact assessment in particular tourism projects that affect their sacred sites or lands and waters traditionally occupied or used by them.

40. Sufficient time should be allowed considering the different conditions and circumstances to ensure that all stakeholders are able to participate effectively in the decision-making process for any project using information provided by the impact assessment. Such information should be provided in forms that are accessible and comprehensible to all the various stakeholders involved.

41. Impacts of tourism in relation to the environment and biological diversity may include:

- (a) Use of land and resources for accommodation, tourism facilities and other infrastructure provision, including road networks, airports and seaports;
- (b) Extraction and use of building materials (e.g., use of sand from beaches, reef limestone and wood);
- (c) Damage to or destruction of ecosystems and habitats, including deforestation, draining of wetlands, and intensified or unsustainable use of land;
- (d) Increased risk of erosion;
- (e) Disturbance of wild species, disrupting normal behaviour and potentially affecting mortality and reproductive success;
- (f) Alterations to habitats and ecosystems;
- (g) Increased risk of fires;
- (h) Unsustainable consumption of flora and fauna by tourists (e.g., through picking of plants; or purchase of souvenirs manufactured from wildlife, in particular such endangered species as corals and turtle shells; or through unregulated hunting, shooting and fishing);
- (i) Increased risk of introduction of alien species;
- (j) Intensive water demand from tourism;
- (k) Extraction of groundwater;
- (l) Deterioration in water quality (freshwater, coastal waters) and sewage pollution;
- (m) Eutrophication of aquatic habitats;
- (n) Introduction of pathogens;
- (o) Generation, handling and disposal of sewage and waste-water;
- (p) Chemical wastes, toxic substances and pollutants;
- (q) Solid waste (garbage or rubbish);
- (r) Contamination of land, freshwater and seawater resources;
- (s) Pollution and production of greenhouse gases, resulting from travel by air, road, rail, or sea, at local, national and global levels;
- (t) Noise.

42. Socio-economic and cultural impacts related to tourism may include:

- (a) Influx of people and social degradation (e.g., local prostitution, drug abuse, etc.);
- (b) Impacts on children and youth;
- (c) Vulnerability to the changes in the flow of tourist arrivals which may result in sudden loss of income and jobs in times of downturn;
- (d) Impacts on indigenous and local communities and cultural values;
- (e) Impacts on health and the integrity of local cultural systems;
- (f) Intergenerational conflicts and changed gender relationships;

- (g) Erosion of traditional practices and lifestyles;
  - (h) Loss of access by indigenous and local communities to their land and resources as well as sacred sites, which are integral to the maintenance of traditional knowledge systems and traditional lifestyles.
43. The potential benefits of tourism may include:
- (a) Revenue creation for the maintenance of natural resources of the area;
  - (b) Contributions to economic and social development, for example:
    - (i) Funding the development of infrastructure and services;
    - (ii) Providing jobs;
    - (iii) Providing funds for development or maintenance of sustainable practices;
    - (iv) Providing alternative and supplementary ways for communities to receive revenue from biological diversity;
    - (v) Generating incomes;
    - (vi) Education and empowerment;
    - (vii) An entry product that can have direct benefits for developing other related products at the site and regionally;
    - (viii) Tourist satisfaction and experience gained at tourist destination.

## 6. IMPACT MANAGEMENT AND MITIGATION

44. Impact management is essential to avoid or minimize any potential damage to biodiversity conservation and sustainable use that tourism development or activities might cause. Proposals for tourism development or activities may incorporate proposals for impact management, but these may not necessarily be judged sufficient to deal with potential impacts on biodiversity. Therefore all stakeholders, and especially Governments that exercise overall control over tourism development and activities, will need to consider the various impact management approaches that may be necessary in any given situation. In particular, Governments should be aware that the tourism industry could provide a direct impetus for conservation of vulnerable ecosystems by supporting sustainable tourism activities that have a direct commercial interest in maintaining the vulnerable ecosystem in a good condition.

45. Tourism should be planned and managed using the internationally accepted planning methodologies (such as the Recreation Opportunity Spectrum and the Limits of Acceptable Change). In vulnerable ecosystems, based on these methodologies and relevant background information, tourism should be restricted and where necessary prevented.

46. Impact management can include, *inter alia*, measures for the siting of tourism development and activities, including establishing appropriate activities in different designated zones, differentiation between the impacts of different types of tourism, and measures to control tourist flows in and around tourist destinations and key sites, to promote appropriate behaviour by tourists so as to minimize their impacts, and to establish limits to numbers of visitors and their impacts within Limits of Acceptable Change at any site.

47. Impact management in relation to transboundary ecosystems and migratory species requires regional cooperation.

48. There is a need to identify those who will be responsible for implementing impact management and the resources that will be required for impact management.

49. Impact management for tourism development and activities can include the adoption and effective implementation of policies, good practices and lessons learned that cover, *inter alia*:

- (a) Controlling impacts of major tourist flows including excursions, cruise ships, etc., which can cause serious effects on destinations even though they are visited for only short periods;
- (b) Reducing impacts of activities outside tourism areas on adjacent and other ecosystems of importance for tourism (e.g., pollution from nearby farming activities or extractive industries may affect areas of tourism development);
- (c) Responsible use of natural resources (e.g., land, soil, energy, water);
- (d) Reducing, minimizing and preventing pollution and waste (e.g., solid and liquid waste, emissions to air, transport);
- (e) Promoting the design of facilities that are more eco-efficient, which adopt the cleaner production approach, and use environmentally sound technologies, in particular to reduce emissions of carbon dioxide and other greenhouse gases and ozone-depleting substances, as set out in international agreements;
- (f) Conserving flora, fauna and ecosystems;
- (g) Preventing the introduction of alien species as a result of the construction, landscaping and operating of tourism activities, including for example from shipping associated with tourism;
- (h) Conserving landscapes, cultural and natural heritage;
- (i) Respecting the integrity of local cultures and avoiding negative effects on social structures, involving, and cooperating with, indigenous and local communities, including measures to ensure respect for sacred sites and customary users of these sites, and to prevent negative impacts on them and on lands and waters traditionally occupied or used by them, as well as on their subsistence resources;
- (j) Using local products and skills, and providing local employment;
- (k) Promoting appropriate behaviour by tourists so as to minimize their adverse impacts, and to promote positive effects through education, interpretation, extension, and other means of awareness-raising;
- (l) Alignment of marketing strategies and messages with the principles of sustainable tourism;
- (m) Contingency plans for handling accidents, emergencies or bankruptcies that may occur during construction and use of facilities and which may threaten the environment and the conservation and sustainable use of biodiversity;



- (n) Environmental and cultural sustainability audits and review of existing tourism activities and developments and of the effectiveness with which impact management is being applied to existing tourism activities and developments;
- (o) Mitigation measures for existing impacts, and appropriate funding to support them. Such measures should include development and implementation of compensation measures in cases when tourism has resulted in negative environmental, cultural, and socio-economic effects, taking into consideration the range of redress and compensation measures.

50. Governments, in cooperation with biodiversity managers, those communities that would be affected by the proposals, and other stakeholders, would normally assess the need for impact management in addition to any management measures included in the proposals under consideration. All stakeholders should understand the importance of such impact management.

51. The tourism industry can assist in promoting corporate policies on sustainable tourism and biodiversity, with defined goals, monitoring and reporting their progress publicly on a regular basis.

## 7. DECISION-MAKING

52. Decisions will be made concerning approval or otherwise of, *inter alia*:

- (a) National strategies and plans for tourism and biodiversity;
- (b) Proposals for tourism development and activities at particular locations in relation to biodiversity, which are to be submitted through the notification process;
- (c) Adequacy of impact management measures in relation to anticipated impacts from tourism development and activities;
- (d) Adequacy and frequency of monitoring and reporting.

53. Such decisions will ultimately be taken by Governments (or specific authorities designated by Governments). It is recognized, however, that effective consultation with and participation of the communities and groups affected, including specific input from biodiversity managers, and from indigenous and local communities as well as the private sector in a broad sense, is an important foundation of the decision-making process and critical to sustainable development. Decision makers should consider using multi-stakeholder processes as a tool for the decision-making process.

54. The decision-making process should be transparent, accountable, and apply the precautionary approach. Legal mechanisms should be put in place for notification and approval of tourism development proposals and for ensuring implementation of the conditions of approval of development proposals.

55. For proposals for tourism development and activities at particular locations, the proposers will normally be required to provide the information set out in the notification process. This should apply equally to public-sector development and

infrastructure projects, as well as to private-sector development. Impact assessment should be a component of any decision-making process.

56. Measures should be taken to ensure full and timely disclosure of project information concerning tourism development proposals. Consistent with Article 8(j), decision-making should include meaningful consultation with indigenous and local communities affected by projects in order to ensure, *inter alia*, respect for the customs and traditional knowledge, innovations and practices of indigenous and local communities, and adequate funding and technical support for effective participation. Where the national legal regime requires prior informed consent of indigenous and local communities with respect to decisions identified in paragraph 52, such prior informed consent must be obtained.

57. Decisions should include a review of the adequacy of information available, that could cover, *inter alia*, baseline information, impact assessment, and information on the proposed tourism development or activity, its nature and size, the type(s) of tourism involved, and information on human settlements and communities that may be affected.

58. In cases where there is not sufficient contextual/baseline information available at the time, or where the overall vision, goals and objectives for tourism and biodiversity have not been developed sufficiently to make a decision, decisions may be deferred pending sufficient information being obtained, and/or completion of overall plans/goals.

59. In making a decision, conditions may be attached to any approvals that may be granted, including conditions regarding management of tourism in relation to avoidance or minimization of adverse impacts on biodiversity, and for appropriate decommissioning of tourism activities should the development cease. Decision makers may also, as appropriate, request further information from a proposer; defer a decision pending further baseline research by other agencies; or refuse a proposal.

## 8. IMPLEMENTATION

60. Implementation follows a decision to approve a particular proposal, strategy or plan. Unless otherwise stated, the developer and/or operator will be responsible for complying with the conditions for granting the approval; and, as part of this process, they can also be required to notify the designated government authority of any failures to comply with conditions attached to an approval, including conditions for decommissioning, and/or of any changes in circumstances, including unforeseen environmental conditions and/or biodiversity issues (e.g., detection of rare or endangered species not recorded in the original proposal and impact assessment).

61. Any revisions or changes to an approved project, including additions and/or variations of activities, must be approved by the designated authorities before construction.

62. Implementation plans should recognize that indigenous and local communities and other relevant stakeholders may require assistance as actors in implementation, and should ensure that sufficient resources are available for implementation and for effective participation.

63. Local stakeholders should be given an ongoing opportunity to express their wishes and concerns to those managing tourism facilities and activities. As part of this process, clear and adequate information regarding implementation should be provided for review by the stakeholders, in forms that are accessible and comprehensible to them.

64. Availability of information on policies, programmes, projects, and their implementation, including information on existing and future guidelines, should be ensured and exchange of information fostered, for example, through the clearing-house mechanism of the Convention on Biological Diversity.

## 9. MONITORING AND REPORTING

65. It is necessary to establish a monitoring and control system for the management of tourism activities and biological diversity. Long-term monitoring and assessment are necessary in relation to the impacts of tourism on biodiversity, and will need to take into account the timescale for ecosystem changes to become evident. Some effects may develop quickly, while others may take place more slowly. Long-term monitoring and assessment provide a means for detecting adverse effects that may arise from tourism activities and development in relation to biodiversity, so that action can be taken to control and mitigate such effects.

66. Monitoring and surveillance in relation to management of tourism and biodiversity includes, *inter alia*, the following main areas:

- (a) Implementation of approved tourism developments or activities, and compliance with any conditions attached when approval was granted, and taking appropriate actions in cases of non-compliance;
- (b) Impacts of tourism activities on biodiversity and ecosystems, taking appropriate preventative actions as necessary;
- (c) Impacts of tourism on the surrounding population, especially indigenous and local communities;
- (d) General tourism activities and trends, including tour operations, tourism facilities, and tourist flows in originating and receiving countries, including progress towards sustainable tourism;
- (e) Clearly defined objectives, actions and targets for conservation or mitigation of threats to biodiversity, maintenance or restoration of ecosystems and for tourism;
- (f) Compliance with, and enforcement as necessary, of conditions attached to any approval. Communities and other interested stakeholders may also monitor and report their findings to the designated government authorities.

67. Developers and operators of tourism facilities and activities should be required to report periodically to designated authorities and to the public on compliance with conditions set out in approvals, and on the condition of biodiversity and the environment in relation to the tourism facilities and activities for which they are responsible.

68. Prior to the commencement of any new tourism development or activities, an inclusive monitoring and reporting system should be put in place, with indicators to track how tourism actions are mitigating threats to biodiversity, along with agreed upon quantifiable standards indicating thresholds of acceptable change. These should be developed in conjunction with all key stakeholders including indigenous and local communities.

69. Indicators to cover aspects of management of biodiversity and sustainable tourism, including socio-economic and cultural aspects, should be identified and monitored at global, national, and local levels, and should include, but not be limited to, the following:

- (a) Conservation of biodiversity;
- (b) Generation of income and employment from tourism (long-term and short-term);
- (c) Proportion of tourism income retained in the local community;
- (d) Effectiveness of multi-stakeholder processes for management of biodiversity and sustainable tourism;
- (e) Effectiveness of impact management;
- (f) Contribution of tourism to the well-being of the local population;
- (g) Visitor impacts and visitor satisfaction.

70. Monitoring results depend largely on the appropriate set of data to be collected. Guidelines on how to collect data in a way that can be used to evaluate change over time should be developed. Monitoring could follow a standard process and format, and be based on a framework including parameters on social, economic, environmental and cultural impact.

71. Monitoring and surveillance in relation to biodiversity impacts should include activities undertaken to ensure respect for endangered species under relevant international agreements, prevention of the introduction of alien species as a result of tourism activities, compliance with national rules concerning access to genetic resources, and prevention of illegal and unauthorized removal of genetic resources.

72. In relation to indigenous and local communities, monitoring and evaluation should include development and use of appropriate tools to monitor and evaluate tourism impacts on the economy of indigenous and local communities, particularly their food and health security, traditional knowledge, practices and customary livelihoods. Use of indicators and early warning systems should be developed as appropriate, taking into account traditional knowledge, innovation and practices of indigenous and local communities, and guidelines developed under the Convention on Biological Diversity relating to traditional knowledge. Measures should also be taken to ensure that indigenous and local communities involved in, or affected by tourism, have the opportunity to be involved effectively in monitoring and evaluation.

73. Monitoring of general environmental and biodiversity conditions and trends, as well as tourism trends and impacts, can be undertaken by Governments, including designated biodiversity managers. Management measures may need to

be adjusted, as appropriate, where adverse impacts on biodiversity and ecosystems are detected. The need for and nature of such adjustments will be based on the results of monitoring, and it is important for these to be determined in dialogue with all relevant stakeholders, including the developers and/or operators of tourism facilities and activities, communities affected by those facilities and activities, and other interested stakeholders. The monitoring process needs to be multi-stakeholder and transparent.

## 10. ADAPTIVE MANAGEMENT

74. The ecosystem approach requires adaptive management to deal with the complex and dynamic nature of ecosystems and the absence of complete knowledge or understanding of their functioning. Ecosystem processes are often non-linear, and the outcome of such processes often shows time-lags. The result is discontinuities, leading to surprise and uncertainty. Management must be adaptive in order to be able to respond to such uncertainties and contain elements of “learning-by-doing” or research feedback. Measures may need to be taken even when some cause-and-effect relationships are not yet fully established scientifically.<sup>210</sup>

75. Ecosystem processes and functions are complex and variable. Their level of uncertainty is increased by the interaction with social constructs, which need to be better understood. Therefore, ecosystem management must involve a learning process, which helps to adapt methodologies and practices to the ways in which these systems are being managed and monitored. Adaptive management should also take the precautionary approach fully into account.

76. Implementation programmes should be designed to adjust to the unexpected, rather than to act on the basis of a belief in certainties.

77. Ecosystem management needs to recognize the diversity of social and cultural factors affecting natural-resource use and sustainability.

78. Similarly, there is a need for flexibility in policy-making and implementation. Long-term, inflexible decisions are likely to be inadequate or even destructive. Ecosystem management should be envisaged as a long-term experiment that builds on its results as it progresses. This “learning-by-doing” will also serve as an important source of information to gain knowledge of how best to monitor the results of management and evaluate whether established goals are being attained. In this respect, it would be desirable to establish or strengthen capacities of Parties for monitoring. In addition, adaptive management learning portfolios should be developed between different sites so that comparison can be made and lessons learned.

79. Implementing adaptive management in relation to tourism and biodiversity will require the active cooperation of all stakeholders in tourism, and especially those in the private sector, with biodiversity managers. Impacts on biodiversity at a particular location may require rapid curtailment of visits by tourists to prevent further damage, and to allow for recovery, and in the longer-term, may necessitate an

<sup>210</sup> Monitoring at World Heritage Sites should be designed to also incorporate the World Heritage criteria upon which the site was inscribed. The monitoring system should be designed to contribute to the World Heritage periodic reporting structure, aimed at gathering information on the state of conservation of the site.

overall reduction in tourist flows. It may be possible for tourists to be redirected to less sensitive areas in such cases. In all cases, maintenance of the balance between tourism and biodiversity will require close interaction between tourism managers and biodiversity managers, and appropriate frameworks for management and dialogue are likely to need to be established.

80. Governments, including designated biodiversity managers, in conjunction with all other stakeholders will therefore need to take actions, as appropriate, to address any problems encountered and to keep on track towards agreed goals. This may include changes and additions to conditions set in the original approval, and will require participation of and consultation with the developer and/or operator of the tourism facilities and activities concerned, and with local communities.

81. Adaptive management can also be undertaken by all those who have management control over any specific site, including local governments, indigenous and local communities, the private sector, non-governmental organizations and other organizations.

82. Where necessary, legal frameworks may need to be reviewed and amended to support adaptive management, taking into account experience gained.

### **C. Notification process and information requirements**

83. Proposals for tourism development and activities at particular locations in relation to biodiversity are to be submitted through the notification process. As such, this process provides the link between proposers of tourism activities and development, and the management process steps outlined above. In particular, the notification process makes specific links to the steps in the management process for impact assessment and decision-making and should take into account local, regional and national impacts. Proposers of tourism projects, including government agencies, should provide full and timely advance notice to all stakeholders who may be affected, including indigenous and local communities, of proposed developments.

84. Information to be provided as part of the notification could include:

- (a) Scale and types of tourism development or activities proposed, including a summary of the proposed project, why and by whom it is proposed, estimated outcomes and possible impacts, and a description of the stages of development and the various structures and stakeholders that may be involved at each stage;
- (b) Analysis of market for proposed tourism development or activities, based on market conditions and trends;
- (c) Geographical description including recreation opportunity zones, outlining tourist activities and infrastructure development, and location of the site of tourism development or activities, the identity and any special features of the surrounding environments and biodiversity;
- (d) Nature and extent of human-resource requirements and plans for their procurement;
- (e) Identification of various stakeholders involved in or potentially affected by the proposed project—including stakeholders in governmental, non-governmental,

and private sectors, and indigenous and local communities—along with details concerning their participation in and/or consultation on the proposed project during its design, planning, construction and operation;

- (f) The perceived roles of local stakeholders in the proposed development;
- (g) The various laws and regulations that may be applicable to the specific site, including overviews of existing laws at local, subnational and national levels, of existing uses and customs, of relevant regional and international conventions or agreements and their status, and cross-boundary agreements or memoranda of understanding and any proposed legislation;
- (h) The proximity of the site to human settlements and communities, sites used by people from those settlements and communities as part of their livelihoods and traditional activities, and heritage, cultural or sacred sites;
- (i) Any flora, fauna and ecosystems that could be affected by the tourism development or activities, including keystone, rare, endangered or endemic species;
- (j) Ecological aspects of the site and its surroundings, including indication of any protected areas; specifications on the ecosystems, habitats, and species; quantitative and qualitative information on the loss of habitats and species (main reasons, trends), and indexing of species;
- (k) Training and supervision of personnel carrying out the tourism development or activities;
- (l) Likelihood of impacts beyond the immediate area of the tourism development or activities, including transboundary impacts and effects on migratory species;
- (m) A description of current environmental and socio-economic conditions;
- (n) Expected changes to environmental and socio-economic conditions as a result of the tourism development or activities;
- (o) Proposed management measures to avoid or minimize adverse impacts from the tourism development or activities, including verification of their functioning;
- (p) Proposed measures for mitigation, decommissioning and compensation in the event of problems arising with the tourism development or activities;
- (q) Proposed measures to maximize the local benefits of the tourism development or activities on surrounding human settlements and communities, biodiversity and ecosystems, which may include, but are not limited to:
  - (i) Using local products and skills;
  - (ii) Employment;
  - (iii) Restoration of biodiversity and ecosystems.
- (r) Relevant information from any previous tourism development or activities in the region, and information on possible cumulative effects;
- (s) Relevant information from any previous tourism development or activities by the proposer.

85. Categories of responses that Governments may wish to consider making in response to notification of proposals for, and requests for permission to undertake, tourism development, include, *inter alia*:

- (a) Approval without conditions;
- (b) Approval with conditions;
- (c) Request for further information;
- (d) Deferral pending further baseline research by other agencies;
- (e) Refusal of the proposal.

#### D. EDUCATION, CAPACITY-BUILDING AND AWARENESS-RAISING

86. Education and awareness-raising campaigns need to be addressed to both the professional sectors and the general public and should inform them about the impacts of tourism on biological diversity, and good practices in this area. The private sector, and, especially, tour operators, could provide information more widely to their clients—the tourists—about tourism and biodiversity issues, and encourage them to conserve, and avoid adverse impact on, biodiversity and cultural heritage to respect national legislation of the visited country, as well as traditions of indigenous and local communities of that country, and to support actions in conformity with the present Guidelines.

87. Awareness campaigns explaining the link between cultural diversity and biological diversity will need to be tailored for various audiences, particularly stakeholders including consumers of tourism, developers and tourism operators.

88. Education and awareness-raising is required at all levels of government. This should include processes for increasing mutual understanding between relevant ministries, including joint and innovative approaches for dealing with tourism and environmental issues.

89. Awareness should also be increased within and outside Government that vulnerable ecosystems and habitats are often located within lands and waters occupied or used by indigenous and local communities.

90. The tourism sector as a whole, along with tourists should be encouraged to minimize any negative impacts and maximize positive impacts on biodiversity and local cultures associated with their consumption choices and behaviour, for example through voluntary initiatives.

91. It is also important to raise awareness within the academic sector responsible for training and research on issues regarding the interaction between biological diversity and sustainable tourism, of the role that they can play concerning public education, capacity-building and awareness-raising on these issues.

92. Capacity-building activities should aim to develop and strengthen the capacities of Governments and all stakeholders to facilitate the effective implementation of the present Guidelines, and may be necessary at local, national, regional and international levels.



93. Capacity-building activities can be identified through the adaptive management process and can include strengthening human resources and institutional capacities, the transfer of know-how, the development of appropriate facilities, and training in relation to biological diversity and sustainable tourism issues, and in impact assessment and impact management techniques.

94. Such activities should include ensuring that local communities are equipped with the necessary decision-making abilities, skills and knowledge in advance of future tourist in-flows, as well as with relevant capacity and training regarding tourism services and environmental protection.

95. Capacity-building activities should include, but not be limited to:

Capacity-building and training to assist all stakeholders, including Governments, and indigenous and local communities, in accessing, analysing and interpreting baseline information, undertaking impact assessments and evaluations, impact management, decision-making, monitoring and adaptive management;

- (a) Development or strengthening of mechanisms for impact assessment with the participation of all stakeholders, including for the approval of the approach, content and scope of impact assessment;
- (b) Establishment of multi-stakeholder processes involving government departments, tourism sector, non-governmental organizations, indigenous and local communities and other stakeholders;
- (c) Training of tourism professionals in conservation and biodiversity issues.

96. Information exchange and collaboration regarding sustainable tourism implementation through networking and partnerships between all stakeholders affected by, or involved in tourism, including the private sector, should be encouraged.

## DECISION VII/15 | Biodiversity and Climate Change

### *The Conference of the Parties*

1. *Welcomes* the report of the Ad Hoc Technical Expert Group on Biological Diversity and Climate Change (UNEP/CBD/SBSTTA/9/11 and UNEP/CBD/SBSTTA/9/INF/12) as scientific advice provided in response to paragraphs 11 and 18 of decision V/4, as a basis for future work;

2. *Invites* Parties, other Governments, international organizations and other bodies to make use of the report on climate change and biodiversity prepared by the Ad Hoc Technical Expert Group on Biological Diversity and Climate Change in order to promote synergies at the national level between the United Nations Framework Convention on Climate Change and its Kyoto Protocol and the Convention on Biological Diversity, when implementing climate-change activities and their relation to the conservation and sustainable use of biodiversity;

3. *Invites* the national focal points for the Convention on Biological Diversity to bring the report to the attention of their counterpart focal points for the United

Nations Framework Convention on Climate Change, and for other relevant agreements, in order to promote synergy at national level;

4. *Notes with appreciation* that the Subsidiary Body on Scientific and Technical Advice of the United Nations Framework Convention on Climate Change (UNFCCC) has welcomed the report of the Ad Hoc Technical Expert Group and has encouraged Parties to the UNFCCC to make use of it for their national purposes as a relevant source of useful information for their national purposes;

5. *Notes* that the Conference of the Parties to the Ramsar Convention on Wetlands at its eighth meeting adopted resolution VIII/3 on climate change and wetlands, which, *inter alia*, called on relevant countries to take action to minimize the degradation as well as promote the restoration of those peatlands and other wetland types that are significant carbon stores or have the ability to sequester carbon and *supports* the request by the Parties to the Ramsar Convention on Wetlands to the Intergovernmental Panel on Climate Change to prepare a technical paper on the relationship between wetlands and climate change;

6. *Welcomes* the proposed assessment on peatlands biodiversity and climate change being undertaken by Wetlands International and the Global Environment Center with the support of UNEP-GEF, the Government of Canada, the Netherlands and others and *encourages* the involvement of parties in this assessment and in preparations for the consideration of its findings by the SBSTTA prior to the ninth meeting of the Conference of the Parties;

7. *Notes also* that there are opportunities to implement climate change mitigation and adaptation activities in ways that are mutually beneficial and synergistic, and that contribute simultaneously to the United Nations Framework Convention on Climate Change and its Kyoto Protocol, the Convention on Biological Diversity, the United Nations Convention to Combat Desertification, Vienna Convention for the Protection of the Ozone Layer and its Montreal Protocol on Substances that Deplete the Ozone Layer, the Ramsar Convention on Wetlands, and other international agreements, all within broader national development objectives;

8. *Further notes* that the ecosystem approach provides a framework for the integrated management of land, water and living resources. Its application could facilitate the formulation of climate change mitigation and adaptation projects that also contribute to biodiversity conservation and sustainable use at the national level;

9. *Invites* Parties, other Governments, international organizations and other bodies to facilitate building capacity related to accessing information and tools, and for enhancing coordination at national level to ensure that climate change mitigation and adaptation projects deliver environmental and social benefits and are consistent with national priorities;

10. Calls for where national circumstances allow case-studies on interlinkages between biodiversity and climate change following a common format developed by the joint liaison group;

11. *Invites* Parties, Governments, funding agencies, research bodies and other organizations to address the gaps identified in the Report in order to help to optimize biodiversity conservation and sustainable use within climate change adaptation pro-

jects, as well as mitigation projects addressing the adverse effects of human activities over the long term at the national, regional, and global levels;

12. *Encourages* Parties to take measures to manage ecosystems so as to maintain their resilience extreme climate events and to help mitigate and adapt to climate change;

13. *Requests* the Subsidiary Body on Scientific, Technical and Technological Advice, with the support of the Executive Secretary, to ensure that the results of the report on climate change and biodiversity prepared by the Ad Hoc Technical Expert Group are incorporated into the ongoing work of the Convention on Biological Diversity, whenever appropriate, when the respective programmes of work are due for review according to the Multi Year Programme of Work of the Conference of the Parties (decision VII/31) and in particular, in the programmes of work on forest biodiversity, marine and coastal biodiversity, mountain biodiversity, inland water biodiversity, biodiversity of dry and sub-humid lands, agricultural biodiversity, indicators, impact assessment, and incentive measures, without implying obligations on Parties additional to those under the Convention on Biological Diversity;

14. *Requests* the Subsidiary Body on Scientific, Technical and Technological Advice, as the next stage of its work on the interlinkages between biodiversity and climate change to develop, for the consideration of the Conference of the Parties, advice or guidance for promoting synergy among activities to address climate change at the national, regional and international level where appropriate, including activities to combat desertification and land degradation, and activities for the conservation and sustainable use of biodiversity;

15. *Invites* the conferences of the parties to the United Nations Framework Convention on Climate Change and the United Nations Convention to Combat Desertification to collaborate with the Convention on Biological Diversity, through the joint liaison group as appropriate, in the development of advice or guidance to Parties in implementing activities that are mutually supportive of the objectives of the three conventions at the local, sub-national, and national levels; and to involve biodiversity experts in relevant activities of the United Nations Framework Convention on Climate Change, including methodological issues;

16. *Invites* the Intergovernmental Panel on Climate Change, *inter alia* through its Fourth Assessment Report, to continue its work on the relationship between climate change and biodiversity including the detection and attribution to climate change of observed biodiversity losses, taking into account the target adopted by decision VI/26 of the Conference of the Parties to achieve by 2010 a significant reduction of the current rate of biodiversity loss at the global, regional and national levels;

17. *Further invites* the Intergovernmental Panel on Climate Change and the Millennium Ecosystem Assessment to collaborate with the Subsidiary Body on Scientific, Technical and Technological Advice on the use of scenarios addressing biodiversity changes in relation to climate change;

18. *Invites* sources of funding to provide financial support to developing country Parties, in particular the least developed and small island developing States among them, and countries with economies in transition, where appropriate, for:

- (a) Country-driven activities, including pilot projects, aimed at projects related to ecosystem conservation, restoration of degraded lands and marine environments and overall ecosystem integrity that take into account impacts of climate change;
- (b) Assistance in capacity-building with the aim of increasing the effectiveness in addressing environmental issues through their commitments under the Convention on Biological Diversity, the United Nations Framework Convention on Climate Change, and the United Nations Convention to Combat Desertification, *inter alia* by applying the ecosystem approach;
- (c) Assistance in developing synergy-oriented programmes to conserve and sustainably manage all ecosystems, such as forests, wetlands and marine environments that also contribute to poverty eradication;

19. *Notes* that the report of the Ad Hoc Technical Expert Group has been transmitted to the Secretariat of the United Nations Framework Convention on Climate Change and through the Secretariat to its bodies, and *requests* the Executive Secretary to transmit the report of the Ad Hoc Technical Expert Group also to the secretariats of the Convention to Combat Desertification, the Ramsar Convention, the Vienna Convention for the Protection of the Ozone Layer and its Montreal Protocol, the Intergovernmental Panel on Climate Change, the Millennium Ecosystem Assessment, the Convention on Migratory Species, the United Nations Development Programme, the Global Environment Facility, and the United Nations Forum on Forests, the World Heritage Convention and the Man and the Biosphere programme of UNESCO, as well as relevant organizations and bodies including, *inter alia*, other members of the Collaborative Partnership on Forests, IUCN, and the World Wide Fund for Nature;

20. Further *requests* the Executive Secretary, in preparation for the next stage of the work on climate change and biodiversity by the Subsidiary Body on Scientific, Technical and Technological Advice, gather in collaboration with, the Intergovernmental Panel on Climate Change, and other relevant organizations, within their given mandates, relevant material for promoting synergy between climate-change mitigation and adaptation activities and the conservation and sustainable use of biodiversity, drawing upon:

- (a) Case-studies, contributed by Parties and others, illustrating the potential of biodiversity both to mitigate and adapt to global climate change, and lessons from these experiences, including lessons learned from extreme climate events;
- (b) Existing relevant tools, approaches and processes for designing projects, and evaluating their economic, environmental and social implications, related to mitigating or adapting to climate change within the broader context of sustainable development both at the national and regional level.

## **DECISION VII/16 | Article 8(j) and related provisions**

### **A. Ad Hoc Open-ended Inter-Sessional Working Group on Article 8(j) and Related Provisions**

#### *The Conference of the Parties*

*Decides* that one meeting of the Ad Hoc Open-ended Inter-Sessional Working Group on Article 8(j) and Related Provisions, financed from the core (BY) budget, be organized prior to the eighth 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.

### **B. Progress report on the integration of the relevant tasks of the programme of work on Article 8(j) into the thematic areas of the Convention**

#### *The Conference of the Parties*

1. *Notes* the progress made in the integration of the relevant tasks of the programme of work in the thematic programmes of the Convention;
2. *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 for the consideration of the Ad Hoc Working Group on Article 8(j) and Related Provisions at its fourth meeting.

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

#### *The Conference of the Parties*

1. *Notes* the progress made in the implementation of the priority tasks of the programme of work on Article 8(j) and related provisions;
2. *Urges* Parties, where they have not already done so, to include information in their national reports on the status and trends in relation to knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and on progress made in the implementation of the priority tasks of the programme of work at the international, national, subnational and local levels;
3. *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.

## D. Genetic use restriction technologies

*The Conference of the Parties,*

*Recalling* decisions V/5, paragraph 23, and VI/5, paragraph 21, of the Conference of the Parties;

*Noting* the report of the Ad Hoc Technical Expert Group on Genetic Use Restriction Technologies (UNEP/CBD/WG8J/3/INF/2),

*Noting also* the potential socio-economic impacts of genetic use restriction technologies on small holder farmers and indigenous and local communities,

*Noting further* recommendation IX/2 of the Subsidiary Body on Scientific, Technical and Technological Advice adopted at its ninth meeting,

*Aware* of the need, expressed by a number of Parties and representatives of indigenous and local communities, to address this issue as a matter of urgency and priority,

1. *Invites* Parties and Governments, in collaboration with relevant organizations, to urgently create and develop, in accordance with identified needs and priorities, capacity-building programmes including the promotion of information and awareness campaigns, to involve and enable smallholder farmers, indigenous and local communities, and other relevant stakeholders to effectively participate in decision-making processes related to genetic use restriction technologies;
2. *Urges* the Ad Hoc Open-ended Inter-Sessional Working Group on Article 8(j) and Related Provisions of the Convention, to consider the potential socio-economic impacts of genetic use restriction technologies on indigenous and local communities, at its next meeting, on the basis of the report of the Ad Hoc Technical Expert Group on Genetic Use Restriction Technologies, the outcome of the deliberations of the tenth meeting of the Subsidiary Body on Scientific Technical and Technological Advice on this issue, and the study undertaken by the Food and Agriculture Organization of the United Nations, pursuant to decision V/5, on potential impacts of genetic use restriction technologies on agricultural biodiversity and agricultural production systems;
3. *Invites* Parties and indigenous and local communities to review the recommendations of the Ad Hoc Technical Expert Group on Genetic Use Restriction Technologies, as they relate to Article 8(j) and related provisions of the Convention, and provide comments thereon to the Executive Secretary, for consideration at the fourth meeting of the Ad Hoc Open-ended Inter-sessional Working Group on Article 8(j) and Related Provisions of the Convention. The Parties as well as the indigenous communities may consult with other stakeholders for this purpose;
4. *Requests* the Executive Secretary to compile information provided by Parties and indigenous and local communities pursuant to paragraph 3 above and submit the compilation to the Ad Hoc Open-ended Inter-sessional Working Group on Article 8(j) and Related Provisions of the Convention at its fourth meeting.

**E. 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**

*The Conference of the Parties,*

*Mindful* that any information-gathering exercise pertaining to knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity should be conducted with the prior informed consent of the holders of such knowledge, innovations and practices,

*Taking note* of the report of the Ad Hoc Technical Expert Group on Biodiversity and Climate Change, which stresses the special impact of climate change on Arctic biodiversity and indigenous and local communities depending on such biodiversity,

*Recalling* that, by decision VI/10, the Conference of the Parties decided to adopt 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 for the conservation and sustainable use of biological diversity, and to request the Executive Secretary to undertake the first phase of the composite report based on elements 1 and 2 of the outline,

*Having considered* the report on the first phase of the composite report on the status and trends of knowledge, innovations and practices, of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity,

*Recalling* that phase I of the composite report is intended to provide an accurate and comprehensive assessment of the state of retention of traditional knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and identify and assess measures and initiatives to protect and promote the use of traditional knowledge, innovations and practices,

*Recognizing* the conceptual and methodological challenges and financial and time constraints faced in preparing the composite report as foreseen in decision VI/10,

*Acknowledging* that further activities are necessary in phase one of the preparation of the composite report in order to address gaps and deficiencies,

*Also acknowledging* the desirability of ongoing information-gathering and sharing of knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity, particularly for the purpose of judging the collective success at reversing the decline of such knowledge, innovations and practices,

*Emphasizing* that any further activity needed under the first phase of the composite report should not prevent immediate initiation of activities under a second phase of the composite report, based upon sections 3 to 7 of the outline of the composite report (decision VI/10, annex I),

## PHASE ONE

1. *Takes note* with appreciation of the information prepared for the third meeting of the Ad Hoc Open-ended Inter-sessional Working Group on Article 8(j) and Related Provisions of the Convention on Biological Diversity (UNEP/CBD/WG8J/3/INF/1);
2. *Decides* to undertake further activities to complete phase one of the composite report by the next meeting of the Ad Hoc Open-ended Inter-sessional Working Group on Article 8(j) and Related Provisions,
3. *Urges* Parties, Governments, relevant organizations, indigenous and local communities and all relevant stakeholders to provide information, through the clearing-house mechanism of the Convention and other feasible means/media, to the Executive Secretary to support the completion of phase one of the composite report,
4. *Requests* the Executive Secretary to continue work on phase one of the composite report in order to produce a revised version of it, in consultation with and with input from Parties, Governments, relevant organizations, all relevant stakeholders as appropriate, and from indigenous and local communities through the national focal points in consultation with and after approval of indigenous and local communities, taking into account the following elements, *inter alia*:
  - (a) Organization of regional workshops;
  - (c) Gathering at national level and inclusion in phase I of the report of additional information in particular on:
    - (i) Assessment, particularly by indigenous and local communities, of the success of measures and initiatives to support the retention and use of knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity, including the advantages and limitations of registers as a measure to protect traditional knowledge, innovations and practices, as well as approaches used for the implementation of registers, and of incentives and disincentives for the retention and use of traditional knowledge, innovations and practices relevant to the conservation and sustainable use of biological diversity;
    - (ii) Examples of measures to protect traditional knowledge, innovations and practices;
    - (iii) Recent field studies undertaken with the full involvement of indigenous and local communities which demonstrate the state of knowledge, innovations and practices;
  - (c) Preparation of a regional report focusing on the Arctic region;
  - (d) Action on decision VI/10, annex I, paragraph 28(b), to create an advisory group/steering committee in which indigenous and local communities will be represented to assist in the completion of the report and undertake a peer review of the revised version, in consultation with indigenous peoples and local community organizations that have participated in the work on the Convention.



## PHASE TWO

5. *Requests* the Executive Secretary, through the national focal points in consultation with and after approval of indigenous and local communities and in consultation with and with input from Parties, Governments, relevant organizations, indigenous and local communities and all relevant stakeholders as appropriate, to immediately start work on a second phase of the composite report, laying emphasis on sections 4 and 5 of the outline of the composite report, foreseeing respectively the identification of national processes that may threaten the maintenance, preservation and application of traditional knowledge, innovations and practices and the identification of processes at the local community level that may threaten the maintenance, preservation and application of traditional knowledge, innovations and practices (decision VI/10, annex I);

6. *Encourages* Parties, Governments and competent organizations to support the efforts of indigenous and local communities to undertake field studies to determine the status, trends and threats related to the knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity, with the full involvement and approval of these communities. In undertaking these studies, the general principles of the programme of work on Article 8(j) and related provisions should be respected and followed, as should paragraph 28(d) of annex I to decision VI/10, which states that 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;

*Financial support*

7. *Urges* Parties, Governments and relevant organizations to provide financial assistance for the completion of phase one and activities under phase two of the preparation of the composite report, in particular in order to support the full involvement and participation of indigenous and local communities in this work;

*Development of a plan of action*

8. *Requests* the Executive Secretary, through the national focal points in consultation with and after approval of indigenous and local communities, to further develop the draft elements for an action plan contained in the annex to the present recommendation, in particular with a view to identifying actors and timeframes, taking fully into account ongoing work under the Convention and relevant international organizations. The action plan would aim to:

- (a) Facilitate synergy between existing initiatives aimed at halting the loss of and encouraging the retention and use of knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity;
- (b) Provide further practical guidance, respectful of indigenous and local communities' perspectives, for the implementation of the programme of work on the implementation of Article 8(j) and related provisions as it relates to the retention of knowledge, innovations and practices of indigenous and local com-

munities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity.

9. *Invites* Parties, Governments and relevant organizations to take the elements identified in the annex into consideration when deciding upon activities to protect traditional knowledge, innovations and practices.

## **ANNEX**

### **ELEMENTS OF A PLAN OF ACTION FOR THE RETENTION OF TRADITIONAL KNOWLEDGE, INNOVATIONS AND PRACTICES OF INDIGENOUS AND LOCAL COMMUNITIES EMBODYING TRADITIONAL LIFESTYLES RELEVANT FOR THE CONSERVATION AND SUSTAINABLE USE OF BIOLOGICAL DIVERSITY**

#### **A. Improved monitoring and reporting process**

1. National reports on Article 8(j) should be compiled by Parties in consultation with indigenous and local communities, based on a questionnaire to be produced by the Secretariat.
2. Reporting periods should be agreed upon and reviews of the status and trends of traditional knowledge, innovations and practices should be pursued on a regular basis.
3. Mobilization of resources to undertake regular review should be promoted.
4. Mechanisms should be established to encourage representatives of indigenous groups and local communities to present information under the Convention on Biological Diversity, including capacity building and incentive measures.
5. Mechanisms should be developed to ensure input from overseas territories and autonomous or semi-autonomous regions.<sup>211</sup>
6. The thematic focal point on Article 8(j) under the clearing-house mechanism should be utilized to catalogue and share best.
7. A survey of current activities of international organizations relevant to Article 8(j) should be undertaken with view to developing synergy.

#### **B. Indicators**

8. Indicators on the state of retention of traditional knowledge, innovations and practices should be established with the active involvement of indigenous and local communities, in consultation with relevant organizations, in connection with the ongoing work on indicators under the Convention.
9. Indicators to assess the success or failure of measures to promote or preserve traditional knowledge, innovations and practices should be established, with the active involvement of indigenous and local communities, in connection with the ongoing work on indicators under the Convention.

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211 The provisions contained in this decision relating to territories under sovereignty disputes recognized by the United Nations shall only be implemented with the consent of all parties involved in the dispute.

10. Information on legislative measures to protect traditional knowledge, innovations and practices as drawn from regional and national reports, should be kept up to date.

### C. Research ethics

11. Examples of codes of ethics and conduct governing research as used by such bodies as research institutions, business and indigenous and local communities, should be gathered with a view to assisting in future possible development of codes of ethics or conduct, and to guide further research on the retention and use of traditional knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant to the conservation and sustainable use of biological diversity.

12. Parties, Governments, international organizations, research institutions and business should respect and promote existing codes of ethics or conduct governing research, and Parties, Governments and relevant organizations should facilitate the development of additional codes by indigenous and local communities where none exist.

### D. Research on and implementation of mechanisms and measures to address the underlying causes of the decline of traditional knowledge, innovations and practices

13. Research should be undertaken on existing and new threats to the retention and use of traditional knowledge, innovations and practices.

14. Mechanisms to promote cooperation in order to address the cause of decline should be identified in cooperation with the Permanent Forum on Indigenous Issues of the United Nations and other relevant initiatives and organizations.

15. Parties should be encouraged, in accordance with national domestic law and international obligations, to recognize land tenure of indigenous and local communities, as recognized rights and access to land are fundamental to the retention of traditional knowledge, innovations and practices.

16. Subject to national legislation and international obligations, Parties should be encouraged to pursue the fair and equitable resolution of land claims as an essential element of efforts to facilitate the retention and use of traditional knowledge, innovations and practices.

17. Indigenous and local communities should, where relevant, be actively involved in the management of protected areas.

18. The rights of indigenous and local communities should be given due respect when establishing new protected areas.

19. Parties should establish measures to ensure respect for the rights of unprotected or voluntarily isolated communities.

20. Restrictions on use of and access to sacred sites or otherwise culturally significant sites should be incorporated into appropriate local or national legislation, in consultation with and with full involvement of indigenous and local communities.

21. Legislation intended to protect, promote the use of traditional knowledge, innovations and practices should be consistent with the needs and views of indigenous and local communities, comprehensive and enforceable.

22. Parties should be encouraged to work with indigenous and local communities to develop measures and mechanisms to mitigate the consequences of actions arising from perverse incentives leading to the decline of knowledge, innovations and practices embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity.

23. Parties should share their experiences with incentive measures as well as other mechanisms and measures to support the retention and use of knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant to the conservation and sustainable use of biological diversity.

24. Mobilization of financial and technical resources should be promoted to support the design and implementation of mechanisms and measures to support retention of knowledge, innovations and practices embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity.

## **E. Capacity-building, education and training**

25. Parties, Governments and relevant organizations should be encouraged to facilitate strengthening existing indigenous organizational structures and organizations representing local communities.

26. Specific capacity-building activities should be targeted at indigenous women and women in rural or otherwise marginal communities, and at traditional knowledge, innovations and practices.

27. Where appropriate, traditional knowledge, innovations and practices should be integrated into formal, local, subnational or national systems of education, which are directed towards local or indigenous communities.

28. Education and training should be offered to indigenous and local communities with special attention to the future role of young people so as to enable sustainable development, while being compatible with their traditions.

29. Parties, Governments and relevant stakeholders should be encouraged to learn about knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and to incorporate it in decision-making processes.

**F. Akwé: Kon<sup>212</sup> Voluntary Guidelines 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**

*The Conference of the Parties,*

*Recalling* that, in decision VI/10, the Conference of the Parties requested the Ad Hoc Open-Ended Inter-sessional Working Group on Article 8(j) and Related Provisions to carry out further work on guidelines 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, and that such work 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 decision VI/7 A,

*Recognizing* that the long-term negative impacts of many developments proposed to take place on, or which are likely to impact on, sacred sites and lands and waters traditionally occupied or used by indigenous and local communities, and in particular the loss of these communities' traditional knowledge, innovations and practices,<sup>213</sup> continue to be a source of great concern,

*Further recognizing* that adequate impact assessment procedures and methodologies play a key role in providing information on the cultural, environmental and social impacts of proposed developments,

*Recognizing also* that developments should not include incentives and mitigation measures that adversely affect biodiversity and the livelihoods of other communities, and that they should be implemented in a manner that is consistent with international law and with other international obligations,

*Recognizing also* the importance of giving appropriate recognition to species considered to be sacred,

*Bearing in mind* that cultural, social and environmental impact assessment processes should enable assessment of the alternative of not proceeding with the proposed development, and that the wishes of indigenous and local communities to live in isolation should be respected,

*Emphasizing* that the conduct of impact assessments within an integrated process will increase the effectiveness of the involvement of indigenous and local communities,

212 Pronounced [agway-goo]. A holistic Mohawk term meaning "everything in creation" provided by the Kahnawake community located near Montreal, where the guidelines were negotiated.

213 Throughout the recommendation the expression "traditional knowledge, innovations and practices" shall be understood to mean the knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity, as contained in Article 8(j) of the Convention on Biological Diversity.

*Emphasizing also* that the effective participation, involvement and approval of indigenous and local communities will require close cooperation among these communities, as well as between all relevant actors, and the design of appropriate mechanisms,

1. *Endorses* the Akwé: Kon Voluntary 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, as contained in the annex to the present decision;
2. *Encourages* Parties and Governments to initiate a legal and institutional review of matters related to cultural, environmental and social impact assessment, with a view to exploring options for incorporation of these guidelines into national legislation, policies, and procedures, bearing in mind that nothing in these guidelines should adversely affect biodiversity and the livelihoods of other communities, and that they should be implemented in a manner that is consistent with international law and with other international obligations;
3. *Requests* Parties and Governments to use these guidelines, as appropriate, in conjunction with the guidelines for incorporating biodiversity-related issues into environmental impact assessment legislation and/or process and in strategic environmental assessment endorsed by the Conference of the Parties at its sixth meeting bearing in mind that nothing in these guidelines should adversely affect biodiversity and the livelihoods of other communities, and that they should be implemented in a manner that is consistent with international law and with other international obligations;
4. *Requests* the Executive Secretary to publish these guidelines as a booklet in the official languages of the United Nations, and *further invites* Parties and Governments, in collaboration with indigenous and local communities, to also make the guidelines available in local languages in relevant circumstances;
5. *Also requests* Parties and Governments to conduct public education and awareness campaigns and develop strategies to ensure that relevant government departments and agencies, indigenous and local communities and their organizations, private sector developers, civil society organizations and potential stakeholders in developments, and the public at large, are made aware of the existence of these guidelines and the need for their application when developments are proposed to take place on sacred sites and on lands and waters traditionally occupied or used by indigenous and local communities;
6. *Invites* intergovernmental organizations, Parties to intergovernmental agreements and civil society organizations active in development and biodiversity conservation, to take into consideration the guidelines for cultural, environmental and social impact assessment regarding developments proposed to take place on sacred sites and on lands and waters traditionally occupied or used by indigenous and local communities;
7. *Requests* the Executive Secretary to continue to liaise with relevant international organizations, multilateral environmental agreements and processes on

impact assessment with a view to developing or enhancing synergies between, and ensuring coherence of, assessment methodologies and guidelines;

8. *Invites* international funding and development agencies that provide funding and other forms of assistance to Governments to undertake developments, within the framework of bilateral and multilateral cooperation efforts, or to assist in the formulation of development policies, as well as policies, plans and guidelines for strategic environmental assessment, to take into consideration the need to incorporate and implement the guidelines within such developments and policies, and plans, guidelines and policies for strategic environmental assessment, and to provide funds, as appropriate, for the prevention and mitigation of negative impacts and risk factors of proposed projects and policies, such as, for example, the implementation of waste-management policies;

9. *Encourages* Parties and Governments, regarding developments proposed to take place on, or which are likely to impact on, sacred sites and land and waters traditionally occupied or used by indigenous and local communities, to:

- (a) Promote the participation of indigenous and local communities in any bodies established by Governments at national, subnational and local levels, and in consultation with indigenous and local communities, in the assessment of proposed developments in which such communities have an interest;
- (b) Take appropriate steps to ensure full transparency of the assessment process, including, but not limited to, the allocation of a sufficient amount of time to conduct a complete assessment of proposed developments prior to their implementation;
- (c) Facilitate the exchange of information among relevant national agencies, developers, indigenous and local communities and all stakeholders on matters of relevance to the conduct of impact assessments of proposed developments;
- (d) Provide, the necessary capacity and funding to ensure these measures can be put into effect, taking into account the views of indigenous and local communities as to their needs;

10. *Calls upon* Parties and Governments to support, financially and otherwise, indigenous and local communities, where they have not already done so, in formulating their own community development and biodiversity conservation plans that will enable such communities to adopt a culturally appropriate strategic, integrated and phased approach to their development needs in line with community goals and objectives. These plans should include a strategic environmental assessment policy or plan to provide a systematic process with the participation of indigenous and/or local communities for integrating cultural, environmental, and social considerations in planning and decision-making;

11. *Also calls upon* the international community to provide the necessary means to Parties to assist in the formulation and development of strategic plans for the building or enhancement of the capacity of indigenous and local communities to conduct of cultural, environmental and social impact assessments, giving full recognition to community development and biodiversity conservation plans;

12. *Invites* indigenous and local communities to take note of the guidelines and to request their application in the case of 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;

13. *Calls upon* Parties for full transparency when developments are 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;

14. *Requests* Parties to include in their national reports information on practices, systems, mechanisms and experiences in the area of strategic environment assessment and cultural, environmental and social impact assessment and any measures adopted to formalize these guidelines in any policies, plans or programmes.

## **ANNEX**

### **AKWÉ: KON VOLUNTARY 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**

#### **I. Purpose and Approach**

1. The present Guidelines are voluntary and intended to serve as guidance for Parties and Governments, subject to their national legislation, in the development and implementation of their impact-assessment regimes. The guidelines should be taken into consideration whenever developments are 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.

2. The objective of these Guidelines is to provide general advice on the incorporation of cultural, environmental, including biodiversity-related, and social considerations of indigenous and local communities into new or existing impact-assessment procedures, noting that some existing procedures may take these concerns into consideration in different ways. The Guidelines should be applied in conjunction with the guidelines for incorporating biodiversity-related issues into environmental impact assessment legislation and/or process and in strategic environmental assessment endorsed by the Conference of the Parties in paragraph 1 of decision VI/7 A, and contained in the annex to that decision.

3. More specifically, the purpose of these Guidelines is to provide a collaborative framework within which Governments, indigenous and local communities, decision makers and managers of developments can:

- (a) Support the full and effective participation and involvement of indigenous and local communities in screening, scoping and development planning exercises;
- (b) Properly take into account the cultural, environmental and social concerns and interests of indigenous and local communities, especially of women who often bear a disproportionately large share of negative development impacts;



- (c) Take into account the traditional knowledge, innovations and practices of indigenous and local communities as part of environmental, social and cultural impact-assessment processes, with due regard to the ownership of and the need for the protection and safeguarding of traditional knowledge, innovations and practices;
  - (d) Promote the use of appropriate technologies;
  - (e) Identify and implement appropriate measures to prevent or mitigate any negative impacts of proposed developments;
  - (f) Take into consideration the interrelationships among cultural, environmental and social elements.
4. The Guidelines recognize that developments vary enormously in nature, scale and complexity with respect to such aspects as their scope, size and duration; strategic and economic importance; and the nature of impacts. The Guidelines therefore should be adapted to suit the appropriate circumstances of each development. Individual countries may redefine the steps in the cultural, environmental and social impact assessment procedure to their needs and requirements, taking into account the needs and concerns of indigenous and local communities and their national legislative, administrative and policy framework, bearing in mind that nothing in these Guidelines should adversely affect biodiversity and the livelihoods of other communities, and that they should be implemented in a manner that is consistent with international law and with other international obligations.
5. Cultural, environmental and social impact assessment procedures should refer to other relevant domestic legislation, regulations, guidelines and international and multilateral environmental agreements and protocols that have been ratified by the Party and have come into force, bearing in mind that nothing in these Guidelines should adversely affect biodiversity and the livelihoods of other communities, and that they should be implemented in a manner that is consistent with international law and with other international obligations.

## II. Use of Terms

6. For the purpose of the Guidelines:
- (a) *Cultural impact assessment*—is a process of evaluating the likely impacts of a proposed development on the way of life of a particular group or community of people, with full involvement of this group or community of people and possibly undertaken by this group or community of people: a cultural impact assessment will generally address the impacts, both beneficial and adverse, of a proposed development that may affect, for example, the values, belief systems, customary laws, language(s), customs, economy, relationships with the local environment and particular species, social organization and traditions of the affected community;
  - (b) *Cultural heritage impact assessment*—is a process of evaluating the likely impacts, both beneficial and adverse, of a proposed development on the physical manifestations of a community's cultural heritage including sites,

structures, and remains of archaeological, architectural, historical, religious, spiritual, cultural, ecological or aesthetic value or significance;

- (c) *Customary law*—law consisting of customs that are accepted as legal requirements or obligatory rules of conduct; practices and beliefs that are so vital and intrinsic a part of a social and economic system that they are treated as if they were laws;<sup>214</sup>
- (d) *Environmental impact assessment*—is a process of evaluating the likely environmental impacts of, and proposing appropriate mitigation measures for, a proposed development, taking into account interrelated socio-economic, cultural and human health impacts, both beneficial and adverse;
- (e) *Sacred site*—may refer to a site, object, structure, area or natural feature or area, held by national Governments or indigenous communities to be of particular importance in accordance with the customs of an indigenous or local community because of its religious and/or spiritual significance;
- (f) *Social impact assessment*—is a process of evaluating the likely impacts, both beneficial and adverse, of a proposed development that may affect the rights, which have an economic, social, cultural, civic and political dimension, as well as the well-being, vitality and viability, of an affected community—that is, the quality of life of a community as measured in terms of various socio-economic indicators, such as income distribution, physical and social integrity and protection of individuals and communities, employment levels and opportunities, health and welfare, education, and availability and standards of housing and accommodation, infrastructure, services;
- (g) *Strategic environmental assessment*—is a process of evaluating the likely environmental impacts of proposed policies, plans or programmes to ensure that they are fully included and addressed at an early stage of decision-making, together with economic, social and cultural considerations;<sup>215</sup>
- (h) *Traditional knowledge*—refers to the traditional knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity.

### III. Procedural Considerations

7. Noting that the actors involved in the assessment process may include the proponent of the development, one or more governmental agencies, indigenous and local communities, stakeholders, and technical experts conducting the assessment; noting further the desirability of integrating cultural, environmental, and social impacts within a single assessment process, and taking into account the fundamental components of an environmental impact assessment as described in the guidelines for incorporating biodiversity-related issues into environmental impact

214 See definition contained in *Black's Law Dictionary* (7th edition), 2000.

215 Term derived from the definition contained in paragraph 1(b) of the Guidelines for Incorporating Biodiversity-related Issues into Environmental Impact Assessment Legislation and/or Process and in Strategic Environmental Assessment, contained in the annex to decision VI/7 A.

assessment legislation and/or process and in strategic environmental assessment, an integrated assessment should involve the following stages:

- (a) *Preparatory stage*:
  - (i) Screening;
  - (ii) Scoping;
- (b) *Main stage*:
  - (i) Impact analysis and assessment;
  - (ii) Consideration of mitigation measures (including not proceeding with the development, finding alternatives which avoid the impacts, incorporating safeguards in the design of the development, or providing compensation—monetary and/or non-monetary—for adverse impacts);
- (c) *Reporting and decision-making stage*:
  - (i) Reporting of the impact assessment study;
  - (ii) Review of the impact assessment study;
  - (iii) Decision-making; and
  - (iv) Devising management and monitoring plans, including roles and responsibilities, alternative proposals and mitigation requirements and conditions;
- (d) *Monitoring and auditing stage*: Monitoring and environmental auditing.

8. As part of the above stages, the following steps may also be considered in carrying out an impact assessment for a development proposed to take place on, or which is likely to impact on, sacred sites and on lands and waters traditionally occupied or used by indigenous and local communities:

- (a) Notification and public consultation of the proposed development by the proponent;
- (b) Identification of indigenous and local communities and relevant stakeholders likely to be affected by the proposed development;
- (c) Establishment of effective mechanisms for indigenous and local community participation, including for the participation of women, the youth, the elderly and other vulnerable groups, in the impact assessment processes;
- (d) Establishment of an agreed process for recording the views and concerns of the members of the indigenous or local community whose interests are likely to be impacted by a proposed development;
- (e) Establishment of a process whereby local and indigenous communities may have the option to accept or oppose a proposed development that may impact on their community;
- (f) Identification and provision of sufficient human, financial, technical and legal resources for effective indigenous and local community participation in all phases of impact assessment procedures;

- (g) Establishment of an environmental management or monitoring plan (EMP), including contingency plans regarding possible adverse cultural, environmental and social impacts resulting from a proposed development;
- (h) Identification of actors responsible for liability, redress, insurance and compensation;
- (i) Conclusion, as appropriate, of agreements, or action plans, on mutually agreed terms, between the proponent of the proposed development and the affected indigenous and local communities, for the implementation of measures to prevent or mitigate any negative impacts of the proposed development;
- (j) Establishment of a review and appeals process.

9. While the focus of environmental, cultural and social impact assessments is necessarily different, it is assumed, however, that the steps or phases for carrying out all three kinds of assessment will be the same for the most part. However, in the case of small-scale locally-based and initiated development, it may be possible to omit some of these steps.

#### A. NOTIFICATION AND PUBLIC CONSULTATION OF PROPOSED DEVELOPMENT BY THE PROPONENT

10. The proponent of a development proposal or the responsible government authority should engage in a process of notification and public consultation of intention to carry out a development. Such notification should use all normal public means of notification (print, electronic and personal media, including newspapers, radio, television, mailings, village/town meetings, etc.), take into account the situation of remote or isolated and largely non-literate communities, and ensure that such notification and consultation take place in the language(s) of the communities and region that will be affected. Such notification should clearly identify the proponent, contain a brief summary of the proposal, the sites and communities likely to be affected, anticipated impacts (if any) on the conservation and sustainable use of biological diversity, as well as possible cultural and social impacts, arrangements for public consultation, contact details, key dates in the life of the project, including those regarding impact assessment procedures, and identify obligations under national and subnational laws as well subregional, regional and international agreements.

11. The development proposal and impact assessment should be made available to organizations representing affected indigenous and local communities and relevant stakeholders for the purposes of public scrutiny and consultation. It should include all details relevant to the proposal. Notification and public consultation of the proposed development should allow for sufficient time to allow the affected indigenous or local community to prepare its response. An opportunity to present its response should be allowed for full and fair consideration by the proponent.

#### B. IDENTIFICATION OF INDIGENOUS AND LOCAL COMMUNITIES AND STAKEHOLDERS LIKELY TO BE AFFECTED BY THE PROPOSED DEVELOPMENT

12. In any development proposed to take place on, or likely to have an impact on, sacred sites and lands and waters traditionally occupied or used by them, indigenous

and local communities should be invited to participate in and are to be accorded full respect at all stages of the assessment and development process, including planning and implementation;

13. A formal process to identify the indigenous and local community members, experts and organizations, and relevant stakeholders should be engaged, including local and open consultations. Once all parties have been identified, it is appropriate that a committee representative of the parties be formally established and its mandate defined to advise on the impact assessment processes, particularly in relation to screening and scoping phases, and for the establishment of any environmental management and monitoring plan, as well as cultural and social contingency plans. In establishing this committee, special consideration should be given to ensuring the adequate representation of indigenous and local communities.

#### C. ESTABLISHMENT OF MECHANISMS FOR INDIGENOUS AND LOCAL COMMUNITY PARTICIPATION

14. Affected indigenous and local communities should be invited to participate on any body appointed to advise on the screening and scoping phases or should be consulted on an impact assessment process for a development proposal, and should be involved in the establishment of the terms of reference for the conduct of the impact assessments, subject to national legislation. The screening and scoping phases should also take into account any community development plans and any mechanisms for strategic environmental assessment that have been formulated by an affected community.

15. In addition to representation on any body established to advise on the other impact assessment process phases, the full and effective participation and involvement of affected indigenous and local communities should contemplate using participatory models of community engagement during the conduct of the impact assessments, including in decision-making. The proponent should also provide regular feedback to the affected community throughout all stages of the impact assessment and development processes.

16. In order to facilitate the involvement and participation of the affected indigenous and local communities, local experts should be identified and their expertise recognized and engaged at the earliest opportunity.

#### D. ESTABLISHMENT OF AN AGREED PROCESS FOR RECORDING THE VIEWS AND CONCERNS OF THE MEMBERS OF THE INDIGENOUS OR LOCAL COMMUNITY WHOSE INTERESTS ARE LIKELY TO BE IMPACTED BY A PROPOSED DEVELOPMENT

17. The proponent and members of the affected indigenous or local community should establish a process by which community views and concerns can be properly recorded, as community members may not be in a position to attend public meetings because of, for example, remoteness of the community, or poor health. While written statements may be preferred, the views of the community members could also be recorded on video or audio tape, or any other appropriate way, subject to the consent of communities.

E. IDENTIFICATION AND PROVISION OF SUFFICIENT HUMAN, FINANCIAL, TECHNICAL AND LEGAL RESOURCES FOR EFFECTIVE INDIGENOUS AND LOCAL COMMUNITY PARTICIPATION IN ALL PHASES OF IMPACT ASSESSMENT PROCEDURES

18. Early identification by the State and affected indigenous and local communities and, as circumstances warrant, provision of necessary human, financial, technical and legal resources, particularly to those indigenous and local communities, to support indigenous and local expertise, will facilitate effective indigenous and local community participation in the impact assessment process. In general, the larger the proposed development, the greater and more widespread the potential impacts and therefore potentially greater are the requirements for support and capacity-building.

F. ESTABLISHMENT OF AN ENVIRONMENTAL MANAGEMENT OR MONITORING PLAN, INCLUDING CONTINGENCY PLANS REGARDING POSSIBLE ADVERSE CULTURAL, ENVIRONMENTAL AND SOCIAL IMPACTS RESULTING FROM A PROPOSED DEVELOPMENT

19. In order to maximize benefits and minimize adverse impacts, it will be necessary in most instances to establish an environmental management or monitoring plan to provide a framework within which the development can take place. Formulation of the environmental management or monitoring plan should be guided by an affected community's development plan and/or measures for strategic environmental assessment, where such plans exist, and should also include contingency plans for possible adverse cultural and social impacts.

G. IDENTIFICATION OF ACTORS RESPONSIBLE FOR LIABILITY, REDRESS, INSURANCE AND COMPENSATION

20. In order to maintain the health, wellbeing and security of affected indigenous and local communities and the ecosystems that sustain them, and, to the extent that it is possible, in order to prevent adverse cultural, environmental and social impacts of any proposed developments, actors that should bear the responsibility for liability, redress, insurance and compensation should be clearly identified.

H. CONCLUSION OF AGREEMENTS OR ACTION PLANS ON MUTUALLY AGREED TERMS BETWEEN THE PROPONENTS OF THE PROPOSED DEVELOPMENT AND THE AFFECTED INDIGENOUS OR LOCAL COMMUNITY

21. In order to protect the interests of affected indigenous and local communities, an agreement, could be negotiated between the community and the proponent of the development. The terms of such an agreement, subject to national legislation and regulations, could cover the procedural aspects of impact assessments, including the option of a no-action alternative, setting out the rights, duties and responsibilities of all parties, and also address measures to prevent or mitigate any negative impacts of the proposed development.

## I. ESTABLISHMENT OF A REVIEW AND APPEAL PROCESS

22. Parties, if they have not already done so, should seek to ensure the full participation of affected indigenous and local communities, in accordance with national legislation, in the decision-making process for of any development proposal, including the review and appeal process, taking into account methods of mediation and dispute resolution, which may include customary methods.

## IV. Integration of Cultural, Environmental and Social Impact Assessments as a Single Process

23. Bearing in mind the unique relationship between indigenous and local communities and the environment, the Guidelines allow for the consideration of the integration of cultural, environmental, social impact assessments as a single process. The conduct 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. The Guidelines 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 give special attention to incorporating cultural and social considerations within any environmental impact assessment legislation or policies.

### A. CULTURAL IMPACT ASSESSMENTS

24. Through the cultural impact assessment process, and particularly during the screening and scoping phases, the issues that are of particular cultural concern should be identified, such as cultural heritage, religions, beliefs and sacred teachings, customary practices, forms of social organization, systems of natural resource use, including patterns of land use, places of cultural significance, economic valuation of cultural resources, sacred sites, ceremonies, languages, customary law systems, and political structures, roles and customs. The possible impacts on all aspects of culture, including sacred sites, should therefore be taken into consideration while developing cultural impact assessments.

25. Cultural heritage impact assessment is concerned with the likely impacts of a proposed development on the physical manifestations of a community's cultural heritage and is frequently subject to national heritage laws. A cultural heritage impact assessment will need to take into account, as the circumstances warrant, international, national and local heritage values.

26. In the event that sites or objects of potential heritage significance are uncovered during earthworks associated with a development, then all activities in and around the area of discovery should cease until a proper archaeological or heritage assessment has been completed.

27. In determining the scope of a cultural impact assessment, the following should be considered:

(a) Possible impacts on continued customary use of biological resources;

- (b) Possible impacts on the respect, preservation, protection and maintenance of traditional knowledge, innovations and practices;
- (c) Protocols;
- (d) Possible impacts on sacred sites and associated ritual or ceremonial activities;
- (e) Respect for the need for cultural privacy; and
- (f) Possible impacts on the exercise of customary laws.

1. Possible impacts on continued customary use of biological resources

28. The assessment should take the customary uses of biological resources that meet the requirements of the Convention, particularly in relation to Article 10(c), fully into consideration, as the diminution of the genetic diversity maintained and fostered by such customary use may lead to a loss of associated traditional knowledge, innovations and practices.

2. Possible impacts on the respect, preservation, protection and maintenance of traditional knowledge, innovations and practices

29. In the conduct of cultural impact assessments, due consideration should be given to the holders of traditional knowledge, innovations and practices and the knowledge itself. Customary laws governing ownership, access, control, use and dissemination of traditional knowledge, innovations and practices should be observed. Protocols with regard to indigenous and local communities should be followed with regard to the disclosure of secret and or sacred knowledge, including those that may involve public hearings and judicial processes in the courts. In the event of the disclosure of secret and or sacred knowledge, prior informed consent and proper protection measures should be ensured.

3. Protocols

30. As part of possible agreements or action plans to be concluded by the proponent of the development and the concerned communities, protocols could be established in order to facilitate the proper conduct of the development, and personnel associated with it, on sacred sites and on lands and waters traditionally occupied or used by indigenous and local communities. Specific protocols may need to be established for particular kinds of development activity (for example, adventure tourism, mining) and may need to take into account the behaviour to be observed when visiting local communities, particular sites or when dealing with members of indigenous and local communities. Protocols should respect regulations already existing under relevant national, sub-national or community self-government legislation.

4. Possible impacts on sacred sites and associated ritual or ceremonial activities

31. When developments are 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, personnel associated with such developments should recognize that many sacred sites, and areas or places of other cultural significance may have important functions with respect to the conservation and sustainable use of bio-



logical diversity and, by extension, the maintenance of the natural resources upon which such communities rely for their well-being.

32. If it is necessary to assess the potential impact of a proposed development on a sacred site, the assessment process should also include the selection of an alternate site for development in consultation with the site custodians and the affected community as a whole. Where a sacred site is to be affected by a proposed development, and in cases where no law exists to protect the site, the concerned indigenous and local community may wish to develop protocols regarding the site in the context of the proposed development.

#### 5. Respect for the need for cultural privacy

33. Proponents of development and personnel associated with the development should respect the cultural sensitivities and needs of indigenous and local communities for privacy, especially with regard to important rituals and ceremonies such as those associated with rites-of-passage and death, and also ensure their activities do not interfere with the daily routines and other activities of such communities.

#### 6. Possible impacts on the exercise of customary laws

34. Development proposals should be assessed for possible impacts on the customary laws of an affected community. If a development requires the introduction of an outside work-force, or requires changes in local customary systems (e.g., regarding land tenure, distribution of resources and benefits) conflicts may result. It may therefore be necessary to codify certain parts of customary law, clarify matters of jurisdiction, and negotiate ways to minimize breaches of local laws.

### B. ENVIRONMENTAL IMPACT ASSESSMENTS

35. In the conduct of the environmental component of an impact assessment regarding a development proposed to take place on, or which is likely to impact on, sacred sites and on lands and waters traditionally occupied or used by indigenous and local communities, the guidelines for incorporating biodiversity-related issues into environmental impact assessment legislation and/or process and in strategic environmental assessment, should be taken into account. National environmental impact assessment legislation and processes should respect existing inherent land and treaty rights as well as legally established rights of indigenous and local communities. As information gathering processes, environmental impact assessments can contribute to the protection of the rights of indigenous and local communities by recognizing the distinct activities, customs and beliefs of the affected indigenous and local communities.

36. The direct impacts of the development proposal on local biodiversity at the ecosystem, species and genetic levels should be assessed, and particularly in terms of those components of biological diversity that the affected indigenous or local community and its members rely upon for their livelihood, well-being, and other needs. Indirect impacts should be carefully assessed and monitored over the long term. The development proposal should be rigorously assessed with respect to the introduction of invasive species.

## 1. Baseline studies

37. In order to effectively undertake an environmental impact assessment for a proposed development, it is desirable to carry out a baseline study, in consultation with the affected indigenous and local communities, to ascertain those components of biological diversity of particular significance to the affected indigenous or local community. Detailed knowledge of biological resources (ecosystems, species and genetic diversity), including valuation of these resources, is essential to the protection of both biodiversity and cultural values. Such baseline study should include whether, for example, habitat types to be affected by the proposed development are represented elsewhere in existing conservation reserves (under national reserve systems), and whether particular crop species (and varieties) for food and agriculture are represented in *ex situ* collections. Baseline studies should collect information with respect to:

- (a) Species inventories (including identification of particular species important to the affected indigenous or local community as food, medicine, fuel, fodder, construction, artefact production, clothing, and for religious and ceremonial purposes, etc);
- (b) Identification of endangered species, species at risk, etc. (possibly referenced to the World Conservation Union (IUCN) Red Data Book, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), and national inventories);
- (c) Identification of particularly significant habitat (as breeding/spawning grounds, remnant native vegetation, wild-life refuge areas including buffer zones and corridors, habitats and routes for migratory species) and crucial breeding seasons for endangered and critical species;
- (d) Identification of areas of particular economic significance (as hunting areas and trapping sites, fishing grounds, gathering areas, grazing lands, timber harvesting sites and other harvesting areas);
- (e) Identification of particularly significant physical features and other natural factors which provide for biodiversity and ecosystems (e.g., watercourses, springs, lakes, mines/quarries that supply local needs); and
- (f) Identification of sites of religious, spiritual, ceremonial and sacred significance (such as sacred groves and totemic sites).

38. Consistent with principle 11 of the ecosystem approach, endorsed by the Conference of the Parties in paragraph 1 of decision V/6, traditional knowledge, innovations and practices should be considered an important and integral component of baseline studies, particularly the traditional knowledge, innovations and practices of those who have a long association with the particular area for which the development is proposed. Traditional knowledge, innovations and practices can be cross-referenced by old photographs, newspaper articles, known historical events, archaeological records, anthropological reports, and other records contained in archival collections.

### C. SOCIAL IMPACT ASSESSMENTS

39. In order to effectively undertake a social impact assessment with respect to an indigenous or local community that is or is likely to be affected by a proposed development, the screening and scoping phases should take into account gender and demographic factors, housing and accommodation, employment, infrastructure and services, income and asset distribution, traditional systems and means of production, as well as educational needs, technical skills and financial implications.

40. Proposed developments should be evaluated in relation to tangible benefits to such communities, such as non-hazardous job creation, viable revenue from the levying of appropriate fees from beneficiaries of such developments, access to markets and diversification of income opportunities. Evaluation of changes to traditional economies could involve economic valuation of negative social impacts, such as crime and sexually transmitted diseases.

41. 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.

42. In social impact assessments, social development indicators consistent with the views of indigenous and local communities should be developed and should include gender, generational considerations, health, safety, food and livelihood security aspects and the possible effects on social cohesion and mobilization.

43. In determining the scope of a social impact assessment, the following should be considered:

- (a) Baseline studies;
- (b) Economic considerations;
- (c) Possible impacts on traditional systems of land tenure and other uses of natural resources;
- (d) Gender considerations;
- (e) Generational considerations;
- (f) Health and safety aspects;
- (g) Effects on social cohesion;
- (h) Traditional lifestyles; and
- (i) The possible impact on access to biological resources for livelihoods.

#### 1. Baseline studies

44. In the conduct of baseline studies, the following areas should, *inter alia*, be addressed:

- (a) Demographic factors (number and age structure of population, ethnic grouping, population distribution and movement—including seasonal movements);
- (b) Housing and human settlements, including involuntary resettlement, expulsion of indigenous peoples from lands and involuntary sedentarization of mobile peoples;

- (c) Health status of the community (particular health problems/issues—availability of clean water—infectious and endemic diseases, nutritional deficiencies, life expectancy, use of traditional medicine, etc.;
- (d) Levels of employment, areas of employment, skills (particularly traditional skills), education levels (including levels attained through informal and formal education processes), training, capacity-building requirements;
- (e) Level of infrastructure and services (medical services, transport, waste disposal, water supply, social amenities (or lack of) for recreation, etc.);
- (f) Level and distribution of income (including traditional systems of distribution of goods and services based on reciprocity, barter and exchange);
- (g) Asset distribution (e.g., land tenure arrangements, natural resource rights, ownership of other assets in terms of who has rights to income and other benefits);
- (h) Traditional systems of production (food, medicine, artefacts), including gender roles in such systems; and
- (i) Views of indigenous and local communities regarding their future and ways to bring about future aspirations.

45. In particular, in relation to subsistence-based indigenous and local communities, the following additional social factors should also be taken into consideration, including impacts thereon:

- (a) Traditional non-monetary systems of exchange such as hunting, barter and other forms of trade, including labour exchange;
- (b) Related economic and social relations;
- (c) Importance of gender roles and relations;
- (d) Traditional responsibilities and concepts of equity and equality in society; and
- (e) Traditional systems of sharing natural resources, including resources that have been hunted, collected or harvested.

## 2. Economic considerations

46. Proposed developments on sacred sites and on lands and waters traditionally occupied or used by indigenous and local communities should ensure that tangible benefits accrue to such communities, such as payment for environmental services, job creation within safe and hazard-free working environments, viable revenue from the levying of appropriate fees, access to markets and diversification of income-generating (economic) opportunities for small and medium-sized businesses. In accordance with national legislation or relevant national regulations, indigenous and local communities should be involved in the financial auditing processes of the developments in which they participate to ensure that the resources invested are used effectively.

### 3. Possible impacts on traditional systems of land tenure and other uses of natural resources

47. Developments that particularly involve changes to traditional practices for food production, or involve the introduction of commercial cultivation and harvesting of a particular wild species (e.g., to supply market demands for particular herbs, spices, medicinal plants, fish, fur or leather) may lead to pressures to restructure traditional systems of land tenure or expropriate land, and to pressures on the sustainable use of biological diversity, in order to accommodate new scales of production. The ramifications of these kinds of changes can be far-reaching and need to be properly assessed, taking into account the value systems of indigenous and local communities. Likely impacts associated with the cultivation and/or commercial harvesting of wild species should also be assessed and addressed.

### 4. Gender considerations

48. In social impact assessments, there is a particular need to examine the potential impacts of a proposed development on women in the affected community with due regard to their role as providers of food and nurturers of family, community decision-makers and heads of households, as well as custodians of biodiversity and holders of particular elements of (gender-specific) traditional knowledge, innovations and practices.

### 5. Generational considerations

49. In any social impact assessment, the potential impact of a proposed development on all generations within a community should be examined. Of particular concern are the impacts that may potentially interfere with opportunities for elders to pass on their knowledge to youth, or which might render certain skills and traditional knowledge, innovations and practices redundant.

### 6. Health and safety aspects

50. In the impact assessment process, the health and safety aspects of the proposed development should be scrutinized. Safety aspects should include such risks as physical injury during construction, and health risks resulting from various forms of pollution, sexual exploitation, social disturbance, disruption to habitats of medicinal species, and use of chemicals, such as pesticides. Foreign workers should be screened for any infectious diseases for which local populations may have no immunity, or for which there is no evidence of infection within their communities.

### 7. Effects on social cohesion

51. The impact assessment process should take into consideration the possible effects that a proposed development might have on the affected community and its people as a whole by ensuring that particular individuals or groups are not unjustly advantaged or disadvantaged to the detriment of the community as a result of the development.

## V. General Considerations

52. The following general considerations should also be taken into account when carrying out an impact assessment for a development proposed to take place on, or which is likely to impact on, sacred sites and on lands and waters traditionally occupied or used by indigenous and local communities:

- (a) Prior informed consent of the affected indigenous and local communities;
- (b) Gender considerations;
- (c) Impact assessments and community development plans;
- (d) Legal considerations;
- (e) Ownership, protection and control of traditional knowledge, innovations and practices and technologies used in cultural, environmental and social impact assessment processes;
- (f) Mitigation and threat-abatement measures;
- (g) Need for transparency; and
- (h) Establishment of review and dispute resolution procedures.

### A. PRIOR INFORMED CONSENT OF THE AFFECTED INDIGENOUS AND LOCAL COMMUNITIES

53. Where the national legal regime requires prior informed consent of indigenous and local communities, the assessment process should consider whether such prior informed consent has been obtained. Prior informed consent corresponding to various phases of the impact assessment process should consider the rights, knowledge, innovations and practices of indigenous and local communities; the use of appropriate language and process; the allocation of sufficient time and the provision of accurate, factual and legally correct information. Modifications to the initial development proposal will require the additional prior informed consent of the affected indigenous and local communities.

### B. GENDER CONSIDERATIONS

54. The vital role that women and youth play, in particular women and youth within indigenous and local communities, 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.

### C. IMPACT ASSESSMENTS AND COMMUNITY DEVELOPMENT PLANS

55. Indigenous and local communities should be encouraged, and provided with the necessary support and capacity to formulate their own community development plans. Such plans should include and should develop mechanisms for strategic environmental assessment that are commensurate with the goals and objectives of the development plans and appropriate poverty eradication programmes as defined by the indigenous and local communities.

56. Any 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 should maintain a balance between economic, social, cultural and environmental concerns, on the one hand, while, on the other hand, maximizing opportunities for the conservation and sustainable use of biological diversity, the access and equitable sharing of benefits and the recognition of traditional knowledge, innovations and practices in accordance with Article 8(j) of the Convention, and should seek to minimize risks to biological diversity. The cultural, environmental and social impact assessment processes should reflect this.

#### D. LEGAL CONSIDERATIONS

57. In any assessment procedure, subject to national legislation consistent with international obligations, Governments, their agencies and development proponents should take into account the rights of indigenous and local communities over lands and waters traditionally occupied or used by them and the associated biological diversity.

58. There is a need for clarification of legal responsibilities, particularly with regard to matters that may arise during the conduct of cultural, environmental and social impact assessments, including enforcement, liability and redress measures.

#### E. OWNERSHIP, PROTECTION AND CONTROL OF TRADITIONAL KNOWLEDGE, INNOVATIONS AND PRACTICES AND TECHNOLOGIES USED IN CULTURAL, ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT PROCESSES

59. 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.

60. In all circumstances related to the proposed development, the customary laws and intellectual property rights of the indigenous and local communities with respect to their traditional knowledge, innovations and practices, should be respected. Such knowledge should only be used with the prior informed consent of the owners of that traditional knowledge. In order to safeguard their rights, indigenous and local communities should establish, or be assisted to establish, protocols consistent with relevant national legislation for access to and use of traditional knowledge, innovations and practices in the cultural, environmental and social impact assessment processes. Assistance in establishing such protocols should be provided if so requested.

#### F. MITIGATION AND THREAT-ABATEMENT MEASURES

61. In the context of impact assessments, and particularly with respect to mitigation 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.

## G. NEED FOR TRANSPARENCY

62. Transparency and public accountability should be maintained regarding the conduct of all phases of the cultural, environmental and social impact assessments, and in any decision-making processes, except in cases of national security and where confidentiality regarding the handling of secret/sacred traditional knowledge, innovations and practices is required. A clause on non-disclosure of information gathered through the impact assessment process of baseline studies related to traditional knowledge, innovations and practices should be ensured.

## H. ESTABLISHMENT OF REVIEW AND DISPUTE RESOLUTION PROCEDURES

63. 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.

# VI. Ways and Means

## A. STRENGTHENING AND REBUILDING OF CAPACITY

64. Any activity aimed at the incorporation of cultural and social considerations, and the biodiversity-related considerations of indigenous and local communities, into national environmental impact assessment systems should be accompanied by appropriate strengthening and rebuilding of capacities. Expertise in traditional knowledge, innovations and practices is required within the agencies responsible for impact assessment. At the same time, indigenous and local community expertise is required in impact assessment methodologies, techniques and procedures. Environmental impact assessments should include in the assessment team experts, including indigenous experts, in the traditional knowledge, innovations and practices related to the relevant ecosystems.

65. Training workshops on cultural, social and biodiversity-related aspects of environmental impact/strategic assessment and on economic valuation of cultural social and biodiversity resources for both assessment practitioners and representatives of indigenous and local communities would facilitate the emergence of a cross-cultural understanding of the issues.

66. Governments should encourage and support indigenous and local communities, where they have not already done so, to formulate their own community-development plans that will enable such communities to adopt a more culturally appropriate strategic, integrated and phased approach to their development needs in line with community goals and objectives. These plans should include a strategic environment assessment policy or aim to provide a systematic process for integrating social, environmental and cultural considerations in planning and decision-making, for the application of impact assessments to development proposals.

## B. LEGISLATIVE AUTHORITY

67. If cultural, environmental and social impact assessment processes relevant to indigenous and local communities are made an integral part of environmental



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

#### C. EXCHANGE OF INFORMATION

68. Web-based resources, such as the clearing-house mechanism of the Convention on Biological Diversity and other means of exchanging experiences and information, including traditional means of communication, may help to raise awareness about best available methods and useful sources of information and experience concerning both the conduct and integration of cultural, social and biodiversity-related concerns of indigenous and local communities in environmental impact assessment processes and in strategic environmental assessment, and should be developed and used for the provision and exchange of information on environmental impact assessment.

69. Communication between assessment practitioners and indigenous and local community members with experience in cultural, environmental and social impact assessment is in urgent need of improvement and should be enhanced through workshops, case-study assessments and through the sharing of experiences through, for example, the focal point on Article 8(j) and related provisions of the clearing-house mechanism of the Convention on Biological Diversity.

#### D. RESOURCES

70. Resources, including financial, technical and legal support, should be made available to indigenous and local communities and relevant national organizations to enable them to participate fully in all aspects of national impact assessments. This support may be provided by national Governments, where possible, or, in developing countries and countries with economies in transition, by appropriate donor agencies.

#### G. PARTICIPATORY MECHANISMS FOR INDIGENOUS AND LOCAL COMMUNITIES

*The Conference of the Parties,*

*Recalling* decisions VI/10 and VI/18 of the Conference of the Parties,

*Recognizing* the importance of the full and effective participation of indigenous and local communities in the Convention process and in decision-making processes and the implementation of the Convention at the national level,

*Recognizing also* the need to strengthen and develop mechanisms to further promote the full and effective participation of indigenous and local communities in the Convention process, particularly in matters related to the objectives of Article 8(j) and related provisions,

*Recognizing further* the vital role that women play in the conservation and sustainable use of biological diversity and affirming the need for the full participation of women at all levels of policy-making and implementation for biological diversity conservation, as recognized in the preamble of the Convention,

*Noting* the work of the Ad Hoc Technical Expert Group on Traditional Knowledge and the Clearing-House Mechanism at its meeting in Santa Cruz de la Sierra, Bolivia, from 24 to 26 February 2003,

*Noting* the need to ensure adequate financial support for the participation of indigenous and local communities in meetings organized under the Convention,

*Noting further* that a number of Parties have put in place measures to facilitate the involvement and participation of indigenous and local communities in decision-making processes and the implementation of the Convention at the national level,

*Emphasizing* the need to strengthen the capacity of indigenous and local communities, in particular at the local level, in order to ensure full and effective involvement and participation in Convention-related matters,

1. *Reiterates* its invitation, contained in paragraph 18 of decision V/16, to Parties and Governments to increase the participation of representatives of indigenous and local communities in official delegations to meetings held under the Convention and *urges* them to further enhance such participation;

2. *Requests* the Executive Secretary to compile information on the participation of indigenous and local communities in the Convention process, and in decision-making processes and the implementation of the Convention at the national level, making it available through the clearing-house mechanism;

3. *Requests* the Executive Secretary to incorporate practical measures to enhance the participation of indigenous and local communities, where appropriate, in the working groups of the Convention on Biological Diversity, Subsidiary Body on Scientific, Technical and Technological Advice and the Conference of the Parties, in accordance with the rules of procedure, where appropriate;

4. *Requests* the Executive Secretary, in consultation with the Bureau of the Conference of the Parties, with regard to meetings held under the Convention, to consider the spacing of such meetings, particularly with regard to those of the Ad Hoc Working Group on Article 8(j) and Related Provisions, *vis-à-vis* meetings of the Open-ended Ad Hoc Working Group on Access and Benefit-sharing and of the Conference of the Parties, in order to allow sufficient time and opportunity for indigenous and local community representatives to contribute to and analyse documents prepared for such meetings, and to secure financial support for attendance;

5. *Requests* the Executive Secretary to continue to promote synergies between international environmental instruments, in particular through 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 on issues of relevance to Article 8(j) and related provisions of the Convention;

6. *Invites* Parties and Governments, in consultation with indigenous and local communities, where they have not already done so, to:

- (a) Promote the effective participation of indigenous and local communities in the development of national mechanisms for participation in decision-making and implementation;
- (b) Establish national, subregional and/or regional indigenous and local community biodiversity advisory committees, taking into account gender equity at all levels;
- (c) Enhance the capacity of national institutions, governmental and civil organizations and organizations of indigenous and local communities to take into account the requirements of Article 8(j) and related provisions and to facilitate its implementation; and
- (d) Build sufficient capacity to ensure that the national biodiversity focal point, in accordance with domestic law, is able to make information available to indigenous and local communities with regard to the circulation of documents and outcomes of meetings held under the Convention, with particular emphasis on providing the documents in appropriate and accessible languages of indigenous and local communities;
- (e) Enhance the capacity of indigenous and local communities to collaborate with national research organizations and universities in order to identify research and training needs in relation to the conservation and sustainable use of biological diversity;

7. *Mindful* of the particular constraints of developing countries, in particular small island developing States amongst them, *urges* Parties, Governments and international organizations, when providing financial or other support for *in situ* conservation, in accordance with Article 8(m) and Article 20, paragraphs 2 and 3, of the Convention, to pay particular attention to the establishment and implementation of participatory mechanisms;

8. *Encourages* Parties and Governments to assist indigenous and local community organizations in their regions to hold regional meetings to discuss the outcomes of the decisions of the Conference of the Parties and to prepare for meetings under the Convention, in particular the meetings of the Ad Hoc Open-ended Working Group on Article 8(j) and Related Provisions and the Ad Hoc Open-ended Working Group on Access and Benefit-sharing;

9. *Invites* Parties to include information regarding the level of participation of indigenous and local communities in their national reports, as well as the measures and approaches used to encourage the participation of indigenous and local communities;

10. *Decides* to establish a voluntary funding mechanism under the Convention to facilitate the participation of indigenous and local communities, giving special priority to those from developing countries and countries with economies in transition and small island developing States in meetings under the Convention, including meetings of the indigenous and local community liaison group and relevant meetings of ad hoc technical expert groups. The funding mechanism for the participation of indigenous and local communities established herein shall operate according to criteria to be developed by the Conference of the Parties in consul-

tation with indigenous and local communities and taking into account any United Nations practice in this field;

11. *Requests* the Executive Secretary to further develop the role of the thematic focal point on Article 8(j) and related provisions of the Convention under the clearing-house mechanism with a view to:

- (a) Assisting national focal points, as appropriate and subject to available resources, to more effectively disseminate and make accessible Convention-related information to indigenous and local communities with particular emphasis on providing information in appropriate and accessible languages of indigenous and local communities;
- (b) Assisting indigenous and local communities, as appropriate and subject to available resources, in the use of information and communication technologies through the organization of capacity-building and training workshops at the local, national, and subregional levels;
- (c) Compiling information on existing networks, experts, tools, and resources relevant to meeting the needs of indigenous and local communities;

12. *Requests* the Executive Secretary, in consultation with indigenous and local communities, through the national focal points, to further assist in the development of communication networks and tools for use by indigenous and local communities, *inter alia*, by:

- (a) Publishing information through the clearing-house mechanism toolkit on formats, protocols, and standards for use by indigenous and local communities and assist in the further development of communication networks;
- (b) Publishing information through the clearing-house mechanism toolkit on electronic communication tools appropriate for use by indigenous and local communities;
- (c) Making available through the thematic focal point electronic forums and other communication tools to promote the further development of communications networks by indigenous and local communities;
- (d) Publishing information on network architecture and custodianship of data through the clearing-house mechanism toolkit to assist indigenous and local communities in the further development of communication networks by indigenous and local communities;
- (e) Identifying other traditional, alternative and non-electronic communication tools to ensure full and effective participation in the communication network by indigenous and local communities.

#### H. DEVELOPMENT OF ELEMENTS OF *SUI GENERIS* SYSTEMS FOR THE PROTECTION OF TRADITIONAL KNOWLEDGE, INNOVATIONS AND PRACTICES

*The Conference of the Parties,*

*Recalling* decision VI/10 in which the Conference of the Parties recognized 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 for the conservation and sustainable use of biological diversity,

*Recalling* paragraph 34 of decision VI/10,

*Recalling also* paragraph 11 of decision V/26 A, by which the Conference of the Parties decided that the Ad Hoc Open-ended Working Group on Access and Benefit-sharing shall maintain communication and exchange of information with the Ad Hoc Open-ended Inter-sessional Working Group on Article 8(j) and Related Provisions of the Convention,

*Recognizing* that the preservation and maintenance of knowledge, innovations and practices of indigenous communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity are linked to the continued stewardship by indigenous and local communities of biological resources on lands and waters traditionally occupied or used by them,

*Also recognizing* that indigenous and local communities have their own systems, as part of their customary laws, for preserving and maintaining traditional knowledge, innovations and practices as well as for the protection and transmission of traditional knowledge,

*Recognizing* the transboundary distribution of some biological and genetic resources and associated traditional knowledge,

*Recognizing also* the collective and inter-generational nature of traditional knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity,

*Recognizing also* the need to halt the misuse and misappropriation of knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and related genetic resources through effective mechanisms that will protect the rights of indigenous and local communities,

*Recognizing* the importance of access and benefit-sharing arrangements in the conservation of genetic resources and the preservation and maintenance of knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity,

*Noting* that a mix of defensive and positive measures, taking into account both proprietary and non-proprietary aspects, may be necessary for the protection of traditional knowledge, innovations and practices relevant for the conservation and sustainable use of biological diversity,

*Recognizing* that a *sui generis* system for the protection of traditional knowledge at the international level may enable indigenous and local communities to effectively protect their knowledge against misuse and misappropriation and that such a system should be flexible and respect the interests and rights of indigenous and local communities,

*Recognizing* that while in some cases databases and registers may play a role in the protection of traditional knowledge, innovations and practices, such databases and registers are only one approach in the effective protection of traditional knowledge, innovations and practices and their establishment should be voluntary, not a requirement for protection, and established with the prior informed consent of indigenous and local communities, and *further recognizing*, if indigenous and local communities decide to use such databases and registers, the need for funding and capacity-building for indigenous and local communities regarding the establishment and maintenance of such databases and registers,

*Emphasizing* that any *sui generis* system for the protection of traditional knowledge, innovations and practices needs to be developed taking into consideration customary law and practices with the full and effective involvement and participation of concerned indigenous and local communities,

*Recognizing* that traditional knowledge, innovations and practices are sometimes accessed without the consent of indigenous and local communities and that these communities have a right to grant or refuse such access as well as to determine the level of such access, subject to Article 8(j),

*Concerned* that some traditional knowledge, innovations and practices have been accessed without the prior informed consent of indigenous and local communities and *recognizing* that necessary steps should be taken to ensure the respect of prior informed consent for any future use of traditional knowledge, subject to Article 8(j),

*Aware* of the need for further work by the Ad Hoc Open-ended Inter-Sessional Working Group on Article 8(j) and Related Provisions of the Convention, on a number of issues relating to the protection of knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity,

*Recognizing* the need for continued collaboration with other relevant organizations working on issues related to the protection of traditional knowledge, innovations and practices, such as the World Intellectual Property Organization (WIPO), the Permanent Forum on Indigenous Issues (PFII), the World Health Organization (WHO) and the Food and Agriculture Organization of the United Nations (FAO), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Conference on Trade and Development (UNCTAD) and the World Trade Organization (WTO) to ensure mutual supportiveness and avoid duplication of efforts,

1. *Requests* the Executive Secretary to continue gathering and analysing information on the issues set out in paragraphs 34(b)–(e) of decision VI/10 and disseminate this information through the clearing house mechanism;

2. *Invites* Parties, Governments, indigenous and local communities, and relevant international organizations to communicate to the Executive Secretary any relevant information on existing indigenous, local, national and regional *sui generis* systems for the protection of the knowledge, innovations and practices of indigenous communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and any relevant information on innovative

policy, administrative and legislative measures that are supportive of customary law and practices;

3. *Requests* the Executive Secretary to compile information on issues identified in paragraph 2 above, and on the nature of customary laws and traditional protocols of indigenous and local communities relating to customary uses and the conservation and sustainable use of biological diversity, in cooperation with indigenous and local communities, for consideration by the Ad Hoc Open-ended Inter-sessional Working Group on Article 8(j) and Related Provisions of the Convention;

4. *Requests* the Executive Secretary, based on submissions by Parties, Governments, indigenous and local communities and relevant international organizations, to develop, in cooperation with the ongoing work on the use of terms in the Ad Hoc Open-ended Working Group on Access and Benefit-Sharing and in consultation with Parties, indigenous and local communities and relevant international organizations, a glossary of terms relevant to Article 8(j) and related provisions for the consideration by the fourth meeting of the Ad Hoc Open-ended Inter-sessional Working Group on Article 8(j) and Related Provisions of the Convention;

5. *Decides* on appropriate mechanisms for better cooperation between the Ad Hoc Open-ended Working Group on Access and Benefit-Sharing and the Ad Hoc Open-ended Inter-sessional Working Group on Article 8(j) and Related Provisions of the Convention in order to ensure the participation and involvement of indigenous and local communities in the Ad Hoc Open-ended Working Group on Access and Benefit-Sharing;

6. *Requests* the Ad Hoc Open-ended Inter-sessional Working Group on Article 8(j) and Related Provisions of the Convention, with the collaboration of relevant international organizations and bodies such as the United Nations Permanent Forum on Indigenous Issues to:

- (a) Consider non-intellectual-property-based *sui generis* forms of protection of traditional knowledge, innovations and practices relevant for the conservation and sustainable use of biodiversity;
- (b) Further develop, as a priority issue, elements for *sui generis* systems, listed in the annex to the present decision, for protection of knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and ensure benefit-sharing arrangements for these communities when their traditional knowledge and associated genetic resources are accessed;
- (c) Review the relevance and applicability of the Bonn Guidelines to the Ad Hoc Open-ended Inter-sessional Working Group on Article 8(j) and Related Provisions of the Convention in accordance with decision VI/24 A of the Conference of the Parties;
- (d) Review and, if appropriate, make recommendations regarding the international regime on access and benefit-sharing with a view to including *sui generis* systems and measures for the protection of knowledge, innovations, and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity;

- (e) Assess the role of databases and registers in the protection of traditional knowledge, innovations and practices embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity;
  - (f) Explore, taking into account the work of the World Intellectual Property Organization and the United Nations Permanent Forum on Indigenous Issues, the potential of and conditions under which the use of existing as well as new forms of intellectual property rights can contribute to achieving the objectives of Article 8(j) and related provisions of the Convention;
7. *Invites* Parties and Governments to consider appropriate measures, with the full and effective participation of indigenous and local communities, to implement at local, national, subregional, regional and international levels *sui generis* systems and other new innovative mechanisms that ensure the protection of traditional knowledge, innovations and practices taking into consideration customary law and traditional practices;
8. *Requests* the Executive Secretary, with the cooperation of Parties, indigenous and local communities and relevant international organizations, to collect information on the role of databases and registers in the protection of traditional knowledge, innovations and practices relevant for the conservation and sustainable use of biological diversity;
9. *Invites* Parties, Governments and international organizations to strengthen the capacity of indigenous and local communities to protect, use, preserve, maintain and promote their traditional knowledge, innovations and practices relevant for the conservation and sustainable use of biological diversity;
10. *Invites* both Parties and indigenous and local communities to share national experiences amongst themselves on local and national approaches, as well as international approaches, for the protection of traditional knowledge and to consider the harmonization of approaches at the regional level;
11. *Invites* the World Intellectual Property Organization to make available to the Ad Hoc Open-ended Inter-sessional Working Group on Article 8(j) and Related Provisions of the Convention, the results of its work on issues relevant to the implementation of Article 8(j) and related provisions of the Convention, in particular in relation to the protection of traditional knowledge and its recognition as prior art.

## **ANNEX**

### **SOME POTENTIAL ELEMENTS TO BE CONSIDERED IN THE DEVELOPMENT OF *SUI GENERIS* SYSTEMS FOR THE PROTECTION OF TRADITIONAL KNOWLEDGE, INNOVATIONS AND PRACTICES OF INDIGENOUS AND LOCAL COMMUNITIES**

1. Statement of purpose, objectives and scope.
2. Clarity with regard to ownership of traditional knowledge associated with biological and genetic resources.
3. Set of relevant definitions.



4. Recognition of elements of customary law relevant to the conservation and sustainable use of biological diversity with respect to: (i) customary rights in indigenous/traditional/local knowledge; (ii) customary rights regarding biological resources; and (iii) customary procedures governing access to and consent to use traditional knowledge, biological and genetic resources.
5. A process and set of requirements governing prior informed consent, mutually agreed terms and equitable sharing of benefits with respect to traditional knowledge, innovations and practices associated with genetic resources and relevant for the conservation and sustainable use of biological diversity.
6. Rights of traditional knowledge holders and conditions for the grant of rights.
7. The rights conferred.
8. A system for the registration of indigenous/local knowledge/Systems for the protection and preservation of indigenous/local knowledge.
9. The competent authority to manage relevant procedural/administrative matters with regard to the protection of traditional knowledge and benefit-sharing arrangements.
10. Provisions regarding enforcement and remedies.
11. Relationship to other laws, including international law.
12. Extra-territorial protections.

## **I. Recommendations of the Permanent Forum on Indigenous Issues to the Convention on Biological Diversity**

*The Conference of the Parties,*

*Stressing the need* for a better understanding among United Nations agencies on issues pertaining to indigenous and local communities and their traditional knowledge,

*Noting* recommendations 1, 8 and 9 of the Permanent Forum on Indigenous Issues contained in the report of the second session of the Forum, which are addressed to the Convention on Biological Diversity (UNEP/CBD/WG8J/3/8),

1. *Welcomes* the increasing collaboration between the Convention process and the Permanent Forum on Indigenous Issues on matters pertaining to indigenous and local communities and their knowledge, innovations and practices relevant for the conservation and sustainable use of biological diversity;
2. *Requests* the Executive Secretary to contribute as appropriate to the preparation of the report of the Secretary General to the Forum on Indigenous Issues on the implementation of chapter 26 of Agenda 21 and other relevant chapters, such as chapters 36 and 15;
3. *Requests* the Executive Secretary to transmit to the Permanent Forum on Indigenous Issues at its third session the Akwé: Kon Voluntary 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;

4. *Further requests* the Executive Secretary to consult and coordinate with the Secretariat of the Forum and to collaborate with United Nations agencies and relevant international organizations with a view to organizing a workshop on cultural, environmental and social impact assessments based on the Akwé: Kon Voluntary Guidelines and aimed at the further strengthening of the understanding of the link between environment and cultural diversity, with the participation of representatives of indigenous and local communities, and *urges* Parties and Governments to provide financial resources in support of the organization of the workshop;
5. *Requests* the Ad Hoc Open-ended Inter-sessional Working Group on Article 8(j) and Related Provisions to develop elements of an ethical code of conduct to ensure respect for the cultural and intellectual heritage of indigenous and local communities relevant for the conservation and sustainable use of biological diversity, taking into account task 16 of the programme of work on Article 8(j) and related provisions.

## **DECISION VII/17 | Liability and redress (Article 14, paragraph 2)**

*The Conference of the Parties,*

*Recalling* its decision VI/11,

*Taking note* of the preparations by the Executive Secretary for the meeting of the group of legal and technical experts on liability and redress in the context of paragraph 2 of Article 14 of the Convention on Biological Diversity,

1. *Renews* its request to the Executive Secretary contained in its decision VI/11, paragraph 1, to convene a group of legal and technical experts to discharge the mandate specified in that decision;
2. *Requests* the Executive Secretary to update the documentation prepared pursuant to decision VI/11, paragraph 2, and to make it available prior to convening the group of legal and technical experts;
3. *Urges* Parties and Governments to make the necessary voluntary financial contributions to facilitate the convening of the group of legal and technical experts.

## **DECISION VII/18 | Incentive Measures (Article 11)**

*The Conference of the Parties,*

*Recognizing* the need to remove policies or practices that create perverse incentives that lead to the degradation and loss of biological diversity, or to mitigate these perverse incentives, as a crucial element in national and global strategies to halt the degradation and loss of biodiversity,

*Stressing* that these incentives and mitigation measures should not adversely affect biodiversity and livelihoods of other communities, and should be applied in a manner consistent with international law,

*Noting* that the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity also call for the removal or mitigation of policies, laws and regulations that generate perverse incentives,

*Underlining* the need for further policy guidance on this issue, in particular with regard to the application of ways and means to remove or mitigate perverse incentives,

*Recognizing* that new policies should also be examined with a view to identifying, and avoiding, potential perverse incentives,

*Recalling* the programme of work on incentive measures established in decision V/15 of the Conference of the Parties and the recognition by the Conference of the Parties at its sixth meeting that further work needs to be undertaken on the role of positive incentives and their performance as well as on perverse incentives and ways and means for their removal or mitigation, as reflected in decision VI/15,

*Recalling further* its request to the Executive Secretary, in paragraph 7 of decision VI/15, to elaborate, in collaboration with relevant organizations, proposals for the application of ways and means to remove or mitigate perverse incentives, 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,

*Acknowledging* that the proposals for the application of ways and means to remove or mitigate perverse incentives as elaborated by the second workshop on incentive measures, held in Montréal from 3 to 5 June 2003, contain valuable and useful elements that provide a general framework to address the removal or mitigation of perverse incentives in different economic sectors and ecosystems, but need further refinement and consideration before adoption by the Conference of the Parties,

*Recognizing* that the development and application of practical methods of assessing trends in the economic and social value of biodiversity and of demonstrating the economic and ecological consequences of biodiversity loss are essential elements in meeting the 2010 target,

*Recognizing* the important work undertaken by the Organisation for Economic Co-operation and Development and the Millennium Ecosystem Assessment regarding the economic aspects of biodiversity and the assessment of biodiversity values,

### **Proposals for the application of ways and means to remove or mitigate perverse incentives**

1. *Takes note with appreciation* of the work of the second workshop on incentive measures, held in Montréal from 3 to 5 June 2003, and of the Subsidiary Body on Scientific, Technical and Technological Advice, in elaborating the proposals for the application of ways and means to remove or mitigate perverse incentives, annexed to the present decision;

2. *Encourages* Parties and governments, as appropriate, to use the proposals as voluntary interim guidance to Parties for the application of ways and means to remove or mitigate policies and practices that generate perverse incentives, and to extend their efforts to an examination of new policies with a view to identifying, and avoiding, potential perverse incentives, bearing in mind that perverse incentives include those that negatively affect biodiversity in other countries;
3. *Requests* the Subsidiary Body on Scientific, Technical and Technological Advice at its tenth meeting, as a matter of priority, to further refine and consider, with a view to recommending adoption by the Conference of the Parties, the proposals for the application of ways and means to remove or mitigate perverse incentives, giving adequate time for a substantive and conclusive review of the proposals;
4. *Encourages* Parties and Governments to use, on a voluntary basis, these proposals as further interim guidance in implementing the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity and, in particular, principles 2 and 3, which address incentive measures;
5. *Invites* competent international organizations and agencies to provide technical and financial support to the efforts of Parties and Governments to apply these proposals with a view to removing or mitigating perverse incentives;
6. *Invites* Parties, Governments and relevant organizations to submit any information on the removal or mitigation of perverse incentives, including case-studies and best-practices on the application of ways and means as well as any experiences with the application of the proposals, to the Executive Secretary; and *requests* the Executive Secretary to provide a report thereon to the tenth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice, to assist in the further consideration of the proposals,
7. *Decides* that the progress made by Parties in removing or mitigating perverse incentives should be included in their national reports prepared in accordance with Article 26 of the Convention as appropriate;

### **Further implementation of the programme of work on incentive measures**

8. *Invites* Parties, Governments and international organizations to submit case-studies, best practices and other information on the use of non-monetary positive incentive measures for the conservation and sustainable use of biodiversity as an initial step in the ongoing examination of incentive measures, including traditional laws and practices which generate positive incentives, and on the application of methodologies for the assessment of values of biodiversity and its functions, as well as other tools for prioritization in decision-making, to the Executive Secretary;
9. *Requests* the Executive Secretary to make this information available through the clearing-house mechanism and other means, if appropriate, and to prepare a synthesis report for consideration by the Subsidiary Body on Scientific, Technical and Technological Advice at a meeting prior to the eighth meeting of the Conference of the Parties;

10. *Urges* Parties, Governments and relevant funding agencies to target and prioritize funding to support the preparation and compilation of case-studies and best practices contemplated in paragraph 8;

11. *Requests* the Executive Secretary to prepare, in cooperation with the Organisation for Economic Co-operation and Development and other relevant international organizations, an analysis of existing and new instruments that provide positive incentives, including traditional laws and practices which generate positive incentives, their interaction with other policy measures and their effectiveness, including their requirements for successful application, possible limitations and shortcomings, and to develop proposals on the application of such positive incentive measures and their integration into relevant policies, programmes or strategies, for consideration by the Subsidiary Body for Scientific, Technical and Technological Advice at a meeting prior to the eighth meeting of the Conference of the Parties;

12. *Requests* the Executive Secretary to explore, in cooperation with the Millennium Ecosystem Assessment, the Organisation for Economic Co-operation and Development and relevant international organizations, existing methodologies for valuation of biodiversity and biodiversity resources and functions, as well as other tools for prioritization in decision-making, by preparing a compilation of existing valuation tools that provides an overview of the discussion on their methodological status, if appropriate, as well as an assessment of their applicability in terms of effectiveness and capacity preconditions, and to prepare proposals for the application of such tools. These proposals should include the identification of options to strengthen international collaborative partnerships for assessing biodiversity values, especially for the refinement and advancement of valuation tools, and shall be submitted to the Subsidiary Body on Scientific, Technical and Technological Advice for its consideration at a meeting prior to the eighth meeting of the Conference of the Parties.

## ANNEX

### [PROPOSALS FOR THE APPLICATION OF WAYS AND MEANS TO REMOVE OR MITIGATE PERVERSE INCENTIVES]

#### A. General considerations

1. For the purpose of these indicative guidelines, the term *policy* shall refer to a system of strategies, plans and programmes that spell out, *inter alia*, operational targets, and a related set of legal, administrative and/or economic tools that are implemented by national, sub-national and local governments to attain a set of underlying objectives. The term *practice* shall refer to any activity undertaken by individuals, communities, companies and organizations that is based on customary law, social norms or cultural traditions.

2. A *perverse incentive* emanates from policies or practices that encourage, either directly or indirectly, resource uses leading to the degradation and loss of biological diversity. The removal of such policies or practices or the mitigation of their perverse effects is therefore an important element in promoting the conservation and sustainable use of biological diversity.

3. Three phases are suggested in the process of removing such policies or practices or in mitigating their perverse effects on biological diversity, all of which should be implemented with stakeholder participation:

- (a) The identification of policies or practices that generate perverse incentives and their impacts;
- (b) The design and implementation of appropriate reforms;
- (c) The monitoring, enforcement and evaluation of these reforms.

4. The following sections provide indicative guidance, corresponding to these three phases on the application of ways and means to remove policies or practices generating perverse incentives.

## **B. Identification of policies or practices that generate perverse incentives**

### **1. PRINCIPLES FOR IDENTIFYING POLICIES AND PRACTICES THAT GENERATE PERVERSE INCENTIVES**

5. *Review of policies and practices.* Not every single policy measure and, in particular, not every incentive measure, leads to adverse effects for biodiversity. A thorough study, critical review and evaluation of policies and practices potentially contributing to biodiversity loss, including the assessment of their impact on biodiversity as well as their effectiveness and efficiency, is therefore essential to identify properly and comprehensively any specific policies or practices and their interaction that are responsible for such decline. Indicator systems are an important means to inform such an analysis. Parties and governments should engage in the further development of such systems.

6. *Interaction between policies and practices, and with other root causes.* The study should take fully into account that the loss of biodiversity may be caused by a complex interaction of several root factors. Consequently, the identification of perverse incentives resulting from specific policies and practices is often difficult, as their extent may crucially depend on the design and degree of implementation and enforcement of other policies, and on other socio-economic root causes. The removal or mitigation of such policies and practices, although necessary, may not be sufficient to halt the loss of biodiversity if other macro-economic and sectoral policies and key socio-economic reasons remain unchanged.

7. *Identification of perverse practices.* Special analytical care is needed if practices are to be held accountable for any adverse impacts on biological diversity. Such practices are difficult to change as they are rooted in cultural traditions or customary law, which may have wider social values. Furthermore, perverse incentives may be often explained by an economically rational response to ill-adapted policies. The analysis should determine whether the promotion of cultural adaptation is appropriate or whether the reform of policies, or a combination of both, provides better opportunities for an effective policy intervention.

8. *Scope of perverse incentives.* In some instances, policies and practices may generate perverse incentives only under specific local conditions and socio-economic circumstances, while they may prove to be neutral or even favourable for biolog-

ical diversity under other conditions and circumstances. The study should therefore seek to identify and quantify, whenever feasible and appropriate, the *scope* and *extent* to which such policies and practices adversely affect biodiversity, as this information is important for prioritization and for choosing the appropriate policy response.

9. *Differentiation of policy objectives, operational targets, and tools.* Policies that induce unsustainable behaviour are often designed to attain legitimate objectives. Biodiversity decline usually comes as an un-anticipated side-effect of such policies. In particular, subsidies have often been introduced for good and sound purposes. However, the operational targets of the policy and the tools that are used to attain these targets are not always appropriate to meet the proclaimed objectives. Furthermore, the policy objectives, even while initially good and sound, may no longer be valid. Once a specific policy is identified in generating perverse incentives, further analytical work should therefore differentiate the underlying objectives, operational targets and the specific policy tools used, in order to identify the appropriate entry point for policy reform.

10. *Identification of all relevant costs and benefits and their distribution.* The identification of all relevant costs and benefits from removing or mitigating policies or practices that generate perverse incentive as well as their distribution within society and the economy is key for a well-informed policy choice. Hence, the assessment should not only include the direct, tangible costs and benefits, but also the intangible costs and benefits for society as a whole. The use of appropriate valuation tools should be considered if feasible. Furthermore, when assessing the merits of mitigation policies, the following cost components should also be taken into consideration: compliance costs, monitoring and enforcement costs, administrative costs and costs of change management.

11. *Identification of obstacles for policy reform.* The following elements should also be identified, as they are crucial for the design of implementable policy responses:

- (a) Relevant obstacles for the removal of policies and practices generating perverse incentives, such as distributional issues, property rights, entrenched interests, cultural traditions, international considerations;
- (b) Relevant obstacles for the implementation of policies that mitigate such perverse incentives, such as international obligations, lack of funds or lack of administrative and/or institutional capacity.

12. *Periodic policy evaluations.* The lack of evaluation of policy efficacy and efficiency contributes to the persistence of policies that create perverse incentives and do not assist in achieving what may still be legitimate policy objectives. Periodic quantitative policy evaluation, which includes biodiversity impacts, is desirable for various reasons: it provides criteria for the selection of the most desirable policy reform interventions, it assists in the identification of relevant stakeholders (winners and losers), creates political and evidentiary support for change of ineffective and perverse incentives, gives an indication of policy alternatives and provides an indication of the cost of removal of the perverse incentives. The establishment of periodic quantitative evaluation of the effectiveness of policy instruments and an

assessment of any perverse incentives created by them would enable the development of win-win policy reforms. International organizations are highly requested to cooperate in this effort.

13. *Prioritization.* The analysis should enable prioritization of subsequent reforms to remove or mitigate perverse incentives, that is, it should enable to spell out which reforms to take up first, and which ones to take up later. Such a prioritization exercise should be based on a set of criteria, including the feasibility and ease of policy reform, the importance and extent of biodiversity degradation, and socio-economic concerns.

## 2. WAYS AND MEANS TO IDENTIFY POLICIES AND PRACTICES THAT GENERATE PERVERSE INCENTIVES

14. *Strategic environmental assessment.* Elements of strategic environmental assessment (SEA) procedures could be used, if appropriate, as a means to identify policies and practices that generate perverse incentives. In this regard, the Guidelines for Incorporating Biodiversity-related Issues into Environmental Impact Assessment Legislation and/or Processes and in Strategic Environmental Assessment (decision VI/7, annex) could be taken into consideration. While mainly used for *proposed* policies, SEA procedures provide useful guidance on how to design and conduct research to identify perverse incentives for biodiversity conservation and sustainable use that emanate from *existing* policies. In particular, the following steps emerge as possible means of assessing policies and practices with regard to potential perverse incentives:

- (a) Screening to determine which policies or practices require full or partial study with regard to possible perverse incentives;
- (b) Scoping to identify which potential impacts on biological diversity are relevant to address, and to derive terms of reference for the actual study;
- (c) The actual study to identify the perverse incentives for biodiversity conservation and sustainable use emanating from policies and practices, taking into account those impacts that result from the interaction of different policies and practices;
- (d) The identification of possible action to remove or mitigate perverse incentives;
- (e) The identification of possible reform obstacles;
- (f) Pursuant to the design and implementation of reform policies, monitoring and evaluating the implementation of such reform policies, to ensure that unpredicted outcomes and failed mitigation measures are identified and addressed in a timely fashion.

15. *Stakeholder involvement.* The involvement of all stakeholders is an important element in identifying policies or practices that generate perverse incentives. The direct benefits of policies often go to well organized societal actors, while the costs of these policies, e.g., the loss of ecosystem services due to biodiversity decline, are borne by the wider public or by diffuse and/or powerless groups. Such groups, however, may be able to forward additional important information and to point to possible shortcomings in the conclusions of the assessment. It should therefore



be ensured, through appropriate mechanisms of levelling the playing field for all stakeholders, that all groups are fully involved throughout the process. A balanced representation of stakeholders in the consultation will contribute to identifying properly and comprehensively both the benefits of individual policies and their possible shortcomings.

16. *Transparency.* Perverse incentives are often difficult to detect, because the negative impacts on biodiversity are usually an indirect by-product of policies aiming at other goals, and because they may result from an intricate interaction between different policies or practices. Ensuring that the process of assessing policies and practices is conducted in a transparent manner will contribute to ensure that all relevant stakeholders are well-informed about the process and its outcomes. This is an important pre-condition for effective stakeholder involvement.

17. *Capacity-building.* In developing countries and countries with economies in transition, lack of institutional and administrative capacity to design and conduct appropriate assessment studies is often a serious impediment to identifying policies and practices that generate perverse incentives. Capacity-building, supported by relevant national, regional and international organizations, is therefore an important prerequisite in successfully removing or mitigating policies and practices that generate perverse incentives. Funding should be ensured for capacity-building.

## C. Design and implementation of appropriate reforms

### 1. GUIDELINES FOR THE CHOICE OF REFORMS

18. *Possible political action.* The following is an indicative list of possible political action once specific policies and practices are identified as generating perverse incentives for the conservation and sustainable use of biological diversity, bearing in mind that, in some instances, several such activities need to be undertaken simultaneously, and also recalling that reforms of other macro-economic and sectoral policies may often be necessary to capture the full benefits of removing or mitigating perverse incentives and to halt the loss of biodiversity:

- (a) Removal of the policy or practice;
- (b) Removal of the policy and its replacement with another policy that attains the same objectives, but without or with fewer perverse impacts on biological diversity (re-instrumentation);
- (c) In those cases where a policy or practice has overall negative impacts but some positive impacts, removal of that policy or practice and introduction of an additional policy that seeks to maintain the positive impacts;
- (d) Removal of the policy or practice, combined with measures to overcome obstacles for policy reform;
- (e) Introduction of policies that mitigate the perverse impacts on biodiversity of policies or practices, possibly including policies that address relevant obstacles.

19. The following paragraphs provide an indicative list of conditions for the selection of political action further to the identification of policies or practices that gen-

erate perverse incentives. Some conditions make reference to costs and/or benefits. It is important to note that the policy choice should be based not only on the direct, tangible costs and benefits, but also on an assessment of the intangible costs and benefits, including, for instance, benefits emanating from ecosystems services. Furthermore, the assessment should also include components such as compliance costs, monitoring and enforcement costs, administrative costs and the costs of change management, if appropriate. Maximizing the net social benefit, taking into account distributional objectives and effects at national and global levels, is the criterion for the choice of reform policies.

20. *Removal of policies that generate perverse incentives.* The removal of policies that generate perverse incentives could be considered when the following conditions are met:

- (a) The analysis may reveal that a policy generating perverse incentives was introduced under circumstances that no longer prevail. As a consequence, the policy objectives may no longer be valid. For instance, the objective of providing support to companies whose sector undergoes a period of economic crisis would no longer be valid after the recovery or the successful restructuring of this sector;
- (b) In other cases, the policy objective may still be valid. The analysis may show, however, that perverse incentives would be generated under any policy to attain this objective, that is, under any operational target and policy tool chosen. In such cases, the removal of the policy should be considered if the costs for society of effective mitigation policies would be higher than the net societal benefits foregone when the policy is removed.

21. *Removal of perverse practices.* The removal of practices that generate perverse incentives should be considered if a careful analysis of their interplay with formal policies reveals that such practices are indeed the appropriate target for reform policies. Such practices are difficult and costly to remove, because of the very fact that they are rooted in cultural traditions or customary law. Their removal should be considered if the cost of promoting cultural adaptation, through for instance appropriate awareness-raising and education programmes, is lower than the cost of effective mitigation policies. Furthermore, it has to be recalled that perverse incentives, apparently caused by specific practices, may often be explained by an economically rational response to ill-adapted policies. In those cases, the reform of these policies may often provide better opportunities for an effective policy intervention.

22. *Re-instrumentation.* In many cases, the underlying policy objective may still be valid and legitimate, and the perverse incentives emanating from the policy could be substantially lowered or avoided if other operational targets and tools would be used. In such instances, the removal of the policy and its replacement by a policy with fewer or no perverse impacts should be considered. Special care should be paid to identifying and implementing those operational targets and related tools that generate the least or no adverse impact on biological diversity.

23. *Removal and introduction of policies that maintain any positive impacts.* In some cases, policies and practices may generate perverse incentives under specific local conditions and socio-economic circumstances, while they may even be

favourable for biological diversity under other conditions and circumstances. In these cases, the removal of these policies and practices should still be envisaged if the overall effect on biological diversity is mainly negative. Additional, well-targeted policies could be introduced to maintain the positive impacts.

24. *Removal and overcoming of obstacles.* Substantial obstacles may sometimes hinder the removal of policies and practices. Additional policies to overcome such obstacles could be introduced if the associated costs are lower than the costs of effective mitigation. The choice of the appropriate policy would clearly depend on the relevant obstacle identified:

- (a) *Distributional concerns.* In some cases, the removal of policies or practices may have adverse distributional consequences. The impact of reforms on food security and poverty should be of particular concern. A step-by-step approach to the reforms could be considered. Additional well-targeted income policies could also be implemented to compensate these adverse effects;
- (b) *Legal issues.* In some cases, the removal of policies may impinge on the property rights of some stakeholders. Compensation of associated losses might be required;
- (c) *Entrenched interests.* In most cases, some groups or individuals will lose as a result of the removal of policies or practices. Such groups or individuals will resist such reform. Additional policy measures may be warranted to overcome their resistance. Such measures may include awareness-raising and education programmes as well as measures to increase transparency for the wider public with regard to the adverse impact of policies and practices, thereby shifting the burden of proof to those groups opposing political reform. Compensatory policies for such stakeholders should only be considered as a last resort;
- (d) *Lack of capacity.* In developing countries and countries with economies in transition, lack of institutional and administrative capacity is often a serious impediment to removing or mitigating perverse incentives. Capacity-building will be needed in these cases;
- (e) *Cultural traditions.* The removal of practices generating perverse incentives is particularly difficult if they are deeply rooted in cultural beliefs, customs and traditions. Awareness-raising and education programmes can be appropriate means to overcome such obstacles;
- (f) *International competitiveness.* Unilateral removal of policies that generate perverse incentives may create a risk that domestic industries lose competitiveness. Such risks become more important in a globalized world of increased international trade and capital flows. When evidence for such cases is compelling, international cooperation to remove such policies in a coordinated, synchronized way may be warranted;
- (g) *Global benefits of removing perverse incentives.* In many cases, the benefits arising from a removal of policies that generate perverse incentives for the conservation and sustainable use of biodiversity are of a global nature, while the costs of removing such policies accrue at the national level. In such cases, international cooperation, including the extension of the activities of interna-

tional financial compensatory mechanisms such as the Global Environment Facility (GEF), is warranted to cover the possible incremental national costs of generating global benefits.

25. *Mitigation.* If the removal of policies or practices is not feasible or too costly, the mitigation of their perverse effects on biodiversity, through appropriate means, may be warranted. More specifically, the introduction of such mitigation policies should be considered if:

- (a) The cost for society of removing policies and practices, including forgone benefits, would be higher than the cost of effective mitigation policies;
- (b) The cost for society of replacing the policy by a policy serving the same objective with less of no perverse impacts would be higher than the cost of effective mitigation policies;
- (c) The cost for society of overcoming obstacles to the removal of policies and practices are higher than the cost of effective mitigation policies.

## 2. WAYS AND MEANS TO REMOVE OR MITIGATE PERVERSE INCENTIVES

### (a) Important tools for removal and mitigation

26. *National guidelines.* Guidelines that are adopted by competent national authorities will be an important indirect means to effectively remove or mitigate perverse incentives. Guidelines that are well adapted to national needs and circumstances may serve to structure and inform the national process of identifying as well as removing or mitigating policies and practices that generate perverse incentives. If made publicly available, they may serve as a benchmark against which the general public can gauge the effectiveness of the reform process.

27. *Stakeholder involvement.* The removal of policies or practices that generate perverse incentives is often opposed by influential groups or individuals that profit from these policies or practices. Even when it is not the stated objective of a policy to support such groups or individuals, its removal may be at risk because of their influence. In contrast, the costs of these policies, e.g., the loss of ecosystem services due to biodiversity decline, are borne by the wider public or by diffuse and/or powerless groups. The empowerment and involvement of such groups during the design and implementation phase, through appropriate mechanisms of levelling the playing field for all stakeholders, is therefore another important means to ensure that appropriate policy responses are implemented.

28. *Awareness-raising and education programmes.* The very fact that practices that generate perverse incentives are rooted in customary law, social norms or cultural traditions implies that considerable obstacles exist to their removal, obstacles that are beyond the immediate reach of formal policy-making. The more indirect approach of awareness-raising and education may therefore be a particularly important means in removing such practices. However, awareness-raising and education programmes will also be an important element in successfully removing policies or introducing mitigation policies, to overcome the resistance of powerful groups opposing their removal.

29. *Transparency.* Creating transparency with regard to the intermediate and final outcomes of the assessment study, that is, with regard to the objectives, costs, and possible negative impacts of policies and practices will contribute to clarifying the implicit choices and priorities and will expose irresponsible policies and practices to the wider public. Transparency will therefore be an important element of a successful programme to raise awareness of these issues. As a consequence, it will also increase the political costs of irresponsible policies and generate political rewards for appropriate action.

30. *Capacity-building.* In developing countries and countries with economies in transition, lack of institutional and administrative capacity is often a serious impediment to removing or mitigating perverse incentives. While some policies that generate perverse incentives can, in principle, be easily removed, the removal of practices or the implementation of successful mitigation policies may require substantial institutional and administrative capacity. Capacity-building, supported by relevant national, regional and international organizations, is therefore a key precondition in successfully removing or mitigating policies and practices that generate perverse incentives for the conservation and sustainable use of biological diversity. Funding should be ensured for capacity-building.

31. *International cooperation.* International cooperation is a very important element in removing or mitigating perverse incentives as set out in paragraph 24 (f) and (g) above.

(b) Ways and means for removal

32. *Re-instrumentation.* In the case of legitimate and valid policy objectives, re-instrumentation, that is, the application of operational targets and related tools that attain the same objective with less or no adverse impacts on biological diversity, may often be a particularly effective way of removing policies that generate perverse incentives for the conservation and sustainable use of biodiversity.

33. *Compensatory policies.* The introduction of additional measures could be considered to compensate stakeholders that are negatively affected by the removal of policies that generate perverse incentives. Provided that funding is ensured, the use of compensatory policies could be considered in following cases:

- (a) If the removal of policies will have an adverse effect on distributional objectives, a step-by-step approach to removing such policies could be taken, and additional, well targeted income policies could be implemented;
- (b) If the removal of policies negatively affects the property rights of some stakeholders, the compensation of associated losses could also be envisaged;
- (c) If the conditions spelled out under (a) and (b) above do not prevail, compensatory policies should only be used as a last resort.

(c) Ways and means for mitigation

34. *Regulation.* In some instances, the introduction of additional regulation may be an effective means to mitigate the perverse impacts on biodiversity, provided that a number of preconditions are met. Such preconditions include:

- (a) The existence of well defined, comprehensive and measurable performance indicators;
- (b) Manageable monitoring and enforcement costs;
- (c) Regulations that can be designed in a comprehensive way so as to avoid adaptive behaviour of target groups, leading to secondary adverse effects on biological diversity.

35. *Overcoming obstacles to mitigation through regulation.* It should be borne in mind that the very obstacles that prevent the removal of policies may also impede the effective mitigation of their perverse effects. For instance, the incentive of target groups not to comply with the regulation may be especially high if the policy generating the perverse incentive remains in place unchanged. Therefore, awareness-raising, transparency and stakeholder involvement are important elements of effective regulatory policies to mitigate perverse incentives.

36. *Positive incentive measures.* The introduction of additional positive incentive measures is another possible means to mitigate the perverse impacts of some policies and practices. In addition to the preconditions enumerated in paragraph 34, a number of other caveats should be taken into consideration when using positive incentive measures:

- (a) If policies having perverse impacts on biodiversity remain unchanged, the cost of using positive incentives for mitigating these impacts will be especially high, which, in turn, will impair the efficiency of using this instrument. Prior to using positive incentives, such policies should therefore be removed to the extent possible, through the means enumerated above;
- (b) As explained in paragraph 23, policies and practices that generate perverse incentives in most circumstances may have a favourable impact on biological diversity in others. In such cases, the use of positive incentive measures could be considered to mitigate the negative effect of removing these policies and practices;
- (c) The careful design of the incentive measure, including the proper specification of eligibility conditions, is especially important in the case of positive incentive measures to avoid the generation of secondary adverse effects on biological diversity;
- (d) In some cases, the strategic behaviour of rational recipients will impede the long-term effectiveness of positive incentive measures. In such cases, their use should be restricted to a transitional period of time through appropriate legal means such as sunset legislation;
- (e) Lack of funds may limit the use of positive incentive measures;
- (f) The use of positive incentive measures may have both negative and positive distributional consequences. These consequences need to be taken into consideration when using positive incentive measures.

37. *Negative incentive measures.* The use of negative incentive measures could also be considered to mitigate the perverse impacts of some policies and practices. In addition to the preconditions enumerated in paragraph 34 above, political resis-

tance will often be especially severe if negative incentive measures are to be introduced. Therefore, awareness-raising, transparency and stakeholder involvement are key elements of a successful introduction of negative incentive measures to mitigate perverse incentives.

38. *Guidance on the use of incentive measures.* Further guidance with regard to the design and implementation of incentive measures is given in the proposals for the design and implementation of incentive measures, endorsed by the Conference of the Parties to the Convention on Biological Diversity at its sixth meeting (decision VII/15, annex I).

#### **D. Monitoring, enforcement and evaluation of reforms**

39. *Stakeholder involvement.* Even after the design and implementation of reforms, relevant stakeholders should be involved in evaluation to ensure their feedback on unanticipated side-effects, failed mitigation measures and other shortcomings, and to ensure that such shortcomings are addressed in a timely fashion.

40. *Indicators and information systems.* It should be considered to introduce appropriate information systems in order to facilitate the process of monitoring and enforcing reforms. Furthermore, the development and application of sound indicators is a crucial precondition to the useful evaluation of reform policies.

41. *Success criteria for evaluation.* The evaluation of reforms should be based on a set of sound success criteria.

42. *Transparency.* Further dissemination of information can play a key role in building and maintaining public support for the reforms, and can thereby contribute to lower monitoring and enforcement costs for public authorities. Again, transparency may be a crucial precondition to ensuring effective stakeholder involvement in evaluating reforms.

43. *Capacity-building.* The ultimate success of the chosen reform is contingent upon successful monitoring, enforcement and evaluation of its impact, including unanticipated side-effects, failed mitigation measures and other shortcomings. It therefore depends on sufficient institutional and administrative capacity. Funding should be available for capacity-building.]

### **DECISION VII/19 | Access and benefit-sharing as related to genetic resources (Article 15)**

#### **A. Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of Benefits Arising out of their Utilization**

*The Conference of the Parties,*

*Recalling* the evolutionary character of the Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of Benefits Arising out of their Utilization and the need to keep their implementation under review,

*Recognizing* that the Guidelines are making a useful contribution to the development of national regimes and contractual arrangements for access and benefit-sharing and to the implementation of the objectives of the Convention,

*Recognizing* further that some developing countries have encountered some constraints due to inadequate capacity to fully utilize the guidelines in the formulation of their national legislation of access and benefit sharing and related arrangements,

1. *Notes* the progress already accomplished and the need for further experience in the implementation of the Guidelines;
2. *Invites* Parties, Governments, indigenous and local communities and all relevant stakeholders to continue to promote the wide implementation of the voluntary Bonn Guidelines;
3. *Encourages* Parties, Governments, indigenous and local communities and all relevant stakeholders to further submit information on relevant experience and lessons learned, including successes and constraints, in the implementation of the Guidelines;
4. *Requests* the Executive Secretary to make this information available through appropriate means, including the clearing-house mechanism of the Convention.

## **B. Use of terms, definitions and/or glossary, as appropriate**

*The Conference of the Parties,*

*Recalling* the voluntary nature of the Bonn Guidelines,

*Noting* that the terms as defined in Article 2 of the Convention shall apply to the Bonn Guidelines on Access and Benefit Sharing in accordance with paragraph 8 of the Bonn Guidelines,

*Noting* further that a number of other relevant terms not defined in the Convention may need to be examined,

*Bearing* in mind the difficulties faced by some developing countries with respect to information technology and related infrastructure,

1. *Invites* Parties, Governments, relevant organizations, indigenous and local communities, and all relevant stakeholders, according to a format provided by the Secretariat, to submit to the Executive Secretary:
  - (a) Information on existing national definitions or other relevant definitions of the following terms: access to genetic resources, benefit sharing, commercialization, derivatives, provider, user, stakeholder, *ex situ* collection, and voluntary nature (as contained in annex II of document UNEP/CBD/COP/6/INF/4);
  - (b) Views on whether additional terms need to be considered, such as arbitrary restrictions;
2. *Requests* access and benefit-sharing national focal points within Governments to facilitate the process of gathering and submitting relevant information to the Secretariat, taking into account the need to consult widely, including with indigenous and local communities;



3. *Requests* the Executive Secretary to gather and compile the information referred to above and distribute this information through available means, including through the clearing-house mechanism of the Convention;
4. *Requests* the Executive Secretary to submit this compilation to the next meeting of the Ad Hoc Open-ended Working Group on Access and Benefit-sharing for its consideration and *requests* the Working Group to further examine the issue of use of terms not defined in the Convention including the possible establishment of an expert group to determine the need for definitions or a glossary, and to report back to the Conference of the Parties.

### C. Other approaches, as set out in decision VI/24 B

#### *The Conference of the Parties,*

*Recognizing* that a package of measures may be necessary to address the different needs of Parties, Governments, relevant organizations, indigenous and local communities and all relevant stakeholders in the implementation of access and benefit-sharing arrangements,

*Acknowledging* that existing other approaches could be considered to complement the Bonn Guidelines and are useful tools in assisting implementation of access and benefit-sharing provisions of the Convention,

*Stressing* the need to further examine other approaches set out in decision VI/24 B, and additional approaches such as interregional and bilateral arrangements as well as an international certificate of legal provenance/origin/source, in particular the operational functionality and cost effectiveness of such an international certificate,

1. *Invites* Parties, Governments, relevant organizations, indigenous and local communities and all relevant stakeholders, to submit to the Secretariat their views and relevant information on additional approaches as well as regional, national and local experiences on existing approaches, including on codes of ethics;
2. *Requests* the Executive Secretary to further compile information on existing complementary measures and approaches, and experiences with their implementation, and to disseminate such information to Parties, Governments, relevant organizations, indigenous and local communities and all relevant stakeholders through, *inter alia*, the clearing-house mechanisms of the Convention;
3. *Requests* the Open-ended Working Group on Access and Benefit-sharing to further consider the issue of additional approaches, in a cost effective way at an appropriate time, and, to this end, *requests* the Executive Secretary to prepare a report on the basis of the submissions received.

## D. International regime on access to genetic resources and benefit-sharing

*The Conference of the Parties,*

*Reaffirming* that the fair and equitable sharing of the benefits arising out of the utilization of genetic resources is one of the objectives of the Convention on Biological Diversity, in accordance with Article 1 of the Convention,

*Reaffirming* the sovereign rights of States over their natural resources and that the authority to determine access to genetic resources rests with the national Governments and is subject to national legislation, in accordance with Article 3 and Article 15, paragraph 1, of the Convention,

*Reaffirming* the commitment of Parties in Article 15, paragraph 2 of the Convention to “endeavour to create conditions to facilitate access to genetic resources for environmentally sound uses by other Contracting Parties and not to impose restrictions that run counter to the objectives of this Convention,”

*Recalling* paragraph 44(o) of the Plan of Implementation of the World Summit on Sustainable Development, which calls for action to “negotiate within the framework of the Convention on Biological Diversity, bearing in mind the Bonn Guidelines, an international regime to promote and safeguard the fair and equitable sharing of benefits arising out of the utilization of genetic resources,”

*Further recalling* resolution 57/260 of 20 December 2002, adopted by the United Nations General Assembly at its fifty-seventh session, inviting the Conference of the Parties to take appropriate steps with regard to the commitment made at the World Summit on Sustainable Development “to negotiate within the framework of the Convention on Biological Diversity, bearing in mind the Bonn Guidelines, an international regime to promote and safeguard the fair and equitable sharing of benefits arising out of the utilization of genetic resources,”

*Recalling* the recommendation of the Inter-Sessional Meeting on the Multi-Year Programme of Work of the Conference of the Parties up to 2010 inviting the Ad Hoc Open-ended Working Group on Access and Benefit-sharing “to consider the process, nature, scope, elements and modalities of an international regime on access to genetic resources and benefit-sharing and to provide advice to the Conference of the Parties at its seventh meeting on this issue,”

*Noting* the Bonn Guidelines on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization, adopted at the sixth meeting of the Conference of the Parties, “as 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,”

*Recalling also* paragraph 44(n) of the Plan of Implementation of the World Summit on Sustainable Development which calls for action to promote the wide implementation of and continued work on the Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of Benefits arising out of their Utilization, as an input to assist the Parties when developing and drafting legislative, administrative or policy measures on access and benefit-sharing as well as con-

tract and other arrangements under mutually agreed terms for access and benefit-sharing.”

*Recalling further* the Millennium Development Goals and the potential role of access and benefit-sharing in poverty eradication and environmental sustainability,

*Taking into account* Articles 8(j), 15, 16, 17, 18, 19, paragraphs 1 and 2, 20, 21 and 22 of the Convention on Biological Diversity,

*Reaffirming* the commitment by Parties, subject to national legislation, to respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from their utilization,

*Noting* the work being carried out under the framework of the Convention by the Working Group on Article 8(j) and Related Provisions of the Convention,

*Recognizing* that the Convention is the key instrument for the conservation, sustainable use and fair and equitable sharing of benefits arising out of the utilization of genetic resources and bearing in mind the work related to access to genetic resources and benefit-sharing carried out in other relevant international intergovernmental organizations,

*Recognizing* also the important contribution of the FAO International Treaty for Plant Genetic Resources for Food and Agriculture that was negotiated in harmony with the Convention on Biological Diversity,

*Recognizing* that Parties that are countries of origin of genetic resources may be both users and providers and that Parties that have acquired these genetic resources in accordance with the Convention on Biological Diversity may also be both users and providers,

*Recalling* that the Bonn Guidelines indicate that Parties and stakeholders may be both users and providers, noting that these terms may still need to be examined and clarified,

*Recognizing* that the regime should be practicable, transparent, and efficient and avoid arbitrary treatment, consistent with the provisions of the Convention,

*Recalling* that the international regime should recognize and shall respect the rights of indigenous and local communities,

*Noting* that there is a need for further analysis of existing national, regional and international legal instruments and regimes relating to access and benefit-sharing and experience gained in their implementation, including gaps and their consequences,

*Noting* that the Ad Hoc Open-ended Working Group on Access and Benefit-sharing has identified possible components of an international regime, without prejudging the outcome,

1. *Decides* to mandate the Ad Hoc Open-ended Working Group on Access and Benefit-sharing with the collaboration of the Ad Hoc Open ended Inter-sessional Working Group on Article 8(j) and Related Provisions, ensuring the participation of indigenous and local communities, non-governmental organizations, industry and scientific and academic institutions, as well as intergovernmental organizations, to elaborate and negotiate an international regime on access to genetic resources and benefit-sharing with the aim of adopting an instrument\instruments to effectively implement the provisions in Article 15 and Article 8(j) of the Convention and the three objectives of the Convention;
2. *Recommends* that the Ad Hoc Open-ended Working Group on Access and Benefit-sharing should operate in accordance with the terms of reference contained in the annex to this decision;
3. *Request* the Executive Secretary to make the necessary arrangements for the Ad Hoc Open-ended Working Group on Access and Benefit-sharing to be convened twice before the eighth meeting of the Conference of the Parties with one meeting from the core budget back to back with the Ad Hoc Open-ended Inter-Sessional Working Group on Article 8(j) and Related Provisions and the other from voluntary contributions;
4. *Requests* the Ad Hoc Open-ended Working Group on ABS to report on progress to the Conference of the Parties at its eighth meeting;
5. *Invites* the United Nations Environment Programme, the Food and Agriculture Organization of the United Nations, the World Trade Organization, the World Intellectual Property Organization, the International Union for the Protection of New Varieties of Plants, to cooperate with the Ad Hoc Open-ended Working Group on Access and Benefit-sharing in elaborating the international regime;
6. *Encourages* Parties, Governments, international organizations and all relevant stakeholders to provide the ways and means to allow for sufficient preparation and to facilitate effective participation of indigenous and local communities in the process of the negotiation and elaboration of an international regime;
7. *Recommends* the promotion of the participation of all relevant stakeholders, including non-governmental organizations and the private sector, and indigenous and local communities;
8. *Invites* Parties, Governments, international organisations, indigenous and local communities and all relevant stakeholders, to submit to the Executive Secretary their views, information and analysis on the elements of the international regime as soon as possible;
9. *Requests* the Executive Secretary to compile the submissions received and to make them available through the clearing-house mechanism and other means for the Ad Hoc Open-ended Working Group on Access and Benefit-sharing.

**ANNEX**  
**TERMS OF REFERENCE FOR THE AD HOC OPEN-ENDED WORKING GROUP ON**  
**ACCESS AND BENEFIT-SHARING**

(a) *Process:*

- (i) To elaborate and negotiate the nature, scope and elements of an international regime on access and benefit-sharing within the framework of the Convention on Biological Diversity, as contained in paragraphs (b), (c) and (d) below, drawing on *inter alia* an analysis of existing legal and other instruments at national, regional and international levels relating to access and benefit-sharing, including: access contracts; experiences with their implementation; compliance and enforcement mechanisms; and any other options;
- (ii) As part of the work, the Ad Hoc Open-ended Working Group on Access and Benefit-sharing will examine whether and to what extent possible elements as contained in paragraph (d) below are part of these instruments and determine how to address the gaps.

(b) *Nature:* The international regime could be composed of one or more instruments within a set of principles, norms, rules and decision-making procedures, legally-binding and/or non-binding.

(c) *Scope:*

- (i) Access to genetic resources and promotion and safeguarding of fair and equitable sharing of the benefits arising out of the utilization of genetic resources in accordance with relevant provisions of the Convention on Biological Diversity;
- (ii) Traditional knowledge, innovations and practices in accordance with Article 8(j).

(d) *Elements:* The following elements shall be considered by the Ad Hoc Open-ended Working Group on Access and Benefit-sharing for inclusion in the international regime, *inter alia*:

- (i) Measures to promote and encourage collaborative scientific research, as well as research for commercial purposes and commercialization, consistent with Articles 8(j), 10, 15, paragraph 6, paragraph 7 and Articles 16, 18 and 19 of the Convention;
- (ii) Measures to ensure the fair and equitable sharing of benefits from the results of research and development and the benefits arising from the commercial and other utilization of genetic resources in accordance with Articles 15.7, 16, 19.1, 19.2. of the Convention;
- (iii) Measures for benefit-sharing including, *inter alia*, monetary and non-monetary benefits, and effective technology transfer and cooperation so as to support the generation of social, economic and environmental benefits;
- (iv) Measures to promote facilitated access to genetic resources for environmentally sound uses according to Article 15.2 of the Convention on Biological Diversity;

- (v) Measures to promote and safeguard the fair and equitable sharing of benefits arising out of the utilization of genetic resources;
- (vi) Measures to ensure the sharing of benefits arising from the commercial and other utilization of genetic resources and their derivatives and products, in the context of mutually agreed terms;
- (vii) Measures to promote access and benefit-sharing arrangements that contribute to the achievement of the Millennium Development Goals, in particular on poverty eradication and environmental sustainability;
- (viii) Measures to facilitate the functioning of the regime at the local, national, subregional, regional and international levels, bearing in mind the transboundary nature of the distribution of some *in situ* genetic resources and associated traditional knowledge;
- (ix) Measures to ensure compliance with national legislations on access and benefit-sharing, prior informed consent and mutually agreed terms, consistent with the Convention on Biological Diversity;
- (x) Measures to ensure compliance with prior informed consent of indigenous and local communities holding traditional knowledge associated with genetic resources, in accordance with Article 8(j);
- (xi) Measures to ensure compliance with the mutually agreed terms on which genetic resources were granted and to prevent the unauthorized access and use of genetic resources consistent with the Convention on Biological Diversity;
- (xii) Addressing the issue of derivatives;
- (xiii) Internationally recognized certificate of origin/source/legal provenance of genetic resources and associated traditional knowledge;
- (xiv) Disclosure of origin/source/legal provenance of genetic resources and associated traditional knowledge in applications for intellectual property rights;
- (xv) Recognition and protection of the rights of indigenous and local communities over their traditional knowledge associated to genetic resources subject to the national legislation of the countries where these communities are located;
- (xvi) Customary law and traditional cultural practices of indigenous and local communities;
- (xvii) Capacity-building measures based on country needs;
- (xviii) Code of ethics/Code of conduct/Models of prior informed consent or other instruments in order to ensure fair and equitable sharing of benefits with indigenous and local communities;
- (xix) Means to support the implementation of the international regime within the framework of the Convention;
- (xx) Monitoring, compliance and enforcement;
- (xxi) Dispute settlement, and/or arbitration, if and when necessary;
- (xxii) Institutional issues to support the implementation of the international regime within the framework of the Convention;
- (xxiii) Relevant elements of existing instruments and processes, including:
  - Convention on Biological Diversity;

- Bonn Guidelines on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization;
- The International Treaty on Plant Genetic Resources for Food and Agriculture of the Food and Agriculture Organization of the United Nations;
- The Commission on Genetic Resources for Food and Agriculture of the Food and Agriculture Organization of the United Nations;
- Current national legislative, administrative and policy measures implementing Article 15 of the Convention on Biological Diversity;
- The United Nations Permanent Forum on Indigenous Issues;
- Outcomes of Working Group on Article 8(j);
- The Agreement on Trade-related Aspects of Intellectual Property Rights and other World Trade Organization agreements;
- World Intellectual Property Organization conventions and treaties;
- International Convention for the Protection of New Varieties of Plants;
- Regional agreements;
- Codes of conduct and other approaches developed by specific user groups or for specific genetic resources, including model contractual agreements;
- African Model Law on the Rights of Communities, Farmers, Breeders, and on Access to Biological Resources;
- Decision 391 of the Andean Community;
- Decision 486 of the Andean Community;
- United Nations Convention on the Law of the Sea;
- Agenda 21;
- Rio Declaration;
- CITES;
- Antarctic Treaty;
- The Universal Declaration of Human Rights;
- The International Covenant on Civil and Political Rights;
- The International Covenant on Economic, Social and Cultural Rights.

**E. Measures, including consideration of their feasibility, practicality and costs, to support compliance with prior informed consent of the Contracting Party providing genetic resources and mutually agreed terms on which access was granted in Contracting Parties with users of such resources under their jurisdiction**

*The Conference of the Parties,*

*Recalling* paragraph 8 of its decision VI/24 A,

*Recalling also* Article 8(j), Article 15, paragraphs 1, 3 and 7, Article 16, paragraph 3, and Article 19, paragraphs 1 and 2, of the Convention,

*Recalling further* paragraph 16(d) of the Bonn Guidelines on Access to Genetic Resources and Equitable Sharing of Benefits Arising out of their Utilization, which identifies a number of measures that could be taken by Contracting Parties with users of genetic resources under their jurisdiction, to support compliance with prior informed consent of the Contracting Party providing such resources and with mutually agreed terms on which access was granted,

*Noting* that a number of Governments have taken initiatives at the national and regional levels to establish measures to support compliance with prior informed consent of the Contracting Parties providing such resources, including countries of origin, in accordance with Article 2 and Article 15, paragraph 3, of the Convention, and of the indigenous and local communities providing associated traditional knowledge, and with mutually agreed terms on which access was granted,

*Noting further* the ongoing activities and processes in relevant international forums such as the World Intellectual Property Organization, the TRIPs Council of the World Trade Organization, and the Commission on Plant Genetic Resources for Food and Agriculture of the Food and Agriculture Organization of the United Nations acting as the Interim Committee for the International Treaty on Plant and Genetic Resources for Food and Agriculture, regarding measures to support compliance with prior informed consent,

*Aware* that further work is required on a number of issues, including analysis of: (i) specific measures to support compliance, in accordance with the sovereign rights of the country of origin of genetic resources, with the prior informed consent of the Contracting Parties providing such resources, including countries of origin, in accordance with Article 2 and Article 15, paragraph 3, of the Convention, and of the indigenous and local communities providing associated traditional knowledge; (ii) compliance measures existing in national laws; (iii) the extent and level of unauthorized access and misappropriation of genetic resources and traditional knowledge; and (iv) availability of remedies in user countries relating to non-compliance,

*Recognizing* that a number of critical issues, such as an international certificate of origin/source/legal provenance, and disclosure of origin of genetic resources and associated traditional knowledge, need to be addressed to support compliance with national legislation of countries of origin and prior informed consent of the Contracting Parties providing such resources, including countries of origin, in accordance with Article 2 and Article 15, paragraph 3, of the Convention, and of the indigenous and local communities providing associated traditional knowledge, and with mutually agreed terms on which access was granted,

*Recognizing further* the need to ensure transparency in the international exchange of genetic resources and associated traditional knowledge,

*Recalling* paragraph 35 of decision VI/20 in which the Conference of the Parties recognized the leading role of the Convention on Biological Diversity in international biological diversity issues,

*Noting with appreciation* the Technical Study on Disclosure Requirements Concerning Genetic Resources and Traditional Knowledge prepared by World Intellectual Property Organization at the request of the Conference of the Parties in



decision VI/24 C and considering the contents of the Technical Study to be helpful in the consideration of intellectual property-related aspects of user measures,

1. *Takes note* of ongoing initiatives at national, regional and international levels regarding measures to support compliance with national legislation, including prior informed consent of the Contracting Parties providing such resources, including countries of origin, in accordance with Article 2 and Article 15, paragraph 3, of the Convention, and of the indigenous and local communities providing associated traditional knowledge, and with mutually agreed terms on which access was granted;
2. *Invites* Parties and Governments to continue taking appropriate and practical measures to support compliance with prior informed consent of the Contracting Parties providing such resources, including countries of origin, in accordance with Article 2 and Article 15, paragraph 3, of the Convention, and of the indigenous and local communities providing associated traditional knowledge, and with mutually agreed terms on which access was granted. Such measures may include:
  - (a) Exchange of information between users and providers regarding legislative, administrative and policy measures existing in their jurisdiction relating to access and benefit-sharing;
  - (b) Incentive measures, as referred to in paragraph 51 of the Bonn Guidelines, to encourage users to comply with national legislation, including prior informed consent and mutually agreed terms, such as publicly sponsored research grants and voluntary certification schemes;
  - (c) Development of model/standard contractual agreements for different user groups and different genetic resources;
  - (d) Aspects related to the import and export of genetic resources, including regulations when feasible and as appropriate;
  - (e) Easy access to justice in cases of violation of legal provisions in provider and user countries;
  - (f) Administrative and judicial remedies, including penalties and compensation as provided by national laws;
  - (g) Monitoring.
3. *Invites* Parties to recognize that traditional knowledge, whether written or oral, may constitute prior art;
4. *Invites* Parties to establish national mechanisms to ensure compliance, when required by domestic law, with the obtaining of prior informed consent of indigenous and local communities regarding access to genetic resources and associated traditional knowledge;
5. *Invites* Parties to put in place mechanisms to ensure fair and equitable benefit-sharing at the national level with relevant stakeholders and indigenous and local communities;
6. *Requests* the Ad Hoc Open-ended Working Group on Access and Benefit-Sharing to address issues related to an international certificate of origin/source/legal prove-

nance, taking into account multilateral approaches to access to genetic resources and benefit-sharing, including issues such as feasibility, practicality and costs;

7. *Requests* the Ad Hoc Open-ended Working Group on Access and Benefit-Sharing to identify issues related to the disclosure of origin of genetic resources and associated traditional knowledge in applications for intellectual property rights, including those raised by a proposed international certificate of origin/source/legal provenance, and transmit the results of this examination to the World Intellectual Property Organization and other relevant forums;

8. *Invites* the World Intellectual Property Organization to examine, and where appropriate address, taking into account the need to ensure that this work is supportive of and does not run counter to the objectives of the Convention on Biological Diversity, issues regarding the interrelation of access to genetic resources and disclosure requirements in intellectual property rights applications, including, *inter alia*:

- (a) Options for model provisions on proposed disclosure requirements;
- (b) Practical options for intellectual property rights application procedures with regard to the triggers of disclosure requirements;
- (c) Options for incentive measures for applicants;
- (d) Identification of the implications for the functioning of disclosure requirements in various World Intellectual Property Organization-administered treaties;
- (e) Intellectual property-related issues raised by proposed international certificate of origin/source/legal provenance;

and regularly provide reports to the Convention on Biological Diversity on its work, in particular on actions or steps proposed to address the above issues, in order for the Convention on Biological Diversity to provide additional information to the World Intellectual Property Organization for its consideration in the spirit of mutual supportiveness;

9. *Invites* the United Nations Conference on Trade and Development and other relevant international organisations to examine the issues in, and related to, the matters specified in paragraphs 7 and 8 in a manner supportive of the objectives of the Convention on Biological Diversity and prepare a report for submission to the on-going process of the work of the Convention on Biological Diversity on access and benefit sharing;

10. *Requests* the Executive Secretary to gather information, with the assistance of Parties, Governments and relevant international organizations, and undertake further analysis relating to:

- (a) Specific measures to support and ensure compliance with national legislation, prior informed consent of the Contracting Parties providing such resources, including countries of origin, in accordance with Article 2 and Article 15, paragraph 3, of the Convention, and of the indigenous and local communities providing associated traditional knowledge, and with mutually agreed terms on which access was granted;

- (b) Existing measures to support compliance with national, regional, and international legal instruments;
- (c) The extent and level of unauthorized access and misappropriation of genetic resources and associated traditional knowledge;
- (d) Access and benefit-sharing arrangements existing in specific sectors;
- (e) Administrative and judicial remedies available in countries with users under their jurisdiction and in international agreements regarding non-compliance with the prior informed consent requirements and mutually agreed terms;
- (f) Existing practices and trends with regard to commercial and other utilization of genetic resources and the generation of benefits;
- (g) Measures that preserve and promote legal certainty for users over the terms and conditions of access and use;

and prepare a compilation of the information received and make this compilation available for the consideration of the Ad Hoc Open-ended Working Group on Access and Benefit-sharing at its third meeting;

11. *Requests* the Ad Hoc Open-ended Working Group on Access and Benefit-sharing to analyse the compilation prepared by the Executive Secretary in accordance with the preceding paragraph, and recommend to the Conference of the Parties at its eighth meeting further measures to support and ensure compliance with prior informed consent of the Contracting Parties providing such resources, including countries of origin, in accordance with Article 2 and Article 15, paragraph 3, of the Convention, and of the indigenous and local communities providing associated traditional knowledge, and with mutually agreed terms on which access was granted.

## **F. Needs for capacity-building identified by countries to implement the Bonn Guidelines**

*The Conference of the Parties,*

*Recalling* decision VI/24 A, paragraph 8, in which the Conference of the Parties requested, the Ad Hoc Open-ended Working Group on Access and Benefit-Sharing to advise the Conference of the Parties on needs for capacity-building identified by countries to implement the Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of Benefits Arising out of their Utilization,

*Mindful* that capacity-building activities related to access and benefit-sharing are a crucial element in achieving the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, as well as the other two objectives of the Convention and the target to significantly reduce the rate of biodiversity loss by 2010,

*Having considered* the Action Plan on Capacity-building for Access to Genetic Resources and Benefit-sharing developed by the Open-ended Expert Workshop on Capacity-building for Access to Genetic Resources and Benefit-sharing further to decision VI/24 B, paragraph 1,

*Having considered* the work done during the ninth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice, held in Montréal from

10 to 14 November 2003, in preparing a programme of work on technology transfer and cooperation for consideration by the Conference of the Parties at its seventh meeting,

*Recognizing* that the Action Plan represents an important framework for the identification of capacity needs, priority areas requiring capacity-building, sources of funding and implementation of the identified needs and priorities,

*Underlining* that capacity-building should be a flexible, demand- and country-driven process requiring international and regional cooperation, as appropriate, involving indigenous and local communities as well as all relevant stakeholders,

*Underlining also* that the implementation of an international regime on access and benefit sharing and of national legislation on access and benefit-sharing could require additional activities to build capacity,

*Taking note with appreciation* of the report of the Open-ended Expert Workshop on Capacity-building for Access to Genetic Resources and Benefit-sharing and its work;

1. *Adopts* the Action Plan on Capacity-building for Access to Genetic Resources and Benefit-sharing annexed to this decision;
2. *Invites* Parties and Governments and relevant organizations to use the Action Plan when designing and implementing national, regional and subregional plans and strategies to build capacities for access and benefit-sharing of genetic resources and related traditional knowledge;
3. *Urges* Parties and relevant organizations to provide financial and technical assistance to support developing countries, in particular, least developed countries, small island developing States, as well as countries with economies in transition, in implementing the Action Plan and the resulting national, regional and subregional plans and strategies;
4. *Encourages* Parties and Governments to provide for the full and effective involvement and participation of indigenous and local communities and all relevant stakeholders in the development and implementation of national capacity-building plans and strategies;
5. *Requests* Parties and Governments to make information available through the clearing-house mechanism and to include information in national reports regarding their implementation of capacity-building measures on access to genetic resources and related traditional knowledge, and benefit-sharing;
6. *Requests* the Executive Secretary to facilitate, including through the clearing-house mechanism, the sharing of relevant information among donor Parties and organizations to assist coordination, reduce duplication and identify gaps relevant to the implementation of the Action Plan.

**ANNEX****ACTION PLAN ON CAPACITY-BUILDING FOR ACCESS TO GENETIC RESOURCES AND BENEFIT-SHARING****A. Objective of the Action Plan**

1. The objective of the Action Plan is to facilitate and support the development and strengthening of capacities of individuals, institutions and communities for the effective implementation of the provisions of the Convention relating to access to genetic resources and benefit-sharing, and in particular the Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of Benefits Arising Out of their Utilization, taking into account their voluntary nature. The implementation of the Action Plan at the local, national, subregional, regional and international levels should involve indigenous and local communities and all relevant stakeholders.
2. Capacity-building for access and benefit-sharing constitutes an integral part of efforts to build the capacities of Parties to manage and develop their genetic resources and should contribute to the conservation and sustainable use of biological diversity.
3. To achieve the objective, the Action Plan will provide a framework for identifying country, indigenous and local community and all relevant stakeholder needs, priorities, mechanisms of implementation and sources of funding.

**B. Key areas requiring capacity-building**

4. Key areas that require capacity-building initiatives should be considered in a flexible and transparent manner, based on a country-driven approach. This approach will take into account the different situations, needs, capabilities and stages of development of each country, as well as the different types of genetic resources and their respective characteristics, and will promote synergies between different initiatives related to capacity-building.
5. Capacities should be strengthened at the systemic, institutional and individual levels in the following key areas:
  - (a) Institutional capacity-building:
    - (i) Policy, legislative and regulatory frameworks;
    - (ii) Administrative framework;
    - (iii) Funding and resource management;
    - (iv) Mechanisms for follow-up, monitoring and assessment;
  - (b) Assessment, inventory and monitoring of genetic resources, and traditional knowledge including taxonomic capacity, *inter alia*, within the context of the Global Taxonomy Initiative, and of *in situ* and *ex situ* conservation activities;
  - (c) The capacity of indigenous and local communities to assess, inventory and monitor genetic resources and related traditional knowledge, with their approval and consent, using the Global Taxonomy Initiative and other relevant initiatives;

- (d) Bioprospecting, screening, DNA sequencing, characterization, product development and marketing;
- (e) Environmental, cultural, social and economic valuation of genetic resources, and associated traditional knowledge, innovations and practices, and market information, including sector-relevant production and marketing strategies;
- (f) Development by Contracting Parties with users of genetic resources under their jurisdiction of appropriate legal, administrative, or policy measures, as appropriate, to support compliance with prior informed consent of the Contracting Party providing such genetic resources and mutually agreed terms on which access was granted;
- (g) Inventory and case-studies of existing policy and legislative measures, and the development of appropriate policies and legislation;
- (h) Development of legislative, administrative and policy mechanisms for the protection of genetic resources and related traditional knowledge including, *inter alia*, the development of *sui generis* systems, the promotion of existing forms of protection of intellectual property rights and the support for community-based approaches of indigenous and local communities;
- (i) Development of national, regional, subregional and international information systems, and national, regional, subregional and international information management and exchange, linked with the clearing-house mechanism of the Convention;
- (j) Development and strengthening of the capacities of indigenous and local communities for participation in decision-making, policy formulation and implementation and for conservation, management and product development with regard to genetic resources and to enable them to benefit from the use of their traditional knowledge and practices related to genetic resources;
- (k) Public education and awareness focusing on indigenous and local communities and all relevant stakeholders at local, national and regional levels;
- (l) Human-resources development at all levels, including: legal drafting skills for development of access to genetic resources and benefit-sharing measures; contract-negotiation skills for indigenous and local communities and other relevant stakeholders; modalities for benefit-sharing; dispute resolution mechanisms;
- (m) Development of awareness with respect to conventions, norms and policies relating to intellectual property rights and trade and their interrelationship with genetic resources and traditional knowledge;
- (n) Strengthening inter-institutional linkages and processes with a view to ensuring more effective coordination;
- (o) 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;
- (p) Clarification and/or recognition, as appropriate, of established rights and claims of indigenous and local communities over genetic resources and related traditional knowledge, innovations and practices, subject to collecting for scientific

or potential commercial purposes and subject to national legal and policy frameworks;

- (q) Mechanisms to provide information to potential users, regulators and the public, international and national, on their obligations regarding access to genetic resources.

### **C. Mechanisms for the implementation of capacity-building in key areas**

6. The following processes, measures and mechanisms could be used for the implementation of capacity-building activities for access to genetic resources and benefit-sharing; noting that measures directed towards the capacity-building needs of users and of providers should be mutually supportive.

#### *7. Actions at multiple levels:*

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) Prioritization at the local, national, and regional levels of the key areas, drawing upon a range of existing expertise in academic, industrial and government sectors and indigenous and local communities;
- (c) Identification of existing and planned capacity-building initiatives, including capacity-building gaps, at the local, national, subregional, regional and international 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) Indigenous and local communities;
  - (vii) Private sector, non-governmental organizations and other stakeholders;
- (d) Developing and enhancing synergies and coordination of capacity-building initiatives;
- (e) Establishment of indicators for monitoring capacity-building implementation;
- (f) Funding through the Global Environment Facility and other donors;
- (g) The participation of the private sector, academic institutions, relevant institutions and organizations of indigenous and local communities, and non-governmental organizations, as providers of capacity-building in specific areas, for example through collaborative research, transfer of technology and funding;
- (h) Training workshops, train the trainers, exchange programmes and study trips;
- (i) Full and effective involvement and participation of relevant stakeholders and 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) Development of audiovisual, multi-media and educational material.

8. *Actions at the national level:*

- (a) Designation of national focal points and establishment of competent national authorities;
- (b) Development of appropriate national access and benefit-sharing strategies, policies, legislation and regulatory frameworks;
- (c) 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;
- (d) Approaches for action, including timelines for the operation of capacity-building for access to genetic resources and benefit-sharing, as provided for in the appendix to this Action Plan;
- (e) Scientific and technical areas, including research production and technology transfer relevant to access to and use of genetic resources and benefit-sharing;
- (f) Development of instruments and tools, including indicators to monitor and assess the implementation of capacity-building for access to genetic resources and benefit-sharing at all stages, and the effectiveness of policy and legislative measures.

9. *Actions at the regional and subregional levels and at the international levels:*

- (a) Regional and subregional collaborative arrangements;
- (b) Assessment of resource requirements and development of a funding strategy;
- (c) Scientific and technical cooperation and partnerships among Parties, and between Parties and relevant multilateral agencies and other organizations through, *inter alia*, the clearing-house mechanism of the Convention, and other relevant networks, including those of relevant indigenous and local communities and relevant stakeholders;
- (d) Information exchange, through the clearing-house mechanism of the Convention, the use of the Internet, databases, CD-ROMs, hard copies and workshops;
- (e) Identification and dissemination of case-studies and best practices;
- (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, where possible making use of work done in other forums;
- (h) The Global Taxonomy Initiative;
- (i) The roster of experts on access to genetic resources and benefit-sharing established under the Convention.



## D. Coordination

10. In view of the multiplicity of actors undertaking capacity-building initiatives for access to genetic resources and benefit-sharing, mutual information-sharing and coordination at all levels should be promoted to encourage synergies and to identify existing gaps in coverage. At the international level, coordination is required with other relevant international regimes, in particular with capacity-building programmes under the International Treaty on Plant Genetic Resources for Food and Agriculture, and with the World Intellectual Property Organization to ensure synergies and complementarities.

11. While recognizing the country-driven nature of the Action Plan, regional and subregional approaches should be encouraged and facilitated to implement the Action Plan, noting in particular the special needs of small island developing States (SIDS). Such facilitation could include appropriate advice to the Global Environment Facility (GEF), including promotion of regional coordination among implementing agencies of capacity-building activities supported by GEF, the submission of relevant case-studies and the broader use of the clearing-house mechanism as a means, assisted by the Executive Secretary, of identifying opportunities for regional and subregional collaboration.

12. Parties, Governments and relevant international organizations should be encouraged to provide information to the Secretariat on steps taken, including by donors, towards the implementation of capacity-building measures, to be made available through the clearing-house mechanism of the Convention.

13. Parties may consider including in their national reports, websites and any other form of reporting, information on the implementation of capacity-building measures on access to genetic resources and benefit-sharing.

14. Coordination between the Ad Hoc Open-ended Inter-sessional Working Group on Access and Benefit sharing and the Ad Hoc Open-ended Inter-sessional Working Group on Article 8(j) and Related Provisions of the Convention on Biological Diversity in the continuing development of their programmes of work with respect to capacity-building for indigenous and local communities should be encouraged.

### Appendix Possible approaches for action

*Recognizing* that the status of policy development related to access and benefit-sharing differs among countries, the approaches for action necessary to implement the Action Plan on access and benefit-sharing are to be decided by countries according to their national needs and priorities,

*Cognizant* of the urgent need to build capacities in developing countries, in particular the least developed and small island developing States among them, as well as countries with economies in transition,

*Building on* the identified elements in the Action Plan and without prejudice to the timeframes indicated therein,

As a tool to assist countries to establish national priorities and to facilitate regional and subregional activities the following approaches for action, based on experience and past practice, are proposed for consideration.

#### POSSIBLE APPROACHES FOR IMPLEMENTATION OF ACTIVITIES IDENTIFIED IN THE ACTION PLAN

##### A. National level

1. Inventory of genetic resources and traditional knowledge and evaluation of their potential markets, as well as assessment of existing measures and practices relating to access and benefit-sharing.
2. Assessment of the effectiveness and adequacy of existing capacity.
3. Development of national access and benefit-sharing strategy or policy (determination of ownership or rights to provide resources, including rights of indigenous and local communities; traditional knowledge; private sector partnership; prior informed consent; implementation; conflict resolution).
4. Enhancing awareness and participation of indigenous and local communities and all relevant stakeholders.
5. Development of timelines, including short- and long-term requirements for internal and external funding.
6. Development and/or strengthening of institutional, administrative, financial and technical capacities, including designation of national focal points and competent authorities and development of national legislative measures.
7. Mechanism for handling access and benefit-sharing requests, including decision-making, as well as public information and participation.
8. Mechanisms for monitoring and compliance for access and benefit-sharing arrangements.
9. Appropriate information mechanisms.

##### B. Subregional and regional levels

1. Assessment of national, bilateral and multilateral funding.
2. Mechanisms for regional and subregional coordination and harmonization of access and benefit-sharing strategies, policies, and legislative measures, where appropriate. This may also include regional and subregional Websites, databases, collaborative arrangements, advisory mechanisms, and centres of excellence and training.

##### C. International level

1. Effective functioning of the clearing-house mechanism, including the establishment of a database on capacity-building activities.
2. Enhancing the effectiveness and adequacy and coordination of financial resources to be provided by multilateral and bilateral donors and other donors to

developing countries, in particular the least developed and small island developing States among them, as well as countries with economies in transition.

3. Development and effective use of the roster of experts.
4. Enhancing synergies and coordination with capacity-building initiatives carried out by the Food and Agriculture Organization of the United Nations (FAO), the World Intellectual Property Organization (WIPO) and other relevant organizations.
5. Strengthening South-South cooperation.
6. Regular review and provision of further guidance by the Conference of the Parties to the Convention.

## **DECISION VII/20 | Further guidance to the financial mechanism**

*The Conference of the Parties,*

*Recalling* the relevant provisions of the Convention on Biological Diversity and its decisions I/2, II/6, III/5, III/8, IV/11, IV/13, V/12, V/13, VI/16 and VI/17,

*Taking note of* the report of the Global Environment Facility (UNEP/CBD/COP/7/9), as well as the compilation of past guidance to the financial mechanism (UNEP/CBD/COP/7/INF/1),

*Urges* the Council of the Global Environment Facility to ensure participation by all Council members in its meetings,

1. *Decides* that the report from the Council of the Global Environment Facility to the Conference of the Parties should be made available three months prior to an ordinary meeting of the Conference of the Parties as well as with updates as appropriate, and in accordance with rules 28 and 54 of the Rules of Procedure for meetings of the Conference of the Parties, the Executive Secretary should make it available in all six United Nations languages;
2. *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, V/13 and VI/17 of the Conference of the Parties. In this regard, the Global Environment Facility shall provide financial resources to developing country 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 and in accordance with the mandate of the Global Environment Facility, 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;

## Marine and coastal biological diversity

3. *Invites* the Global Environment Facility, other funding institutions, and development agencies to provide financial support for the implementation of the elaborated programme of work on marine and coastal biodiversity;

## Monitoring and indicators

4. *Recognizes* that the development and use of indicators, particularly in the development phase, requires a financial and technical commitment from Parties, and therefore *requests* the financial mechanism and *encourages* bilateral and multilateral funding agencies to assist developing countries, in particular the least developed and small island developing States among them, and countries with economies in transition through the provision of financial assistance and training, as required and as appropriate, to develop and implement effective biodiversity indicators;

## Ecosystem approach

5. *Invites* the Global Environment Facility, in accordance with its mandate, and other funding institutions and development agencies to provide financial support for the implementation of the ecosystem approach, in accordance with decision VII/11;

## Biological diversity and climate change

6. *Requests* the financial mechanism, in accordance with its mandate, and *invites* other sources to provide financial support to developing country Parties, in particular the least developed and small island developing States among them, and countries with economies in transition, where appropriate, for:

- (a) Country-driven activities, including pilot projects, aimed at projects related to ecosystem conservation, restoration of degraded lands and marine environments and overall ecosystem integrity that take into account impacts of climate change;
- (b) Assistance in capacity-building with the aim of increasing the effectiveness in addressing environmental issues through their commitments under the Convention on Biological Diversity, the United Nations Framework Convention on Climate Change, and the United Nations Convention to Combat Desertification, *inter alia*, by applying the ecosystem approach;
- (c) Assistance in developing synergy-oriented programmes to conserve and sustainably manage all ecosystems, such as forests, wetlands and marine environments, that also contribute to poverty eradication;

## Global Taxonomy Initiative

7. *Invites* Parties, other Governments, regional and international organizations to take full account of the importance of taxonomic capacities in achieving the goals of the Convention, to support taxonomic activities to attain the 2010 target, and to provide all necessary support to national, and where appropriate regional taxonomic centres of research and expertise; and *urges* the Parties, other Governments and the Global Environment Facility, in accordance with its mandate, and other relevant funding organizations to provide adequate and timely support to developing countries to assist in the implementation of the Global Taxonomy Initiative, and for integrating taxonomic capacity-building activities into thematic and cross-cutting programmes, including supporting activities and projects, such as, where appropriate, stand-alone capacity-building projects;

## Sustainable use

8. *Invites* Parties and Governments, in collaboration with the Global Environment Facility and other relevant organizations, including the private sector, to develop and transfer technologies and provide financial support to assist in the implementation of the Addis Ababa Principles and Guidelines at the national level to ensure that the use of biological diversity is sustainable;

## Invasive alien species

9. *Invites* the Global Environment Facility, in accordance with its mandate, other funding institutions and development agencies to provide financial support to developing countries, in particular the least developed countries and small island developing States among them, and countries with economies in transition, to assist in the improved prevention, rapid response and management measures to address threats of alien invasive species;

## Protected areas

10. *Requests* the Global Environment Facility, respecting national targets and priorities, to support the implementation of the programme of work, and in particular to:

- (a) In collaboration with other donors, encourage increased support to address the long-term financial sustainability of protected areas, including through different mechanisms and instruments, to help achieve the target of securing, by 2008, sufficient resources to meet the costs to effectively implement and manage national and regional systems of protected areas;
- (b) Further develop its portfolio on protected areas towards comprehensive, representative and effectively managed protected area systems addressing system wide needs; and
- (c) Support country driven early action by continuing to streamline its procedures and the provision of fast disbursing resources through expedited means;

## Strategic Plan

11. *Invites* the Global Environment Facility, in accordance with its mandate, to provide adequate and timely support to developing country Parties, in particular the least developed countries and small island developing States among them, and Parties with economies in transition, as appropriate for the implementation of activities to achieve and monitor progress towards the goals and targets identified in the framework for evaluation of progress towards implementation of the Strategic Plan of the Convention, in accordance with decision VII/30;

## Technology transfer and cooperation

12. Decides that based on needs and priorities identified by developing country Parties and countries with economies in transition, the Global Environment Facility, in accordance with its mandate and in collaboration with other interested funding agencies, shall, as appropriate, provide adequate and timely financial support for the implementation of the programme of work on technology transfer and technological and scientific cooperation, consistent with Articles 16 to 20 of the Convention, and in particular for:

- (a) Building policy, legal, judicial and administrative capacity;
- (b) Facilitating access to relevant proprietary technologies;
- (c) Providing other financial and non-financial incentives for the diffusion of relevant technologies;
- (d) Building capacities of, and empowering, indigenous and local communities and all relevant stakeholders with respect to access to and use of relevant technologies;
- (e) Improving the capacity of national research institutions in developing countries and countries with economies in transition for the development of technologies, as well as for adaptation, diffusion and the further development of imported technologies consistent with their transfer agreement and international law including through fellowships and international exchange programmes;
- (f) Supporting the development and operation of regional or international initiatives to assist technology transfer and cooperation as well as scientific and technical cooperation, including those initiatives designed to facilitate South-South cooperation and South-South joint development of new technologies and also such cooperation among countries with economies in transition;

## Millennium Development Goals

13. *Urges* Parties, Governments, international financial institutions, donors, and relevant intergovernmental organizations, as a contribution towards the Millennium Development Goals, to implement development activities in ways that are consistent with, and do not compromise, the achievement of the objectives of the Convention on Biological Diversity and the 2010 target, including by improving environmental policies in relevant development agencies and sectors such as

through integrating concerns relating to biodiversity and the Millennium Development Goals more directly into environmental impact assessments, strategic environmental assessments and other such tools, including at the national level through the national strategies for sustainable development and the poverty reduction strategies and programmes, and *invites* the Global Environment Facility to support capacity-building activities in developing countries for this purpose;

### National reporting

14. *Encourages* Parties, Governments, relevant bilateral, regional and multilateral organizations, and the Global Environment Facility to collaborate to strengthen the various capacities of Parties, particularly developing country Parties and countries with economies in transition, to prepare their future national and thematic reports;

15. *Further encourages* Parties, Governments, relevant bilateral, regional and multilateral organizations, and the Global Environment Facility, to analyse the progress of Parties, particularly developing country Parties and countries with economies in transition, in implementing the Convention, in relation to those areas identified as a priority by those countries, in order to *inter alia* assist them in the preparation of their future national reports;

16. *Requests* the Global Environment Facility to explore ways to expedite and simplify its procedures for allocating funds to the eligible countries to prepare their national reports to fulfil their reporting obligations under the Convention;

17. *Invites* the Global Environment Facility to provide the necessary financial support to facilitate the preparation of the third national reports by the Parties;

### Education and public awareness

18. *Invites* the Global Environment Facility, in accordance with its mandate, and other donor organizations to provide funding to developing countries, particularly the least developed and small island developing States among them, and countries with economies in transition for the implementation of their national communication, education and public-awareness programmes and activities;

### Access to genetic resources and fair and equitable sharing of benefits

19. *Reiterates* its guidance to the Global Environment Facility, as the institutional structure operating the financial mechanism of the Convention, to provide financial resources for country-driven projects based on national priorities that assist with the implementation of the Action Plan in support of the implementation of the Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of Benefits Arising out of their Utilization, and further requests the Global Environment Facility, in accordance with its mandate, to support capacity-building regarding the transfer of technologies which enables providers to fully appreciate and actively participate in benefit-sharing arrangements at the stage of granting access permits;

## Biosafety

*Welcoming* the biosafety capacity-building initiatives of the Global Environment Facility and its implementing agencies,

*Recognizing* the need to ensure that guidance to the financial mechanism will support in a balanced manner the objectives of the Convention and its Protocol,

*Stressing* the need for mutual information, coordinated action and regular monitoring in order to avoid duplication and to identify gaps and possible synergies because of the multitude of different actors undertaking various capacity-building initiatives, and for an active role the Executive Secretary should play in promoting this process,

*Confirming* that the arrangements between the Conference of the Parties and the Council of the Global Environment Facility provided for in the Memorandum of Understanding adopted by the Conference of the Parties at its third meeting will apply, *mutatis mutandis*, for purposes of the Cartagena Protocol,

20. *Decides* to provide the following guidance to the Global Environment Facility to be implemented in a timely manner;

21. *Decides also* upon the following eligibility criteria for funding by the Global Environment Facility:

- (a) All developing countries, in particular the least developed and small island developing States among them, and countries with economies in transition, including countries amongst these that are centres of origin and centres of genetic diversity, which are Parties to the Protocol, are eligible for funding by the Global Environment Facility in accordance with its mandate;
- (b) All developing countries, in particular the least developed and small island developing States among them, and countries with economies in transition, including countries amongst these that are centres of origin and centres of genetic diversity, which are Parties to the Convention and provide a clear political commitment towards becoming Parties to the Protocol, shall also be eligible for funding by the Global Environment Facility for the development of national biosafety frameworks and the development of national biosafety clearing-houses and other necessary institutional capabilities to enable a non-Party to become a Party. Evidence of such political commitment shall take the form of a written assurance to the Executive Secretary that the country intends to become a Party to the Protocol on completion of the activities to be funded;

22. *Stresses* that the provision of financial resources by the Global Environment Facility shall be for country-driven activities and programmes consistent with their national priorities and objectives;

23. *Invites* developed country Parties, Governments, the Global Environment Facility, other donor agencies and relevant organizations to provide financial support and other assistance to developing country Parties, in particular the least developed and the small island developing States among them, and Parties with economies in transition, including countries amongst these that are centres of ori-



gin and centres of genetic diversity, to develop and implement capacity-building activities, including organization of national, regional and inter-regional capacity building workshops and preparatory meetings;

24. *Invites* the Global Environment Facility to extend support for demonstration projects on implementation of the national biosafety frameworks to other eligible countries;

25. *Urges* the Global Environment Facility to ensure a rapid implementation of its initial strategy for assisting countries to prepare for the ratification and implementation of the Protocol, and to support capacity-building for the establishment of national components of the Biosafety Clearing-House in a flexible manner, and to provide additional support for the development and/or strengthening of existing national and regional centres for training; regulatory institutions; risk assessment and risk management; infrastructure for the detection, testing, identification and long-term monitoring of living modified organisms; legal advice; decision-making; handling of socio-economic considerations; awareness-raising and technology transfer for biosafety;

26. *Notes* that the role of the Global Environment Facility, in accordance with its mandate, in the Action Plan for Building Capacities for the Effective Implementation of the Protocol, adopted by the Conference of the Parties serving as the meeting of the Parties to the Cartagena Protocol on Biosafety at its first meeting, includes:

- (a) Providing funding and other assistance to build necessary legislative and administrative frameworks, and for training in risk assessment and risk management;
- (b) Deciding on further areas for financial support for capacity-building in accordance with the identified priority needs of developing countries and countries with economies in transition, responses to the questionnaires, the outcomes of inter-sessional workshops, and its previous pilot project on biosafety;
- (c) Implementing the GEF Strategy to Assist Countries to Ratify and Implement the Cartagena Protocol on Biosafety;
- (d) Facilitating the provision of technical support; and
- (e) Facilitating the use of existing and developing regional networks.

## DECISION VII/21 | 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,

*Recalling also* paragraph 44 of the Plan of Implementation of the World Summit on Sustainable Development,

*Welcoming* the substantial third replenishment of the Global Environment Facility Trust Fund,

*Concerned with* funding gaps, at all levels, that remain in addressing the needs for achieving the three-fold objectives of the Convention in a balanced manner,

*Affirming* that poverty eradication, sustainable development and the achievement of the three objectives of the Convention are closely inter-linked,

1. *Urges* Parties and Governments, international and regional financial institutions and development agencies, as well as other donors, to take timely actions to ensure the effective implementation of the programme of work as well as the Strategic Plan of the Convention and associated targets;

2. *Stresses* the importance of implementing paragraph 7 of decision VI/16 in which Parties and Governments are invited to share their experience on developing and implementing financial measures for supporting national biodiversity strategies and action plans, and *encourages* the Executive Secretary to compile and disseminate such information as available;

3. *Urges* Parties to fully implement the Monterrey Consensus on financing for development and conclude successfully the Doha Development Negotiation Round process;

4. *Notes with appreciation* the publication “Aid activities targeting the objectives of the Rio Conventions 1998–2000” released by the Development Assistance Committee of the Organization for Economic Co-operation and Development, and *invites* the Organization for Economic Co-operation and Development to provide information on financial flow statistics relating to the objectives of the Convention to the Conference of the Parties at its eighth meeting;

5. *Invites* Parties and Governments, funding institutions and development agencies, as well as other donors, which have not done so, to make their funded biodiversity-related projects publicly available on their respective websites and to notify the Executive Secretary of the list of such projects;

6. *Requests* the Executive Secretary to continue the efforts to compile and disseminate biodiversity-related funding information, in order to monitor funding status, identify gaps in funding activities and develop options;

7. *Invites* Parties and Governments to enhance the integration of biological diversity into their sectoral development and assistance programmes;

8. *Invites* Parties and Governments to develop and encourage biodiversity-related partnership arrangements with and among funding institutions and other stakeholders, including with banking and business sectors, in order to promote, *inter alia*, the development and implementation of initiatives such as the Global Initiative on Banking, Business and Biodiversity, in support of the achievement of the objectives of the Convention and agreed global targets;

9. *Encourages* Parties and Governments, international and regional financial institutions and development agencies, as well as other donors, to further explore opportunities to utilize various initiatives including debt-relief instruments to promote conservation and sustainable use of biodiversity.

## DECISION VII/22 | Arrangements for the third review of the effectiveness of the financial mechanism

*The Conference of the Parties,*

*Recalling* Article 21 of the Convention on Biological Diversity and decisions III/8 and VI/17,

*Aware of* the preparation of the third Overall Performance Study of the Global Environment Facility to be completed by June 2005, and the need to ensure synergies between the Study and the third review of the financial mechanism,

1. *Decides* to adopt the annex to the present decision, containing the objectives, methodology and criteria as well as procedures for the third review of the effectiveness of the financial mechanism to be conducted in time for the eighth meeting of the Conference of the Parties;
2. *Decides also* that this third review should be conducted by an independent evaluator and under the authority of the Conference of the Parties and take fully into account reports of the Global Environment Facility with respect to operations of the financial mechanism;
3. *Decides further* that, based on the results of the review, the Conference of the Parties shall take appropriate action to improve the effectiveness of the mechanism if necessary.

### ANNEX

#### **GUIDELINES FOR THE THIRD REVIEW OF THE EFFECTIVENESS OF THE FINANCIAL MECHANISM**

##### **A. Objectives**

1. In accordance with Article 21, paragraph 3, the Conference of the Parties will review the effectiveness of the mechanism, including the criteria and guidelines referred to in Article 21, paragraph 2, with a view to taking appropriate action to improve the effectiveness of the mechanism if necessary. For this purpose, effectiveness will include:
  - (a) The effectiveness of the financial mechanism in providing and delivering financial resources, as well as in overseeing, monitoring and evaluating the activities financed by its resources;
  - (b) The conformity of the activities of the Global Environment Facility (GEF), as the institutional structure operating the financial mechanism, with the guidance of the Conference of the Parties;
  - (c) The efficiency and effectiveness of the process of providing guidance to the financial mechanism to promote the implementation of the Convention and the achievement of its three objectives;

- (d) The efficiency, effectiveness and sustainability of the GEF-funded activities on the implementation of the Convention and in the achievement of its three objectives, taking into account the guidance provided by the Conference of the Parties.

## **B. Methodology**

2. The review will cover all the activities of the financial mechanism for the period from July 2001 to June 2005.
3. The review shall draw upon, *inter alia*, the following sources of information:
  - (a) Information provided by both developed and developing countries and Parties regarding the financial mechanism, including national reports with respect to the financial mechanism;
  - (b) Reports prepared by the Global Environment Facility, including its reports to the Conference of the Parties;
  - (c) Reports of the independent GEF Monitoring and Evaluation Unit that relate to GEF biodiversity activities within the framework of the financial mechanism;
  - (d) The Third Overall Performance Study of the Global Environment Facility;
  - (e) Information provided by other relevant stakeholders.

## **C. Criteria**

4. The effectiveness of the financial mechanism shall be assessed taking into account, *inter alia*:
  - (a) The steps and actions taken by the financial mechanism in response to the actions requested by the Conference of the Parties at its fourth meeting to improve the effectiveness of the financial mechanism, as set out in the annex to its decision IV/11 as well as in decision VI/17;
  - (b) The actions taken by the financial mechanism in response to the guidance of the Conference of the Parties, as contained in decisions I/2, II/6, III/5, IV/13, V/13 and VI/17;
  - (c) Any other significant issue raised by the Parties.

## **D. Procedures**

5. Under the authority and with the support of the Conference of the Parties, the Executive Secretary shall contract an experienced independent evaluator to undertake the review, in accordance with the above objectives, methodology and criteria.
6. The evaluator shall design a questionnaire using the criteria adopted in the present guidelines, to be sent to the Parties and other stakeholders as soon as practicable after the seventh meeting of the Conference of the Parties, and prepare a compilation and synthesis of the information received.

7. The evaluator will undertake such desk studies, interviews, field visits and collaboration with the GEF Monitoring and Evaluation Unit, as may be required, for the preparation of the review, subject to the availability of resources.
8. The draft compilation and synthesis, and the recommendations of the evaluator, will be made available to GEF for its review and comments. Such comments shall be included in the documentation and identified by source.
9. Based on the synthesis report and recommendations of the independent evaluator, the Executive Secretary shall prepare, in consultation with the GEF, a draft decision on the third review of the financial mechanism, including specific suggestions for action to improve the effectiveness of the mechanism if necessary, for consideration of the eighth meeting of the Conference of the Parties.
10. The Executive Secretary shall submit all the relevant documents to Parties at least three months prior to the eighth meeting of the Conference of the Parties.

## **DECISION VII/23 | Scientific and technical cooperation and the clearing-house mechanism (Article 18, paragraph 3)**

### **A. The clearing-house mechanism**

*The Conference of the Parties,*

*Taking note* of the note by the Executive Secretary on the activities of the clearing-house mechanism during the inter-sessional period (UNEP/CBD/COP/7/17/Add.1),

*Noting with satisfaction* the concrete steps taken towards making the clearing-house mechanism an effective tool for promoting technical and scientific cooperation among Parties,

1. *Decides* to extend the mandate of the informal advisory committee, as constituted and coordinated by the Executive Secretary, and as defined by its operational guidelines;
2. *Also decides* to review the continuation and mandate of the informal advisory committee at the ninth meeting of the Conference of the Parties;
3. *Calls upon* Parties to:
  - (a) Use the clearing-house mechanism toolkit to establish clearing-house mechanism national focal points and websites, if they have not done so already;
  - (b) Contribute resources for the translation and maintenance in the six official languages of the United Nations of the content of the website of the Secretariat for the Convention and of the clearing-house mechanism toolkit;
  - (c) Use the controlled vocabulary for the Convention on Biological Diversity to facilitate interoperability of information among national clearing-house mechanisms;

4. *Invites* developed country Parties to assist developing countries Parties, through the clearing-house mechanism, in their efforts to implement and use new information technologies, including the establishment of websites;
5. *Invites* Parties to develop regional clearing-house mechanisms to further promote and facilitate technical and scientific cooperation and the exchange of information on technology transfer at the regional and national levels;
6. *Requests* the Executive Secretary to use the clearing-house mechanism, in collaboration with the informal advisory committee, to continue to strengthen collaboration with international partners and organizations for review at the eighth meeting of the Conference of the Parties and to report on that collaboration, including an elaboration of the relative roles of the clearing-house mechanism and information facilities dealing in particular with taxonomic databases including, IABIN (Inter-American Biodiversity Information Network) hubs, BioNet LOOPs (Locally Owned and Operated Partnerships), NatureServe CDCs (Centres for Data Conservation), nodes of the Global Biodiversity Information Facility and Species 2000 and the Integrated Taxonomic Information System's Catalogue of Life;
7. *Also requests* the Executive Secretary to:
  - (a) Update the strategic plan of the clearing-house mechanism to 2009, in collaboration with the informal advisory committee, for consideration by the eighth meeting of the Conference of the Parties;
  - (b) Convene, subject to the availability of financial resources, regional workshops as a catalysing mechanism to allow for the interaction of international thematic focal points with the national focal points to further enhance the scientific and technical cooperation goal of the clearing-house mechanism and to build capacities at the national level with regard to use of and access to new information technologies;
  - (c) Update the clearing-house mechanism toolkit to be used as a meta-toolkit, linking the different existing toolkits with a view to optimize their resources and assist users to choose the most appropriate technology;
  - (d) Examine ways to develop regional portals to visualize and exchange national and regional cartographic information (geographic information systems and remote-sensing) from all thematic areas (including maps, satellite images and datasets);
  - (e) Advise on ways the clearing-house mechanism can assist to make relevant information interoperable among the three Rio conventions for review at the eighth meeting of the Conference of the Parties;
  - (f) Develop an Internet-based web portal on island biological diversity to integrate, into the existing clearing-house mechanism, information on relevant programmes or initiatives such as the *Small Island Developing States Network* (SIDSnet), the Coastal Regions and Small Islands—UNESCO, the Small Islands Voice and the small island developing states activities programme of the United Nations Environment Programme;
  - (g) Further enhance the sections on the Convention's website related to the programme areas and cross-cutting issues, by applying the lessons learned from the development of the Biosafety Clearing-House, especially its use of

common formats, protocols and standards, to increase interoperability of data and information;

8. Calls on the Informal Advisory Committee to assess the results of the independent review of the clearing-house mechanism of the Convention on Biological Diversity (UNEP/CBD/COP/7/INF/12) and assist the Executive Secretary on measures and actions to be undertaken to strengthen the clearing-house mechanism's role 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.

## **B. Operational procedures for the informal advisory committee of the clearing-house mechanism**

*The Conference of the Parties,*

*Decides to adopt the operational procedures for the informal advisory committee of the clearing-house mechanism established by its decision III/4, paragraph 10, as annexed to the present decision.*

## **ANNEX**

### **OPERATIONAL PROCEDURES FOR THE INFORMAL ADVISORY COMMITTEE**

#### **A. Objectives**

1. The informal advisory committee shall, in providing guidance to the Executive Secretary, have the following objectives:
  - (a) Provide advice on matters relating to the clearing house-mechanism, and in particular, on how to improve the effectiveness of the clearing house-mechanism as a mechanism to promote scientific and technical cooperation and exchange information on the transfer of publicly available expertise, technology and scientific cooperation;
  - (b) Facilitate the development and implementation of guidance from the Conference of the Parties concerning the clearing house-mechanism and the Strategic Plan of the clearing-house mechanism (UNEP/CBD/COP/5/INF/3);
  - (c) Facilitate and encourage cooperation with other relevant international and regional scientific and technical cooperation and technology transfer initiatives;
  - (d) Advise on means to facilitate the implementation of the clearing-house mechanism at the national level;
  - (e) Enhance the scientific and technical cooperation benefits of all Convention activities.

#### **B. Operational procedures**

2. The Executive Secretary, in constituting and coordinating the informal advisory committee, shall seek to ensure regional balance and relevant expertise and

knowledge, including of relevant international and regional scientific and technical cooperation initiatives, and non-governmental organizations.

### **C. Membership**

3. The members of the informal advisory committee shall be selected by the Executive Secretary. In selecting members, he shall seek to ensure a balance of expertise and regional and biogeographical balance.
4. Informal advisory committee members shall be selected for their expertise and understanding of the clearing-house mechanism and the Convention, taking into account the need for expertise including: scientific and technical cooperation; capacity-building; information exchange and sharing; and facilitating partnership with other organizations and initiatives.
5. Informal advisory committee members shall be selected for two years. The term is renewable by the Executive Secretary.
6. The Executive Secretary should ensure that changes in membership do not affect the continuity of the work.
7. Proxies may be agreed to by the Executive Secretary.

### **D. Chair**

8. The Chair of the informal advisory committee shall be selected by the Executive Secretary, after consultation with the members, and serve for at least two years.

### **E. Meetings**

9. Meetings shall be convened by the Executive Secretary and held back-to-back with the SBSTTA and meetings of the Conference of the Parties. Additional meetings, electronic or in person, may be convened by the Executive Secretary as required to ensure the timely handling of issues.
10. The draft agenda for each meeting shall, if possible, be made available two months prior and otherwise at least one month prior to each meeting, and be posted on the Convention on Biological Diversity web site and notified to the informal advisory committee and clearing house-mechanism national focal points by fax and/or e-mail, and/or post.
11. Minutes of each meeting, and related information documents, shall be posted on the website of the Convention on Biological Diversity as soon as practical following their review by the Executive Secretary. This information will also be made available to the informal advisory committee and clearing-house mechanism national focal points by fax or e-mail or post.



**DECISION VII/24 | Education and public awareness (article 13)**

*The Conference of the Parties,*

*Taking note* of the report of the meeting of the Consultative Working Group of Experts on Communication, Education and Public Awareness (UNEP/CBD/COP/7/17/INF/10) and, in particular, the matrix in the report, which summarizes suggestions and proposals to enhance the implementation of the Global Initiative on Communication, Education and Public Awareness, including, *inter alia*, key elements required to develop an operational strategy to guide the implementation of the three programme elements in a coherent and consistent manner (including prioritization, clarification of intended audience, activities, means and resources to undertake the identified activities, institutional arrangements, results to be generated, as well as the reporting mechanisms on implementation and impacts of outputs).

*Noting further* that communication, education and public awareness are essential elements for the successful and effective implementation of the programmes of work of the Convention on Biological Diversity and also for facilitating the process of mainstreaming biodiversity into national sectoral policies and programmes,

1. *Welcomes* the efforts of the Executive Secretary and progress achieved in the implementation of the Global Initiative on Communication, Education and Public Awareness, taking into consideration the limited financial resources available for these efforts;
2. *Welcomes* the report of the fourth meeting of the Consultative Working Group of Experts on Biological Diversity Education and Public Awareness and the proposals contained therein for further implementation of communication, education and public awareness which are attached as an annex to the report of the meeting;
3. *Invites* Parties to take into consideration the need to communicate the various elements of the 2010 biodiversity target and to establish appropriate linkages to the Decade on Education for Sustainable Development in the implementation of their respective national CEPA programmes and activities;
4. *Requests* the Executive Secretary to:
  - (i) Allocate a specific post to facilitate the implementation and further development of Article 13 on education and public awareness;
  - (ii) Convene an informal advisory committee on communication, education and public awareness, which would meet at the next meeting of the SBSTTA to further develop the CEPA work programme for in-depth consideration by the Conference of the Parties at its eighth meeting. This informal advisory committee would meet at subsequent meetings of the SBSTTA and the Conference of the Parties, as is the current practice for the informal advisory committee for the clearing-house mechanism;
  - (iii) Invite Parties to assist the Executive Secretary in the implementation of this action through voluntary contributions to secure the implementation of the work programme;

- (b) Continue the collaborative efforts with the CEPA programmes of other relevant organizations including the Rio Conventions to enhance coordination and maximize synergies;
  - (c) Report to the Conference of the Parties at its eighth meeting on progress in the implementation of the identified priority activities in the CEPA programme of work;
5. *Invites* donor organizations to make available the required financial support for the implementation of the identified priority activities in the CEPA programme of work;
  6. *Invites* donor organizations to provide funding to developing countries, particularly the least developed and small island developing States among them, and countries with economies in transition for the implementation of their national CEPA programmes and activities;
  7. *Requests* Parties to contribute and make available financial support towards the cost of the production of the second edition of the Global Biodiversity Outlook report for release in May 2005;
  8. *Requests* the Executive Secretary, subject to availability of funding, to publish the third edition of the Handbook on the Convention on Biological Diversity, including the decisions of the Conference of the Parties up to its seventh meeting, in the United Nations languages.

## DECISION VII/25 | National reporting

### A. National reporting

#### *The Conference of the Parties*

1. *Takes note* of the analysis of the information contained in the second national reports as contained in the relevant documents prepared by the Executive Secretary for the consideration of the seventh meeting of the Conference of the Parties (UNEP/CBD/COP/7/17/Add.3 and UNEP/CBD/COP/7/INF/2);
2. *Expresses concern* over the delay in the submission of national reports by some Parties, and *takes note* of the difficulty that this delay may pose to the assessment of the implementation of the Convention in the absence of an adequate number of national reports;
3. *Requests* Parties to facilitate the preparation of the third and future national reports and endeavour to submit national reports in time;
4. *Encourages* Parties, Governments, relevant bilateral, regional and multilateral organizations to collaborate to strengthen the various capacities of Parties, particularly developing country Parties and countries with economies in transition, to prepare their future national and thematic reports;
5. *Further encourages* Parties, Governments, relevant bilateral, regional and multilateral organizations, to analyse the progress of Parties, particularly developing

country Parties and countries with economies in transition, in implementing the Convention, in relation to those areas identified as a priority by those countries, in order to *inter alia* assist them in the preparation of their future national reports;

6. *Requests* Parties to submit as much information and data as available to improve the adequacy of information for the evaluation of the implementation of the Convention, the Strategic Plan of the Convention and the progress towards the 2010 target, particularly focusing on:

- (a) Status and trends of biodiversity and its various components;
- (b) Impacts of national actions on the achievement of the objectives of the Convention, the goals and objectives identified in the Strategic Plan of the Convention and the 2010 target;
- (c) Implementation of priority actions in national biodiversity strategies and action plans; and
- (d) Constraints or impediments encountered in the implementation of the Convention;

7. *Requests* the Subsidiary Body for Scientific, Technical and Technological Advice and other bodies established under the Convention to take into account, where appropriate, the conclusions drawn from the analysis of the second national reports when addressing relevant programmes of work, cross-cutting and other issues under the Convention.

## **B. Guidelines for the third national report**

### *The Conference of the Parties*

1. *Endorses* the format for the third national report, as contained in the annex to the note by the Executive Secretary on guidelines for the third national report (UNEP/CBD/COP/7/17/Add.2), as amended, with respect to the questionnaire on forest biological diversity, by annexes I and II of the note by the Executive Secretary on proposals for the review of the expanded programme of work on forest biological diversity (UNEP/CBD/COP/7/17/Add.7);

2. *Requests* the Executive Secretary to further develop this format to incorporate the views expressed by Parties and further questions arising from the decisions of its seventh meeting and to make the revised format available to Parties no later than July 2004;

3. *Further requests* the Executive Secretary to revise the existing national reporting formats to make them more concise and better targeted to reduce the reporting burden placed on Parties, and to better contribute to the assessment of progress towards achieving the mission of the Strategic Plan and the 2010 target, and the identification of obstacles to implementation. The revision of the reporting formats should address the matters in decision VI/25, paragraph 3, and:

- (a) The need to include reporting on all the four goals of the Strategic Plan;
- (b) The need to allow Parties to incorporate the results of indicators (where available) to enable Parties to provide a more comprehensive assessment of progress;

- (c) The need to include available factual data on the outcomes and impacts of measures taken to achieve the objectives of the Convention (including status and trends of biodiversity);
4. *Invites* Parties to promote wide stakeholder involvement, as well as that of indigenous and local communities, in the preparation of national reports, or in related processes that will inform national-report preparation, to ensure a more accurate and comprehensive reflection of the views and priorities of national stakeholders;
5. *Invites* developed country Parties to continue to provide support in the form of technical capacity development and financial resources to developing country Parties, Parties with economies in transition and small island developing States, as appropriate, to facilitate these Parties to meet their reporting obligations;
6. *Encourages* the Executive Secretary to continue to participate in the ongoing efforts to harmonize and streamline the national reporting processes of the Convention with those of other biodiversity-related conventions and processes with a view to reduce reporting burdens on Parties and increase synergies among biodiversity-related conventions, without impeding progress on improvements to the national reporting process to meet the needs of Parties to the Convention, and to strengthen the inter-sessional efforts to promote the submission of national reports;
7. *Decides* to further reduce the reporting burden on Parties by, wherever possible, using other means to gather information to allow evaluation of implementation of the Convention and the Strategic Plan;
8. *Requests* Parties to submit their third national reports:
- (a) By 15 May 2005;
- (b) In an official language of the United Nations;
- (c) In both hard copy and electronic format;
9. *Further requests* the Executive Secretary to prepare an analysis of the information contained in the third national reports for consideration by the Conference of the Parties at its eighth meeting, and make it available through the clearing-house mechanism.

**DECISION VII/26 | Cooperation with other conventions and international organizations and initiatives**

*The Conference of the Parties,*

*Recognizing* that enhanced international cooperation and improved coordination at national level will be important in efforts to meet the 2010 target,

*Noting* Strategic Goal 1 of the Strategic Plan adopted by decision VI/26; that the Convention is fulfilling its leadership role in international biodiversity issues, and in particular subsidiary goals 1.2; that the Convention is promoting cooperation between all relevant international instruments and processes to enhance policy

coherence, and 1.3; that other institutional processes are actively supporting the implementation of the Convention, in a manner consistent with their respective frameworks,

*Noting* the report by the secretariat on cooperation with other organizations, initiatives and conventions (UNEP/CBD/COP/7/19), which contains concrete examples of actions that demonstrate cooperation between international conventions and with implementing organizations,

*Welcoming* the support of the United Nations General Assembly (UNGA Resolution A/58/112) for the ongoing work of the liaison group of the secretariats and officers of the relevant subsidiary bodies of the UNFCCC, the UNCCD and the CBD, which, *inter alia*, encourages continuing cooperation in order to promote complementarities among the secretariats while respecting their independent legal status,

*Recognizing* the leading role of UNEP in environmental issues,

*Recognizing* the role of the Joint Liaison Group in supporting cooperation between the Rio conventions, and the role of the Collaborative Partnership on Forests in enhancing cooperation and coordination on Forest issues, where the Secretariat of the Convention on Biological Diversity is the focal agency on forest biodiversity and traditional forest related knowledge,

1. *Urges* further enhanced cooperation between the Convention on Biological Diversity and all relevant international conventions, organizations and bodies, strengthening and building on existing cooperative arrangements to enhance synergies and reduce inefficiencies in a manner consistent with their respective mandates, governance arrangements and agreed programs, within existing resources;
2. *Requests* in this context, the Executive Secretary, to invite the secretariats of the other four biodiversity conventions (CITES, Ramsar, CMS and World Heritage Convention) to form a liaison group to enhance coherence and cooperation in their implementation, and to report on progress made to the eighth meeting of the Conference of the Parties;
3. *Requests* the Executive Secretary, drawing on the experience gained in the exercise mentioned above, and in close collaboration with relevant conventions, organizations and bodies, to examine options for a flexible framework between all relevant actors, such as a global partnership on biodiversity, in order to enhance implementation through improved cooperation, and to report to the Conference of the Parties at its eighth meeting on possible ways forward;
4. *Requests* the Executive Secretary to renew his applications for observer status in relevant bodies of the World Trade Organization, in particular, in the Council on Trade-related Aspects of Intellectual Property Rights (TRIPs Council);
5. *Requests* the Executive Secretary to inform the Ad Hoc Open-ended Working Group on Review of Implementation of the Convention, on ongoing work to establish ways of enhancing cooperation between the major biodiversity-related organizations and secretariats;
6. *Requests* all Parties and other Governments to support this initiative at the national level and in relevant forums.

**DECISION VII/27 | Mountain biological diversity***The Conference of the Parties*

1. *Adopts* the programme of work<sup>216</sup> on mountain biological diversity, annexed to the present decision, as a set of actions addressing characteristics and problems that are specific to mountain ecosystems;
2. *Underlining* the sovereign rights and responsibilities of countries over their mountains and mountain biodiversity, *notes* that Parties should implement the programme of work on mountain biological diversity in the context of their national and subnational priorities and needs. Inclusion of an activity in the work programme does not mean relevance of that activity to all Parties;
3. *Invites* Parties to identify priority actions among the actions recommended in the programme of work depending on the particular national or local conditions and *urges* Parties to incorporate them into their national biodiversity strategies and action plans, as well as national programmes and activities on the implementation of regional mountain conventions and initiatives, and implement them taking into account the ecosystem approach so as to contribute to the significant reduction of the rate of mountain biological diversity loss by 2010 and as a contribution to poverty reduction and to the benefit of indigenous and local communities dependent on mountains;
4. *Encourages* Parties, other Governments and organizations to ensure cross-referencing to, and coherence with, the other thematic and cross-cutting programmes of work, including technology transfer, while implementing this programme of work;
5. *Invites* Parties to adopt outcome-oriented targets for mountain biodiversity, taking into account the Strategic Plan of the Convention, the Global Strategy for Plant Conservation, the Plan of Implementation of the World Summit on Sustainable Development, the Millennium Development Goals and in conjunction with actions 2.1.5 and 3.2.2 of this programme of work;
6. *Agrees* that, in undertaking the implementation of the programme of work, Parties, other Governments, international organizations, civil society organizations and others should take into account the knowledge, innovations and practices of indigenous and local communities and ensure their participation in conservation and sustainable use of mountain biological diversity, in accordance with Article 8(j) and related provisions of the Convention;
7. *Recognizes* the need for resources, human, technological and financial capacity, to implement effectively the activities in the programme of work, and thus *encourages* governments and other interested entities to form partnerships to address these needs and *urges* bilateral and multilateral organizations and processes to provide financial assistance, training and support, where applicable, to developing country Parties, in particular the least developed countries and small island developing States among them, and Parties with economies in transition to assist in the effective implementation of the programme of work;

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216 Implementation of this programme of work should not promote incentives that negatively affect the biodiversity of other countries.

8. *Invites* Parties, other Governments, and relevant organizations to report on implementation of this decision and those parts of the programme of work, which are identified as priorities under national and local conditions pursuant to paragraphs 3 and 5 through, *inter alia*, their reports submitted to the Conference of the Parties;

9. *Requests* Parties that have not yet done so to submit their thematic reports;

10. *Requests* the Executive Secretary to:

- (a) Develop, in collaboration with Parties and relevant organizations, proposals on a small number of global outcome-oriented targets, timeframes in relation to the 2010 target, ways and means for implementation, and indicators at the regional, national and local levels for consideration at a meeting of the Subsidiary Body on Scientific, Technical and Technological Advice prior to the eighth meeting of the Conference of the Parties;
- (b) Compile information received from Parties, other Governments and relevant organizations and bodies, on the implementation of the programme of work, and analyse progress made towards the achievement of a significant reduction in the rate of mountain biodiversity loss by 2010;
- (c) Assist the Parties in implementing the programme of work through, *inter alia*, the supporting activities defined in the programme of work, and the development, in collaboration with relevant organizations, of proposals for global and, where appropriate, regional targets or expected measurable outputs with timeframes and main actors; and
- (d) Regularly gather information on the characteristics and problems that are specific to mountain biological diversity listed in paragraph 8 of the programme of work;
- (e) In collaboration with relevant conventions and organizations, collect, review, evaluate and share, through the Clearing-house Mechanism and other means, existing information about the role of mountain ecosystems in producing and maintaining freshwater resources, and about the consequences of climate change and desertification on mountain biological diversity;
- (f) With the assistance of the Global Taxonomy Initiative Co-ordination Mechanism to develop and incorporate activities and targets appropriate to mountain ecosystems within the GTI programme of work for consideration at SBSTTA 11, taking into account the COP 7 decision on targets.

11. *Further requests* the Executive Secretary to strengthen collaboration with other organizations, institutions and conventions, as a way to streamline many of the activities contained in the programme of work; promote synergies and avoid unnecessary duplications;

12. *Notes* that the notes by the Executive Secretary on status and trends of, and threats to, mountain biological diversity (UNEP/CBD/SBSTTA/8/5), and on measures taken for the conservation and sustainable use of mountain biological diversity (UNEP/CBD/SBSTTA/8/6), can be a basis for the identification of priorities for early action, and *recognizes* that the relative importance of threats, and

their underlying causes will vary by region and country, and, accordingly, *requests* the Executive Secretary to update this information as part of the reviews of the implementation of the thematic programmes of work in collaboration with Parties and relevant organizations, in particular the Global Mountain Biodiversity Assessment among others, and making use of all available information;

13. *Emphasizes* the importance of mountain biodiversity for livelihoods, and therefore *requests* the Executive Secretary to compile and disseminate information linking mountain biodiversity to sustainable development and poverty alleviation, and examples of successful collaboration between mountain dwellers and communities living in areas adjacent to mountains in form of incentives for mountain dwellers (as a way to illustrate the “upland-lowland contract”);

14. *Recognizing* the value of traditional and sustainable land use practices of indigenous and local communities in preserving mountain biodiversity, *requests* the Executive Secretary to collect and disseminate relevant information contributed by these communities through the clearing-house mechanism and other means;

15. *Reminds* Parties of Article 20 of the Convention and *invites* the developed country Parties to further enhance the provision of additional financial resources and transfer of technology to enable developing country Parties and Parties with economies in transition to implement the programme of work on mountain biological diversity.

## **ANNEX PROGRAMME OF WORK ON MOUNTAIN BIODIVERSITY**

### **A. Introduction**

1. Mountain areas cover almost one quarter of the Earth’s land surface and host about 12 per cent of its human inhabitants. Additionally, mountains provide vital natural resources for lowland peoples. Mountains are both a unique environment in their own right, and one that incorporates many of the existing thematic programmes under the Convention. For example, forests, inland waters, dry and sub-humid lands and agricultural programme elements can all be found in mountain biological diversity. The present programme of work on mountain biological diversity features goals and activities that are specific to mountain biological diversity, although the existing programmes of work on forests, inland waters, agricultural, and dry and sub-humid land biological diversity also apply to mountain ecosystems. As a result, the goals and activities contained in the existing programmes of work of each of these thematic areas should also be applied and implemented, whenever appropriate, for their respective areas in mountain ecosystems.

2. Mountain biological diversity is of high importance for a number of ecological functions. The integrity of soils is the prime focus for ecosystem services and human needs. Mountains have often been referred to as “natural water towers” because they contain the headwaters of rivers that are also vital for maintaining human life in densely populated areas downstream. Natural and semi-natural vegetation cover on mountains helps to stabilize headwaters, preventing flooding, and



maintaining steady year-round flows by facilitating the seepage of rainwater into underwater aquifers. Mountain biodiversity contributes to human well-being well beyond its immediate vicinity and is essential to the management of water flows over entire river basins.

3. Soil retention and slope stability are closely connected with the extent of above-ground and below-ground vegetation, both essential to ecosystem resilience after disturbance. The high plant functional diversity of mountain ecosystems may also add to their resiliency and, should extreme disturbances occur, often provides effective barriers to high-energy events such as rock falls and avalanches. It also may reduce extensive damage levels at lower elevations. Although it has been to date impossible to provide a thorough definition of mountains with both universal application and acceptance, there are a number of characteristics that are unique to mountain ecosystems. These are referred to in the note by the Executive Secretary on the status and trends of, and threats to, mountain biodiversity prepared for the eighth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA), (UNEP/CBD/SBSTTA/8/5).

4. Information and input from international forums may also be taken into account, particular, chapter 13 of Agenda 21, which relates to sustainable mountain development, and the World Summit on Sustainable Development, which also considered mountain ecosystems. Paragraph 42 of the Plan of Implementation of the World Summit, states that:

“Mountain ecosystems support particular livelihoods, and include significant watershed resources, biological diversity and unique flora and fauna. Many are particularly fragile and vulnerable to the adverse effects of climate change and need specific protection.”

5. The Plan of Implementation proposed a number of specific actions to be undertaken in regard to mountains. The 2002 International Year of the Mountains also provides valuable input. In addition, a number of international agreements and bodies, institutions, and programme initiatives may be considered such as the Convention on Wetlands, (Ramsar, Iran, 1971), the United Nations Convention to Combat Desertification (UNCCD), the United Nations Framework Convention on Climate Change (UNFCCC), the Food and Agriculture Organization of the United Nations (FAO), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the International Centre for Integrated Mountain Development (ICIMOD), the International Centre for Agricultural Research in the Dry Areas (ICARDA), the International Partnership for Sustainable Development in Mountain Regions, the International Human Dimensions Programme on Global Environmental Change (IHDP), the Centre for Mountain Studies, the Consorcio para el Desarrollo de la Ecoregion Andina (CONDESAN), the Mountain Research Initiative (MRI), the Global Mountain Biodiversity Assessment (GMBA) of DIVERSITAS, the International Union of Forest Research Organizations (IUFRO), the Alpine Convention, the Carpathian Framework Convention and the United Nations Environment Programme—World Conservation Monitoring Centre (UNEP-WCMC).

## B. Overall purpose and scope of the programme of work

6. The overall purpose of the programme of work is the significant reduction of mountain biological diversity loss by 2010 at global, regional and national levels, through the implementation of the three main objectives of the Convention on Biological Diversity.

7. The implementation of the programme of work aims at making a significant contribution to poverty alleviation in mountain ecosystems and in lowlands dependent on the goods and services of mountain ecosystems and thereby contribute to the objectives of the Strategic Plan of the Convention on Biological Diversity, the Plan of Implementation of the World Summit on Sustainable Development, and the Millennium Development Goals.

8. The programme of work focuses on addressing characteristics and problems that are specific to mountain biological diversity. These include:

- (a) The particularly high concentration of biological diversity hotspots in mountain regions, including high ecosystem diversity, high species richness, high number of endemic and endangered species, and high genetic diversity of crop, livestock, and their wild relatives;
- (b) Cultural diversity, and the particularly key role of indigenous and local communities in the conservation and management of mountain biological diversity;
- (c) The fragility of mountain ecosystems and species and their vulnerability to human and natural disturbances, in particular to land-use change and global climate change (such as the retreat of glaciers and increased areas of desertification);
- (d) The upland-lowland interactions that characterize mountain ecosystems, with special emphasis to the relevance of upland ecosystems for the management of food, water and soil resources.

9. The programme of work also seeks to avoid duplication with existing thematic work programmes and other existing initiatives of the Convention on Biological Diversity. Parties are encouraged to apply, where appropriate, the objectives and activities from these thematic work programmes to the conservation of mountain biological diversity, the sustainable use of mountain biological diversity, and the equitable sharing of benefits arising from the utilization of genetic resources.

10. The programme of work is intended to assist Parties in establishing national programmes of work with targeted goals, objectives, and actions, with specific actors, timeframes, inputs, and expected measurable outputs. Parties may select from, adapt, and/or add to, the goals, objectives and actions suggested in the current programme of work according to particular national and local conditions, and their level of development. Implementation of this programme of work should take into account the ecosystem approach of the Convention on Biological Diversity. In determining national programmes of work, Parties are encouraged to pay due regard to the socio-economic, cultural and environmental costs and benefits of various options. In addition, Parties are encouraged to consider the use of appropriate technologies, sources of finance, and technical cooperation, and to ensure, through appropriate actions, the means to meet the particular challenges and demands of their mountain ecosystems.

## C. Programme elements, goals and actions

### PROGRAMME ELEMENT 1: DIRECT ACTIONS FOR CONSERVATION, SUSTAINABLE USE AND BENEFIT-SHARING

GOAL 1.1: To prevent and mitigate the negative impacts of key threats to mountain biological diversity

#### *Actions*

1.1.1. Reduce the impacts of adverse land-use practices and changes in urban, forest, inland waters and agricultural areas in mountain ecosystems, including the buffer zones of protected areas using, as appropriate, planning or management mechanisms, such as ecological/economic/ecoregional planning/bioregional/hazardous-areas zoning, so as to ensure the maintenance of biodiversity, in particular ecosystem integrity.

1.1.2. Develop mechanisms and implement measures to reduce human-induced slope instability, adverse effects of natural geological hazards, and to maintain and/or enhance soil stability and ecosystem integrity by way of a diverse and natural vegetation cover that will also promote soil biodiversity function.

1.1.3. Prevent or mitigate the negative impacts of economic development, infrastructure projects and other human-induced disturbances on mountain biological diversity at all levels, where applicable, taking into consideration the results of environmental and social impact assessment, paying particular attention to cumulative impacts.

1.1.4. Develop strategies specific to mountains ecosystems to prevent the introduction of invasive alien species and, when they have been introduced, control and eradicate their negative impacts on mountain biological diversity.

1.1.5. Monitor and exchange information on the impacts of global climate change on mountain biological diversity, and identify and implement ways and means to reduce the negative impacts.

1.1.6. Implement measures to reduce and prevent key pressures in mountain ecosystems such as deforestation, fragmentation, unsustainable harvesting, inappropriate reforestation or afforestation, human-induced forest fires, overgrazing, inappropriate mining practices and urban expansion resulting in land degradation, degradation of inland water ecosystems, disruption of water flow, and consequent losses of biological diversity (see also decision VI/22).

1.1.7. Identify factors responsible for and possible measures to prevent the retreat of glaciers in some mountain systems and implement measures to minimize the impact of this process on biodiversity.

1.1.8. Identify local and long-range pollution (air, water and soil), which threaten mountain biodiversity at all levels and take appropriate measures to prevent and mitigate the impacts.

*Supporting activities of the Executive Secretary*

1.1.9. Compile, in collaboration with relevant bodies and organizations, and disseminate through the clearing-house mechanism and other means:

- (a) Information on degraded mountain ecosystems as well as key threats to mountain biodiversity and their ecological and socio-economic impacts;
- (b) Case-studies, lessons learned and best-practice guidance on ways to prevent and mitigate the negative impacts of key threats to mountain biodiversity;
- (c) Information on impact of climate change and desertification on the carrying capacity of mountain ecosystems and traditional uses.

**GOAL 1.2: To protect, recover, and restore mountain biological diversity**

*Actions*

1.2.1. Develop and implement programmes to restore degraded mountain ecosystems and protect natural dynamic processes and maintain biological diversity in order to enhance the capacity of mountain ecosystems to resist and adapt to climate change, or recover from its negative impacts including, *inter alia*, by establishing corridors and taking appropriate measures to maintain ecological functions of natural corridors, where appropriate, to enable vertical migration of species, ensuring minimal viable population sizes to enable genetic adaptation to changing environmental conditions. These programmes should include socio-economic considerations, especially in relation to indigenous and local communities.

1.2.2. Initiate specific activities to facilitate maintenance, protection and conservation of existing levels of endemic species, with a focus on narrowly-distributed taxa.

1.2.3. Identify and protect unique, fragile mountain ecosystems, other biological diversity hotspots and their associated species, especially threatened species, giving priority consideration to measures aimed at strict *in situ* protection and/or developing *ex situ* mechanisms whenever feasible.

1.2.4. Develop strategies for land-use and water-resource planning at landscape level using the ecosystem approach, taking into account elements of ecological connectivity and traditional uses of indigenous and local communities, and to prevent and mitigate losses of mountain biological diversity due to fragmentation and land-use conversion.

1.2.5. Establish and strengthen adequate, effective national, regional and international networks of mountain-protected areas, in accordance with decisions of the Conference of the Parties on protected areas, while respecting the rights and full participation of indigenous and local communities.

1.2.6. Promote, as appropriate, the role of sustainable agriculture and pastoralism, using sustainable traditional practices that can maintain biological diversity in mountain ecosystems.

1.2.7. Identify suitable practices for enhancing ecosystem sustainability with particular emphasis on degraded slopes.

1.2.8. Address issues related to conflict between humans and other species, especially with regard to coexistence with predators.

1.2.9. Review protected area systems within mountain regions and, as appropriate, take measures to ensure that these are developed and maintained to be comprehensive, adequate and representative, in line with decision VII/28 of the Conference of Parties on programme of work on protected areas.

1.2.10. Develop and implement measures to rehabilitate freshwater networks for migratory species, taking into account the physical barriers.

1.2.11. Establish restoration areas where mountain biological diversity has been degraded significantly and where restoration is needed to complement and buffer the protected-area network.

*Supporting action of the Executive Secretary*

1.2.12. Collaborate with relevant organizations and bodies to compile and disseminate information on:

- (a) Components of biodiversity important for conservation, in particular, on mountain endemic species, hotspots and their associated species and threatened species;
- (b) Best practices for their conservation, sustainable use and benefit-sharing.

1.2.13. Compile and disseminate case-studies on methods and economic aspects of restoration of degraded mountain ecosystems and recovery of mountain endangered species.

**GOAL 1.3: To promote the sustainable use of mountain biological resources**

*Actions*

1.3.1. Promote sustainable land-use and water resource management practices in relation to human livelihood needs (agriculture, pastoralism, animal husbandry, forestry, aquaculture, inland water fisheries, etc.) in mountain ecosystems, taking into account the Convention principles for sustainable use and the ecosystem approach.

1.3.2. Promote sustainable land-use practices, techniques and technologies, including those of indigenous and local communities and community-based management systems, for the conservation and sustainable use (including pastoralism, hunting and fishing) of wild flora and fauna and agro-biodiversity in mountain ecosystems, including biological pest control.

1.3.3. Support activities of indigenous and local communities involved in the use of traditional mountain-related knowledge, in particular concerning sustainable management of biodiversity, soil, water resources and slope.

1.3.4. Promote partnerships between all stakeholders, including indigenous and local communities, involved in the sustainable use of mountain biological resources (see also goal 2.3).

1.3.5. Develop criteria in the framework of the Convention Guidelines on Biodiversity and Tourism Development in accordance with the ecological conditions of mountains ecosystems and promote the use of these guidelines.

1.3.6. Through appropriate environmental planning, reduce the negative impacts of tourism and outdoor activities on mountain ecosystems, as well as the development of associated human settlements and facilities.

1.3.7. Strengthen local capacity for sustainable tourism management, in order to ensure that benefits derived from tourism activities are shared by indigenous and local communities, while preserving natural and cultural heritage values.

1.3.8. Promote the sustainable use of economically valuable wild plants and animals, as an income-generating activity for the local inhabitants.

1.3.9. Promote integrated watershed management practices at all levels for maintaining ecosystem integrity, soil stability on slopes, upstream-downstream inter-connections and protection against natural hazards.

GOAL 1.4: To promote access to, and sharing of benefits arising from the utilization of genetic resources related to mountain biological diversity in accordance with national legislation where it exists

*Actions*

1.4.1. Strengthen the capacity of indigenous and local communities to engage in equitable benefit-sharing arrangements, taking into account the Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization, bearing in mind their voluntary character and that they do not purport to replace national legislation.

1.4.2. Develop methods to assess and conserve genetic resources of high economic value for promoting fair and equitable sharing of benefits, respecting national legislation on access to genetic resources.

1.4.3. Promote actions that are beneficial for conservation through generating employment and/or income particularly for marginal communities.

GOAL 1.5: To maintain genetic diversity in mountain ecosystems in particular through the preservation and maintenance of traditional knowledge and practices

*Actions*

1.5.1. Assess and develop strategies aimed at minimizing the threat of genetic erosion on domesticated biodiversity (crops, animals) and wild relatives, paying particular attention to the centres of origin of the genetic resources.

1.5.2. Implement provisions contained in Article 8(j) on traditional knowledge and related provisions of the Convention on Biological Diversity, taking into consideration the needs of developing countries.

1.5.3. Develop, validate and implement sustainable use practices for plants, animals and microorganisms at the genetic, species, population, community and ecosystem levels.

1.5.4. Respect, preserve and maintain indigenous knowledge, practices, processes and technologies to ensure conservation, sustainable use of biodiversity and sharing of benefits.

PROGRAMME ELEMENT 2: MEANS OF IMPLEMENTATION FOR CONSERVATION,  
SUSTAINABLE USE AND BENEFIT-SHARING

GOAL 2.1: To enhance the legal, policy, institutional, and economic framework

*Actions*

2.1.1. Identify and address perverse incentives and/or policies that may impede the implementation of the Convention on Biological Diversity in mountain ecosystems, taking into account the decisions of the Conference of the Parties on incentive measures.

2.1.2. Develop and introduce appropriate incentives, market and compensation mechanisms, in accordance with national and international law where appropriate, specific for the maintenance of mountain ecosystems and the goods and services delivered by the mountain ecosystems.

2.1.3. Promote the diversification of income-generating activities in support of conservation and sustainable use of mountain biological diversity and poverty reduction, including methods to share economic wealth, i.e., within mountain regions through regional development plans and between regions through “upland-lowland contracts.”<sup>217</sup>

2.1.4. Improve the science/policy linkages by undertaking national and sub-national scientific assessments of the causes of biodiversity loss, including making policy recommendations, in order to reduce the rate of loss of mountain biological diversity by 2010.

2.1.5. Develop performance indicators and report on the integration of conservation and sustainable use of mountain biological diversity into institutional programmes, including sectoral policies, legal and economic frameworks.

2.1.6. Strengthen legal and institutional capacity to implement the work programme on mountain biological diversity, especially through national focal points, institutes and other relevant stakeholder groups and mechanisms allowing for the coordination of sectorial authorities in implementing those activities within their areas of responsibility.

2.1.7. Develop and implement legal and policy strategies for land-use planning at the landscape or river basin level, where appropriate, taking into account elements of ecological integrity and connectivity, while emphasizing upstream-downstream relations and the prevention of losses of mountain biological diversity due to fragmentation and land-use conversion.

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217 The concept was described by Professor Christian Körner, Professor of Botany at the University of Basel and Chairman of the Global Mountain Biodiversity Assessment in his keynote presentation at the eighth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice in March 2003 as follows: The upland-lowland contract concept establishes joint responsibilities between lowlanders and uplanders. Under this concept, uplanders would, for example, be responsible for taking care of the fragile upland mountain landscape to reduce potential impacts on lowlanders. In return, lowlanders may be able to provide uplanders with the products of lowland cultivated areas (food and other resources).

2.1.8. Support proactive planning and adaptive measures to reduce the vulnerability to both natural and human-induced hazards adversely impacting on mountain biological diversity, cultural landscapes and local communities.

2.1.9. Encourage the implementation of environmental and social impact assessments at sectoral, programme and project levels. Promote sustainable development and the eradication of poverty and prevent the negative impacts of economic development on mountain biological diversity including cumulative impacts. Also take into account specificities of indigenous and local communities depending upon mountain ecosystems, by observing section F of decision VII/16 of the Conference of the Parties on the Akwé: Kon voluntary guidelines 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.

2.1.10. Integrate aspects of mountain biological diversity into plans, policies and programmes related to mountain areas.

*Supporting activities of the Executive Secretary*

2.1.11. Collate and disseminate, e.g., through the clearing-house mechanism and other appropriate means, case-studies of best practice of international and national efforts to enhance the legal, policy, institutional and economic frameworks to conserve and sustainably use mountain biodiversity.

2.1.12. Promote synergy in the implementation of international and regional conventions including, where relevant, the Ramsar Convention, UNFCCC, CBD, WHC, CITES and the United Nations Convention to Combat desertification.

**GOAL 2.2: To respect, preserve, and maintain knowledge, practices and innovations of indigenous and local communities in mountain regions**

*Actions*

2.2.1. Promote the implementation of activities aimed at maintaining existing levels of agrobiodiversity paying particular attention to centres of origin and the goods and services they provide both for meeting local demands and to ensure sources of food security.

2.2.2. Respect, understand and support the traditions and sustainable practices of the indigenous and local communities in mountain regions in ways which accommodate their needs, participation, knowledge and practices for conservation and sustainable use of mountain biodiversity (taking into account Article 8(j) of the Convention and related decisions from the Conference of the Parties and programmes of work).

2.2.3. Promote networking, collaborative action and participation of indigenous and local communities in decision-making processes, paying particular attention to the empowerment of women, in order to maintain mountain biodiversity and its sustainable use.

2.2.4. Encourage decentralization and enhance access to information for the full participation and involvement of indigenous and local communities in decisions



that affect them in relation to mountain ecosystems.

2.2.5. Promote the implementation of activities aimed at the improvement of mountain livelihoods, poverty reduction and the maintenance of cultural identity, in order to achieve sustainable use of mountain biological diversity.

2.2.6. Develop capacity-building measures and information-sharing to facilitate the involvement of indigenous and local communities, with their prior informed consent, in the management, conservation, and sustainable use of mountain biological diversity.

**GOAL 2.3: To establish regional and transboundary collaboration and the establishment of cooperative agreements**

*Actions*

2.3.1. Promote integrated transboundary cooperation, strategies for sustainable activities on mountain ranges through mutually agreed-upon arrangements by countries concerned. Cooperative arrangements should cover specific thematic issues such as landscape, soil, wetland, watershed, rangeland, mining, protected areas and wildlife management, agriculture, pastoralism, forestry, transportation, energy and tourism.

2.3.2. Promote and strengthen regional and transboundary cooperation for research, adaptive management, fair and appropriate allocation of water to ecosystems, and exchange of expertise to improve the conservation and management of mountain biodiversity (e.g., Global Mountain Biodiversity Assessment (GMBA) and International Centre for Integrated Mountain Development (ICIMOD)).

2.3.3. Promote the appreciation and conservation of mountain biological diversity as a means of reducing human conflict, i.e., through peace parks.

2.3.4. Strengthen collaboration and synergies between the work programmes of the Convention on Biological Diversity and other global conventions and agreements on climate change, desertification, transboundary pollution, invasive alien species, wetlands and endangered species, with a special focus on mountain systems and their biological diversity, including through joint programmes of work. Also strengthen collaboration with the International Partnership for Sustainable Development in Mountain Regions and regional conventions on mountains.

2.3.5. Encourage the development of new methodologies and new mechanisms, such as the upland-lowland contract that sustain mountain biological diversity and the provision of goods and services.

**PROGRAMME ELEMENT 3: SUPPORTING ACTIONS FOR CONSERVATION, SUSTAINABLE USE AND BENEFIT-SHARING**

**GOAL 3.1: To develop work on identification, monitoring and assessment of mountain biological diversity**

*Actions*

3.1.1. Promote the monitoring of susceptible areas subject to climate change.

3.1.2. Conduct mountain surveys in priority areas, for conservation and sustainable use of mountain biological diversity. These surveys should consider inventories at genetic, species and ecosystem levels.

3.1.3. Apply, whenever appropriate, the programmes of work of the global initiatives such as the Global Taxonomy Initiative, Millennium Ecosystem Assessment and the Global Invasive Species Programme.

3.1.4. Support the work of the Global Mountain Biodiversity Assessment.

3.1.5. Use national biodiversity strategies and action plans and other national reports to the Convention, for monitoring and assessment of mountain biodiversity.

*Supporting activity of the Executive Secretary*

3.1.6. Promote collaboration among the secretariats and national focal points of United Nations Framework Convention on Climate Change, United Nations Convention to Combat Desertification and other relevant organizations to develop adaptive strategies for mountain ecosystems and for the monitoring of changes due to the impact of global processes, where appropriate.

**GOAL 3.2:** To improve knowledge on and methods for the assessment and monitoring of the status and trends of mountain biological diversity based on available information.

*Actions*

3.2.1. Develop key abiotic, biotic and socio-economic indicators of status and change of mountain ecosystems.

3.2.2. Develop and select international, regional and national criteria and, where appropriate, quantifiable indicators for mountain biological diversity, taking into account the work of the Convention on monitoring and indicators and the knowledge held by indigenous and local communities, together with other experience of sustainable mountain management.

3.2.3. Develop methodologies for assigning value to the ecological services provided by land management systems in order to develop economic-incentive mechanisms for compensating the poor and vulnerable mountain communities.

3.2.4. Assess and address the changing status of both local and long-range pollution and global climate change issues with special relevance to mountain ecosystems.

3.2.5. Assess and address fragmentation and impacts on biodiversity, by changing land-use management practices, e.g., land abandonment, mining.

3.2.6. Assess and address the positive and the negative impacts of tourism and outdoor activities in mountain ecosystems.

3.2.7. Assess and address natural dynamic processes in mountain ecosystems and the need to preserve areas for natural dynamic processes.

3.2.8. Develop monitoring systems based on key national and subnational indicators of changes in mountain ecosystem structure and function taking into

account existing monitoring expert knowledge and systems as well as relevant work and processes on indicators.

**GOAL 3.3:** To improve the infrastructure for data and information management for accurate assessment and monitoring of mountain biological diversity and develop associated databases

*Actions*

3.3.1. Enhance and improve the technical capacity at a national level to monitor mountain biological diversity, benefiting from the opportunities offered by the clearing-house mechanism of the Convention on Biological Diversity, including the development of associated databases as required at the global scale to facilitate exchange.

3.3.2. Promote open access as Parties consider appropriate, to existing information on biodiversity and related databases and sharing through the clearing-house mechanism of the Convention on Biological Diversity and other appropriate means.

3.3.3. Encourage mapping and inventory of biodiversity and of land-use changes, using analogue and digital databases (remote-sensing, geographic information system) for scientific purposes and for supporting decision-making.

*Supporting activity of the Executive Secretary*

3.3.4. Enhance the capacity of the clearing-house mechanism to facilitate the implementation of goal 3.3.

**GOAL 3.4:** To improve research, technical and scientific cooperation, and other forms of capacity-building related to mountain biological diversity

*Actions*

3.4.1. Conduct long-term research on species adaptability to changing environmental conditions under climatic or human-induced global change, in relation to mountain biological diversity.

3.4.2. Conduct key research on the role and importance of mountain biological diversity and ecosystem functioning, considering ecosystem components, structure, function, processes and services.

3.4.3. Develop and support research to assess the role of soil biological diversity and the diversity of protective vegetation cover for the stability and safety of mountain areas and watershed protection, e.g., avoidance of human-induced erosion, landslides and avalanches.

3.4.4. Initiate mechanisms and develop collaborative research/scientific programmes of mutual interest among countries with mountains, especially those having common problems and comparable socio-cultural conditions.

3.4.5. Foster exchange of experiences and knowledge of sustainable development and ecosystem vulnerability among countries with mountains, taking into account the vulnerability of social-cultural systems and communities.

3.4.6. Conduct interdisciplinary, key research programmes on mountain biological diversity, and its relationship to ecosystem structure and functions, including communities-based management, with special reference to transitional zones linking upland-lowland ecosystems such as ecotones, hotspots, buffer areas and corridors.

3.4.7. Develop capacity and enhance opportunities for community-based research and monitoring to conserve mountain biodiversity and provide greater benefits to mountain communities.

3.4.8. Develop scientific and technical coordination mechanisms at national level for identification of research priorities and for optimising the efficient utilization of research results.

*Supporting activity of the Executive Secretary*

3.4.9. Explore and quantify the benefits of a diverse, intact vegetation cover in catchments for water quantity and quality, hydroelectric yield and geological and hydrological hazard prevention and control.

**GOAL 3.5:** To increase public education, participation and awareness in relation to mountain biological diversity

*Actions*

3.5.1. Promote educational and capacity-building systems tailored to the specific conditions of mountain ecosystems, such as workshops, courses, study tours, community exchanges, communications from the Convention on Biological Diversity, education and publications efforts, in line with the Global Initiative on Communication, Education and Public Awareness (decision VI/19 of the Conference of the Parties).

3.5.2. Increase awareness of the actual and potential contribution of knowledge, practices and innovations of indigenous and local communities to conserve and sustainably use mountain biological diversity, i.e., biodiversity documentation, inventories by community and other appropriate levels.

3.5.3. Encourage the implementation of sustainable tourism activities aimed at increasing awareness, respect and knowledge for mountain biological diversity, including knowledge of the local, natural and cultural landscapes.

3.5.4. Increase dissemination of knowledge on upland-lowland interactions and on components of interdependence.

3.5.5. Further promote the education of women and their role in the conservation and dissemination of traditional knowledge.

3.5.6. Enhance awareness among policy makers and planners on the importance and contribution of mountain ecosystems in poverty eradication programmes;

3.5.7. Increase broad-based awareness of the values of mountain biological diversity through, *inter alia*, national and local public awareness campaigns.

GOAL 3.6: To promote the development, validation, and transfer of appropriate technologies for mountain ecosystems, including indigenous technologies in accordance with Article 8(j) of the Convention on Biological Diversity and related provisions

*Action*

3.6.1. Implement the programme of work on technology transfer giving particular attention to matters relating to the conservation and sustainable use of mountain biodiversity.

*Supporting activities of the Executive Secretary*

3.6.2. Document and disseminate, through the Clearing-house Mechanism and other means, best practices and appropriate technologies and innovative approaches to managing biodiversity.

3.6.3. In collaboration with relevant organizations, provide Parties with access to appropriate and latest technologies and innovations relating to mountain biodiversity with the approval and involvement of indigenous and local communities as appropriate.

## DECISION VII/28 | Protected areas (Articles 8(a)–(e))

*The Conference of the Parties*

1. *Confirms* that efforts to establish and maintain systems of protected areas and areas where special measures need to be taken to conserve biological diversity in line with Article 8 on *in situ* conservation and other relevant articles of the Convention, are essential for achieving, in implementing the ecosystem approach, the three objectives of the Convention and thus contributing to achieving the 2010 target contained in the Strategic Plan of the Convention and in the Plan of Implementation of the World Summit on Sustainable Development, and to achieve sustainable development and the attainment of the Millennium Development Goals;
2. *Welcomes* the joint NGO statement and joint NGO commitment on protected areas made at the seventh meeting of the Conference of the Parties by international non-governmental organizations<sup>218</sup> to support the implementation of a strong programme of work on protected areas under the CBD and looks forward to receiving information on the progress made with respect to their pledge;
3. *Also welcomes* the outputs of the Vth IUCN World Parks Congress, in particular the message from the Congress to the Convention on Biological Diversity, and its contribution to the programme of work on protected areas;
4. *Recalls* the need to provide to developing countries, in particular the least developed and small island developing States among them, and countries with

<sup>218</sup> BirdLife International, Conservation International, Flora and Fauna International, The Nature Conservancy, Wildlife Conservation Society, WWF, and World Resources Institute.

economies in transition adequate funding to support the implementation of this programme of work in accordance with Article 20 of the Convention;

5. *Recognizes* that Parties should implement the programme of work on protected areas, in the context of their nationally determined priorities, capacities and needs. Activities implemented domestically by Parties will be prioritized based on country and regionally specific needs, national determination, legislation, circumstances and priorities concerning protected areas issues, and their national protected areas and biodiversity strategies. Inclusion of an activity does not mean relevance of that activity to all Parties;

6. *Emphasizes* that the targets included in the programme of work on protected areas provide a framework within which national and/or regional targets may be developed and activities prioritized according to national priorities and capacities and, taking into account differences in protected areas and protected area systems among countries;

7. *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;

8. *Emphasizes* the need for capacity-building, in developing countries, particularly in the least developed and the small island developing States amongst them, and countries with economies in transition, in order to enable them to implement the programme of work;

9. *Urges* Parties, other Governments, and funding organizations to mobilize as a matter of urgency through different mechanisms adequate and timely financial resources for the implementation of the programme of work by developing countries, particularly in the least developed and the small island developing States amongst them, countries with economies in transition, in accordance with Article 20 of the Convention, with special emphasis on those elements of the programme of work requiring early action;

10. *Calls* Parties to estimate the cost to implement the necessary activities to meet the targets of the programme of work, review the effectiveness in using existing financial resources and identify the unmet costs and report back to COP 8;

11. *Calls* on Parties and development agencies to integrate within their development strategies (such as country assistance strategies, poverty reduction strategies and national development strategies) protected area objectives and reflect the contributions of protected areas to sustainable development, as a means to achieve the Millennium Development Goals, in particular Goal 7 on environmental sustainability;

12. *Underlines* the importance of conservation of biological diversity not only within but also outside protected areas by promoting sustainable use of natural resources in order to achieve a significant reduction of the rate of biodiversity loss by 2010 and therefore also calls for increased efforts to integrate biodiversity conservation and restoration aspects into sectoral policies and programmes;

13. *Invites* Parties to consider options, in the context of implementing the programme of work, such as ecological networks<sup>219</sup>, ecological corridors<sup>220</sup>, buffer zones and other related approaches in order to follow up the WSSD Plan of Implementation and the conclusions of Inter-Sessional Meeting on the Multi-Year Programme of Work of the Conference of the Parties up to 2010;

*Status and trends of, and threats to, protected areas*

14. *Welcomes* the work carried out by the SBSTTA on documents on status and trends of, and threats to, protected areas prepared by the Executive Secretary (UNEP/CBD/SBSTTA/9/5);

15. *Agrees* that the indicative list of categories set out in Annex I of the Convention should guide the selection of protected areas and areas where special measures need to be taken to conserve biological diversity;

16. *Recognizes* that, while the number and extent of protected areas has been increasing in the past decades, so that around 11 per cent of the world's land surface is currently in protected status, existing systems of protected areas are neither representative of the world's ecosystems, nor do they adequately address conservation of critical habitat types, biomes and threatened species, and, with marine areas particularly under-represented actions need to be taken to fill these gaps;

17. *Recognizes* that the inadequacy of knowledge and awareness of the threat to, and the role and value, of biodiversity, insufficient financial sustainability and support, poor governance, ineffective management and insufficient participation, pose fundamental barriers to achieving the protected areas objectives of the Convention on Biological Diversity and stresses the need for Parties to adequately address these issues;

*Overall objective*

18. *Adopts* the programme of work on protected areas annexed to the present decision with the objective of the establishment and maintenance by 2010 for terrestrial and by 2012 for marine areas of comprehensive, effectively managed, and ecologically representative national and regional systems of protected areas that collectively, *inter alia* through a global network<sup>221</sup> contribute to achieving the three objectives of the Convention and the 2010 target to significantly reduce the current rate of biodiversity loss;

19. *Urges* Parties to achieve fully the goals and targets of the work programme while recognizing that Parties should implement the activities of the programme of

219 In the context of this programme of work, a generic term used in some countries and regions, as appropriate, to encompass the application of the ecosystem approach that integrates protected areas into the broader land- and/or seascapes for effective conservation of biodiversity and sustainable use.

220 Ecological corridors may not be applicable to all Parties.

221 A global network provides for the connections between Parties, with the collaboration of others, for the exchange of ideas and experiences, scientific and technical cooperation, capacity building and cooperative action that mutually support national and regional systems of protected areas which collectively contribute to the achievement of the programme of work. This network has no authority or mandate over national or regional systems.

work on protected areas, as annexed to the present decision, in the context of their nationally determined priorities, capacities and needs;

*Programme of work*

20. *Affirms* that aspects related to marine and coastal protected areas in decision VII/5 on marine and coastal biological diversity, be considered an integral part of the Convention's work on protected areas;

21. *Urges* concerned Parties, individually and collectively, to take further steps in curbing the illegal exploitation and trade of resources, particularly from existing protected areas and from areas of ecological importance for biodiversity conservation;

22. *Recalls* the obligations of Parties towards indigenous and local communities in accordance with Article 8(j) and related provisions and *notes* that the establishment, management and monitoring of protected areas should take place with the full and effective participation of, and full respect for the rights of, indigenous and local communities consistent with national law and applicable international obligations;

23. *Urges* Parties to elaborate outcome-oriented targets for the extent, representativeness and effectiveness of their national systems of protected areas, taking into account the Strategic Plan of the Convention the Global Strategy for Plant Conservation, the Plan of Implementation of the World Summit on Sustainable Development and the Millennium Development Goals, as well as any targets adopted by the Conference of the Parties to facilitate monitoring of the progress towards achievement of the 2010 target;

24. *Requests* the Subsidiary Body on Scientific, Technical and Technological Advice to provide scientific and technical advice on the implementation of the programme of work. This work should draw *inter alia* upon the input of Parties and other Governments, the work of relevant United Nations organizations and conventions, the work of the IUCN—World Commission on Protected Areas, the outcomes of the Fifth IUCN World Congress on Protected Areas, and the work of relevant indigenous and local communities, and non-governmental organizations;

25. *Decides* to establish an ad hoc open-ended working group on protected areas to support and review implementation of the programme of work and report to the Conference of the Parties;

26. *Requests* the Executive Secretary to make arrangements to hold at least one meeting of the ad hoc open-ended working group on protected areas before COP 8 subject to the availability of the necessary voluntary contributions

27. *Invites* Parties, other Governments and relevant organizations to organize regional technical workshops to advance implementation of and assess the progress in implementation of the programme of work;

28. *Decides* to assess at each meeting of the Conference of the Parties until 2010, progress in the implementation of the programme of work, and to determine the need for more effective measures and additional financial and technical support; to reach the 2010 target;



29. *Suggests* the following tasks need to be undertaken by the ad hoc open-ended working group:

- (a) To explore options for cooperation for the establishment of marine protected areas in marine areas beyond the limits of national jurisdiction, consistent with international law, including the United Nations Convention on the Law of the Sea, and based on scientific information;
- (b) To explore options for mobilizing as a matter of urgency through different mechanisms adequate and timely financial resources for the implementation of the programme of work by developing countries, particularly in the least developed and the small island developing States amongst them, countries with economies in transition, in accordance with Article 20 of the Convention, with special emphasis on those elements of the programme of work requiring early action;
- (c) To contribute to the further development of “tool kits” for the identification, designation, management, monitoring and evaluation of national and regional systems of protected areas, including ecological networks, ecological corridors, buffer zones, with special regard to indigenous and local communities and stakeholder involvement and benefit sharing mechanisms;
- (d) To consider reports from the Parties, academia, and scientific organizations, civil society and others on progress in the implementation of the programme of work on protected areas, compiled by the Executive Secretary;
- (e) To recommend to COP ways and means to improve implementation of the programme of work on protected areas;

30. *Urges* Parties and *invites* other Governments, and relevant organizations to report to the Executive Secretary on implementation of this decision and the programme of work prior to each meeting of the Conference of the Parties until 2010;

31. *Recognizes* the value of a single international classification system for protected areas and the benefit of providing information that is comparable across countries and regions and therefore *welcomes* the ongoing efforts of the IUCN World Commission on Protected Areas to refine the IUCN system of categories and *encourages* Parties, other Governments and relevant organizations to assign protected-area management categories to their protected areas, providing information consistent with the refined IUCN categories for reporting purposes;

32. *Invites* the United Nations Environment Programme—World Conservation Monitoring Centre working with international organizations to further develop the World Database on Protected Areas in order to assist the monitoring of progress towards the overall objective of this decision, and *urges* Parties, other Governments and relevant organizations to provide up-to-date information for the Database;

*Suggested supporting activities of the Executive Secretary*

33. *Requests* the Executive Secretary to update information on status and trends of, and threats to, protected areas as part of the reviews of the implementation of

the thematic programmes of work, in collaboration with Parties and relevant organizations, in particular the IUCN-WCPA;

34. *Requests* the Executive Secretary to strengthen collaboration with other organizations, institutions and conventions with a view to supporting implementation of the activities contained in the programme of work, promoting synergies and avoiding unnecessary duplications, and to establish a liaison group of relevant organizations including the World Heritage Convention, the Ramsar Convention on Wetlands, the Man and Biosphere programme of the United Nations Educational, Scientific and Cultural Organization, UN Convention on the Law of the Sea, relevant regional conventions and other organizations to facilitate this objective;

35. *Further requests* the Executive Secretary to:

- (a) Compile information received from Parties, other Governments and relevant organizations and bodies on the implementation of the programme of work, and transmit this information to the ad hoc open-ended working group;
- (b) Establish in collaboration with the IUCN World Commission on Protected Areas a roster of experts to help respond to requests by Parties for assistance in implementing the programme of work on protected areas and to draw on experts from this roster, at the request of countries, to assist in the implementation of the programme of work;
- (c) Undertake the suggested supporting activities included in the programme of work.

## **ANNEX PROGRAMME OF WORK ON PROTECTED AREAS**

### **I. Introduction**

1. *In situ* conservation, sustainable use of biological diversity and the fair and equitable sharing of benefits arising from the use of genetic resources are dependent upon properly maintaining sufficient natural habitat. Protected areas, together with conservation, sustainable use and restoration initiatives in the wider land-and seascape are essential components in national and global biodiversity conservation strategies. They provide a range of goods and ecological services while preserving natural and cultural heritage. They can contribute to poverty alleviation by providing employment opportunities and livelihoods to people living in and around them. In addition, they also provide opportunities for research including for adaptive measures to cope with climate change, environmental education, recreation and tourism. As a result, most countries have developed a system of protected areas. The protected-area network now covers about 11 per cent of Earth's land surface. Less than 1 per cent of the Earth's marine area is covered. The central role of protected areas in implementing the objectives of the Convention has been repeatedly emphasized in decisions of the Conference of Parties. They form a vital element of the various thematic programmes of work, namely, marine and coastal biological diversity, inland water ecosystems biological diversity, dry and sub-humid lands biological diversity, forest biological diversity and mountain biological diversity.

2. Given their many benefits, protected areas are important instruments for meeting the Convention's targets of significantly reducing the rate of biodiversity loss by 2010. However, according to the best available data on the status and trends on protected areas (see UNEP/CBD/SBSTTA/9/5), the current global systems of protected areas are not sufficiently large, sufficiently well-planned, nor sufficiently well-managed to maximize their contribution to biodiversity conservation. Therefore, there is an urgent need to take action to improve the coverage, representativeness and management of protected areas nationally, regionally and globally.

3. The Convention on Biological Diversity works with many partner organizations, conventions and initiatives in facilitating conservation and sustainable use through protected areas. These include the IUCN World Commission on Protected Areas (WCPA); the UNEP World Conservation Monitoring Centre (UNEP-WCMC); the International Maritime Organization (IMO); the World Resources Institute (WRI); The Nature Conservancy (TNC); the World Wide Fund for Nature (WWF); the UNESCO Man and Biosphere programme (MAB); the UNESCO World Heritage Convention; the Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention); the Convention on the Conservation of Migratory Species of Wild Animals and the associated agreements; the Convention on Trade in Endangered Species of Wild Fauna and Flora (CITES); (EU) the United Nations Forum on Forests (UNFF); the Global Environment Facility (GEF), International Convention for Regulation of Whaling (ICRW); Food and Agriculture Organization of the United Nations (FAO); UN Convention on the Law of the Sea (UNCLOS); indigenous organizations, other stakeholders and industry; and various regional agreements and programmes.

4. The present programme of work on protected areas features goals and activities that are specific to protected areas. Some elements of existing programmes of work on forests, inland waters, dry and sub-humid lands, coastal and marine and mountain biological diversity as well as the Global Strategy for Plant Conservation and the Global Taxonomy Initiative also apply to protected areas. The goals and activities contained in these existing programmes of work should also be applied and implemented, as and whenever appropriate for their respective protected areas. Other relevant guidelines developed under cross-cutting issues of the CBD should also be taken into account when implementing the programme of work.

5. The World Summit on Sustainable Development, in its Plan of Implementation, has stated that the achievement of the 2010 target requires new and additional financial and technical resources for developing countries, and that the progress in establishment and maintenance of a comprehensive, effectively managed, and ecologically representative global system of protected areas is of crucial importance for achieving the 2010 target. The WSSD also called for provision of financial and technical support for activities in this field, recognizing that funding for this purpose generally should consist of a mixture of national and international resources and include the whole range of possible funding instruments such as public funding, debt for nature swaps, private funding, remuneration from services provided by protected areas, and taxes and fees at the national level for the use of ecological services.

## II. Overall purpose and scope of the programme of work

6. The overall purpose of the programme of work on protected areas is to support the establishment and maintenance by 2010 for terrestrial and by 2012 for marine areas of comprehensive, effectively managed, and ecologically representative national and regional systems of protected areas that collectively, *inter alia* through a global network<sup>222</sup> contribute to achieving the three objectives of the Convention and the 2010 target to significantly reduce the current rate of biodiversity loss at the global, regional, national and sub-national levels and contribute to poverty reduction and the pursuit of sustainable development, thereby supporting the objectives of the Strategic Plan of the Convention, the World Summit on Sustainable Development Plan of Implementation and the Millennium Development Goals.

7. The programme of work consists of four interlinked elements intended to be mutually reinforcing and cross-cutting in their implementation. It was developed bearing in mind the need to avoid unnecessary duplication with existing thematic work programmes and other ongoing initiatives of the Convention on Biological Diversity, and to promote synergy and coordination with relevant programmes of various international organizations. Parties are encouraged to apply where appropriate the objectives and activities from these thematic work programmes and the work on cross-cutting issues.

8. The Convention's work on protected areas takes into account the ecosystem approach. The ecosystem approach is the primary framework for action under the Convention, and its application will help reach a balance between the three objectives of the Convention. Multiple-use protected areas applied in an ecosystem approach context can, for example, help meet specific goals relating to conservation, sustainable use and the fair and equitable sharing of benefits arising from the use of genetic resources. The ecosystem approach provides a framework within which the relationship of protected areas to the wider landscape and seascape can be understood, and the goods and services flowing from protected areas can be valued. In addition, the establishment and management of protected area systems in the context of the ecosystem approach should not simply be considered in national terms, but where the relevant ecosystem extends beyond national boundaries, in ecosystem or bioregional terms as well. This presents a strong argument for and adds complexity to the establishment of transboundary protected areas and protected areas in marine areas beyond the limits of national jurisdiction. Any work under this programme on marine and coastal protected areas should be consistent with decision VII/5 on Marine and Coastal biodiversity.

9. The programme of work is intended to assist Parties in establishing national programmes of work with targeted goals, actions, specific actors, time frame, inputs and expected measurable outputs. Parties may select from, adapt, and/or add to the activities suggested in the current programme of work according to particular national and local conditions and their level of development. Implementation of

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222 A global network provides for the connections between Parties, with the collaboration of others, for the exchange of ideas and experiences, scientific and technical cooperation, capacity building and cooperative action that mutually support national and regional systems of protected areas which collectively contribute to the achievement of the programme of work. This network has no authority or mandate over national or regional systems.

this programme of work should take into account the ecosystem approach of the Convention on Biological Diversity. In implementing the programme of work, Parties are encouraged to pay due regard to the social, economic and environmental costs and benefits of various options. In addition, Parties are encouraged to consider the use of appropriate technologies, source of finance and technical cooperation, and to ensure, through appropriate actions, the means to meet the particular challenges and demands of their protected areas.

10. The implementation of the programme of work will contribute to achieving the three objectives of the Convention.

**PROGRAMME ELEMENT 1: DIRECT ACTIONS FOR PLANNING, SELECTING, ESTABLISHING, STRENGTHENING, AND MANAGING, PROTECTED AREA SYSTEMS AND SITES**

**GOAL 1.1:** To establish and strengthen national and regional systems of protected areas integrated into a global network as a contribution to globally agreed goals

**TARGET:** By 2010, terrestrially<sup>223</sup> and 2012 in the marine area, a global network of comprehensive, representative and effectively managed national and regional protected area system is established as a contribution to (i) the goal of the Strategic Plan of the Convention and the World Summit on Sustainable Development of achieving a significant reduction in the rate of biodiversity loss by 2010; (ii) the Millennium Development Goals—particularly goal 7 on ensuring environmental sustainability; and (iii) the Global Strategy for Plant Conservation.

*Suggested activities of the Parties*

1.1.1. By 2006, establish suitable time-bound and measurable national and regional level protected area targets and indicators.

1.1.2. As a matter of urgency, by 2006, take action to establish or expand protected areas in any large, intact or relatively unfragmented or highly irreplaceable natural areas, or areas under high threat, as well as areas securing the most threatened species in the context of national priorities,<sup>224</sup> and taking into consideration the conservation needs of migratory species.

1.1.3. As a matter of urgency, by 2006 terrestrially and by 2008 in the marine environment, take action to address the under-representation of marine and inland water ecosystems in existing national and regional systems of protected areas, taking into account marine ecosystems beyond areas of national jurisdiction in accordance with applicable international law, and transboundary inland water ecosystems.

1.1.4. By 2006, conduct, with the full and effective participation of indigenous and local communities and relevant stakeholders, national-level reviews of existing and potential forms of conservation, and their suitability for achieving biodiversity conservation goals, including innovative types of governance for protected areas that need to be recognized and promoted through legal, policy, financial institutional and community mechanisms, such as protected areas run by government

<sup>223</sup> Terrestrial includes inland water ecosystems.

<sup>224</sup> Parties may wish to use IUCN Red List of Threatened Species criteria, Version 3.1.

agencies at various levels, co-managed protected areas, private protected areas, indigenous and local community conserved areas.

1.1.5. By 2006 complete protected area system gap analyses at national and regional levels based on the requirements for representative systems of protected areas that adequately conserve terrestrial, marine and inland water biodiversity and ecosystems. National plans should also be developed to provide interim measures to protect highly threatened or highly valued areas wherever this is necessary. Gap analyses should take into account Annex I of the Convention on Biological Diversity and other relevant criteria such as irreplaceability of target biodiversity components, minimum effective size and viability requirements, species migration requirements, integrity, ecological processes and ecosystem services.

1.1.6. By 2009, designate the protected areas as identified through the national or regional gap analysis (including precise maps) and complete by 2010 terrestrially and 2012 in the marine environments the establishment of comprehensive and ecologically representative national and regional systems of protected areas.

1.1.7. Encourage the establishment of protected areas that benefit indigenous and local communities, including by respecting, preserving, and maintaining their traditional knowledge in accordance with article 8(j) and related provisions.

*Suggested supporting activities of the Executive Secretary*

1.1.8. Identify options for quantitative and qualitative protected areas targets and indicators that should be used at the global level that could contribute to the 2010 target and the Millennium Development Goals.

1.1.9. Invite relevant international and regional organizations to offer their assistance to the Parties in conducting national-level gap analyses.

1.1.10. Compile and disseminate through the clearing-house mechanism and other relevant media relevant approaches, frameworks and tools for system planning and promote and facilitate the exchange of experiences and lessons learned in applying and adapting them to different ecological and social settings.

**GOAL 1.2:** To integrate protected areas into broader land- and seascapes and sectors so as to maintain ecological structure and function

**TARGET:** By 2015, all protected areas and protected area systems are integrated into the wider land- and seascape, and relevant sectors, by applying the ecosystem approach and taking into account ecological connectivity<sup>225</sup> and the concept, where appropriate, of ecological networks.

*Suggested activities of the Parties*

1.2.1. Evaluate by 2006 national and sub-national experiences and lessons learned on specific efforts to integrate protected areas into broader land- and seascapes and sectoral plans and strategies such as poverty reduction strategies.

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225 The concept of connectivity may not be applicable to all Parties.

1.2.2. Identify and implement, by 2008, practical steps for improving the integration of protected areas into broader land- and seascapes, including policy, legal, planning and other measures.

1.2.3. Integrate regional, national and sub-national systems of protected areas into broader land- and seascape, *inter alia* by establishing and managing ecological networks, ecological corridors<sup>226</sup> and/or buffer zones, where appropriate, to maintain ecological processes and also taking into account the needs of migratory species.

1.2.4. Develop tools of ecological connectivity, such as ecological corridors, linking together protected areas where necessary or beneficial as determined by national priorities for the conservation of biodiversity.

1.2.5. Rehabilitate and restore habitats and degraded ecosystems, as appropriate, as a contribution to building ecological networks, ecological corridors and/or buffer zones.

*Suggested supporting activities of the Executive Secretary*

1.2.6. Encourage the organization of regional and sub-regional workshops for the exchange of experiences on integration of biodiversity and protected areas into relevant sectoral and spatial plans.

1.2.7. Compile and disseminate, using the CHM and other media, case-studies of best practices and other reports regarding the application of the ecosystem approach in relation to protected areas at the international, regional, national and sub-national levels.

**GOAL 1.3:** To establish and strengthen regional networks, transboundary protected areas (TBPAs) and collaboration between neighbouring protected areas across national boundaries

**TARGET:** Establish and strengthen by 2010/2012<sup>227</sup> transboundary protected areas, other forms of collaboration between neighbouring protected areas across national boundaries and regional networks, to enhance the conservation and sustainable use of biological diversity, implementing the ecosystem approach, and improving international cooperation.

*Suggested activities of the Parties*

1.3.1. Collaborate with other parties and relevant partners to establish effective regional networks of protected areas, particularly in areas identified as common conservation priorities (e.g., barrier reef systems, large scale river basins, mountain systems, large remaining forest areas and critical habitat for endangered species), and establish multi-country coordination mechanisms as appropriate to support the establishment and effective long term management of such networks.

1.3.2. Collaborate with other Parties and relevant partners through the United Nations Informal Consultative Process on the Law of the Sea (UNICPOLOS) to establish and manage protected areas in marine areas beyond the limits of national

<sup>226</sup> Ecological corridors may not be applicable to all Parties.

<sup>227</sup> References to marine protected area networks to be consistent with the target in the WSSD plan of implementation.

jurisdiction, in accordance with international law, including the UN Convention on the Law of the Sea, and based on scientific information.

1.3.3. Establish, where appropriate, new TBPAs with adjacent Parties and countries and strengthen effective collaborative management of existing TBPAs.

1.3.4. Promote collaboration between protected areas across national boundaries.

*Suggested supporting activities of the Executive Secretary*

1.3.5. Collaborate and consult with relevant organizations and bodies for developing guidelines for establishing transboundary protected areas and collaborative management approaches, as appropriate, for dissemination to Parties.

1.3.6. Compile and disseminate information on regional networks of protected areas and transboundary protected areas, including, as far as possible, their geographical distribution, their historical background, their role and the partners involved.

1.3.7. Review the potential for regional cooperation under the Convention on Migratory Species with a view to linking of protected area networks across international boundaries and potentially beyond national jurisdiction through the establishment of migratory corridors for key species.

**GOAL 1.4: To substantially improve site-based protected area planning and management**

**TARGET:** All protected areas to have effective management in existence by 2012, using participatory and science-based site planning processes that incorporate clear biodiversity objectives, targets, management strategies and monitoring programmes, drawing upon existing methodologies and a long-term management plan with active stakeholder involvement.

*Suggested activities of the Parties*

1.4.1. Create a highly participatory process, involving indigenous and local communities and relevant stakeholders, as part of site-based planning in accordance with the ecosystem approach, and use relevant ecological and socio-economic data required to develop effective planning processes.

1.4.2. Identify appropriate measurable biodiversity conservation targets for sites, drawing on criteria laid out in Annex I to the Convention on Biological Diversity and other relevant criteria.

1.4.3. Include in the site-planning process an analysis of opportunities for the protected area to contribute to conservation and sustainable use of biodiversity at local and regional scales as well as an analysis of threats and means of addressing them.

1.4.4. As appropriate, but no later than 2010, develop or update management plans for protected areas, built on the above process, to better achieve the three objectives of the Convention.

1.4.5. Integrate climate change adaptation measures in protected area planning, management strategies, and in the design of protected area systems.



1.4.6. Ensure that protected areas are effectively managed or supervised through staff that are well-trained and skilled, properly and appropriately equipped, and supported, to carry out their fundamental role in the management and conservation of protected areas.

*Suggested supporting activities of the Executive Secretary*

1.4.7. Compile and disseminate through the clearing-house mechanism current relevant approaches, frameworks and tools for site planning and promote and facilitate the exchange of experiences and lessons learned in applying and adapting them in different ecological and social settings.

1.4.8. Disseminate information on successful management models of protected areas which serve to further the three objective of the Convention and may also contribute to poverty reduction and the pursuit of sustainable development.

**GOAL 1.5:** To prevent and mitigate the negative impacts of key threats to protected areas

**TARGET:** By 2008, effective mechanisms for identifying and preventing, and/or mitigating the negative impacts of key threats to protected areas are in place.

*Suggested activities of the Parties*

1.5.1. Apply, as appropriate, timely environmental impact assessments to any plan or project with the potential to have effects on protected areas, and ensure timely information flow among all concerned parties to that end, taking into account decision VI/7 A of the Conference of the Parties on guidelines for incorporating biodiversity-related issues into environmental impact assessment legislation and/or processes and in strategic environmental assessments.

1.5.2. Develop by 2010 national approaches to liability and redress measures, incorporating the polluter pays principle or other appropriate mechanisms in relation to damages to protected areas.

1.5.3. Establish and implement measures for the rehabilitation and restoration of the ecological integrity of protected areas.

1.5.4. Take measures to control risks associated with invasive alien species in protected areas.

1.5.5. Assess key threats to protected areas and develop and implement strategies to prevent and/or mitigate such threats.

1.5.6. Develop policies, improve governance, and ensure enforcement of urgent measures that can halt the illegal exploitation of resources from protected areas, and strengthen international and regional cooperation to eliminate illegal trade in such resources taking into account sustainable customary resource use of indigenous and local communities in accordance with article 10(c) of the Convention.

*Suggested supporting activities of the Executive Secretary*

1.5.7. Address issues specific to protected areas, in the guidelines for incorporating biodiversity considerations in environmental impact assessment and strategic environmental assessment, procedures and regulations.

1.5.8. Collaborate with the International Association for Impact Assessment and other relevant organizations on further development and refinement of the impact assessment guidelines particularly to incorporate all stages of environmental impact assessment processes in protected areas taking into account the ecosystem approach.

1.5.9. Compile and disseminate through the clearing-house mechanism and other means case studies, best practices and lessons learned in mitigating the negative impacts of key threats and facilitate the exchange of experiences.

**PROGRAMME ELEMENT 2: GOVERNANCE, PARTICIPATION, EQUITY AND BENEFIT SHARING**

**GOAL 2.1: To promote equity and benefit-sharing**

**TARGET:** Establish by 2008 mechanisms for the equitable sharing of both costs and benefits arising from the establishment and management of protected areas.

*Suggested activities of the Parties*

2.1.1. Assess the economic and socio-cultural costs, benefits and impacts arising from the establishment and maintenance of protected areas, particularly for indigenous and local communities, and adjust policies to avoid and mitigate negative impacts, and where appropriate compensate costs and equitably share benefits in accordance with the national legislation.

2.1.2. Recognize and promote a broad set of protected area governance types related to their potential for achieving biodiversity conservation goals in accordance with the Convention, which may include areas conserved by indigenous and local communities and private nature reserves. The promotion of these areas should be by legal and/or policy, financial and community mechanisms.

2.1.3. Establish policies and institutional mechanisms with full participation of indigenous and local communities, to facilitate the legal recognition and effective management of indigenous and local community conserved areas in a manner consistent with the goals of conserving both biodiversity and the knowledge, innovations and practices of indigenous and local communities.

2.1.4. Use social and economic benefits generated by protected areas for poverty reduction, consistent with protected-area management objectives.

2.1.5. Engage indigenous and local communities and relevant stakeholders in participatory planning and governance, recalling the principles of the ecosystem approach.

2.1.6. Establish or strengthen national policies to deal with access to genetic resources within protected areas and fair and equitable sharing of benefits arising from their utilization, drawing upon the Bonn Guidelines on Access to Genetic

Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization as appropriate.

**GOAL 2.2:** To enhance and secure involvement of indigenous and local communities and relevant stakeholders

**TARGET:** Full and effective participation by 2008, of indigenous and local communities, in full respect of their rights and recognition of their responsibilities, consistent with national law and applicable international obligations, and the participation of relevant stakeholders, in the management of existing, and the establishment and management of new, protected areas.

*Suggested activities of the Parties*

2.2.1. Carry out participatory national reviews of the status, needs and context-specific mechanisms for involving stakeholders, ensuring gender and social equity, in protected areas policy and management, at the level of national policy, protected area systems and individual sites.

2.2.2. Implement specific plans and initiatives to effectively involve indigenous and local communities, with respect for their rights consistent with national legislation and applicable international obligations, and stakeholders at all levels of protected areas planning, establishment, governance and management, with particular emphasis on identifying and removing barriers preventing adequate participation.

2.2.3. Support participatory assessment exercises among stakeholders to identify and harness the wealth of knowledge, skills, resources and institutions of importance for conservation that are available in society.

2.2.4. Promote an enabling environment (legislation, policies, capacities, and resources) for the involvement of indigenous and local communities and relevant stakeholders<sup>228</sup> in decision making, and the development of their capacities and opportunities to establish and manage protected areas, including community-conserved and private protected areas.

2.2.5. Ensure that any resettlement of indigenous communities as a consequence of the establishment or management of protected areas will only take place with their prior informed consent that may be given according to national legislation and applicable international obligations.

*Suggested supporting activities of the Executive Secretary*

2.2.6. Make available to Parties case-studies, advice on best practices and other sources of information on stakeholder participation in protected areas.

2.2.7. Promote, through the CHM, technical publications and other means, the international sharing of experience on effective mechanisms for stakeholder involvement and governance types in conservation in particular with regard to co-managed protected areas, indigenous and local community conserved areas and private protected areas.

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228 In this context nomadic communities and pastoralists are given special reference.

PROGRAMME ELEMENT 3: ENABLING ACTIVITIES

GOAL 3.1: To provide an enabling policy, institutional and socio-economic environment for protected areas

TARGET: By 2008 review and revise policies as appropriate, including use of social and economic valuation and incentives, to provide a supportive enabling environment for more effective establishment and management of protected areas and protected areas systems.

*Suggested activities of the Parties*

3.1.1. By 2006, identify legislative and institutional gaps and barriers that impede the effective establishment and management of protected areas, and by 2009, effectively address these gaps and barriers.

3.1.2. Conduct national-level assessments of the contributions of protected areas, considering as appropriate environmental services, to the country's economy and culture, and to the achievement of the Millennium Development Goals at the national level; and integrate the use of economic valuation and natural resource accounting tools into national planning processes in order to identify the hidden and non-hidden economic benefits provided by protected areas and who appropriates these benefits.

3.1.3. Harmonize sectoral policies and laws to ensure that they support the conservation and effective management of the protected area system.

3.1.4. Consider governance principles, such as the rule of law, decentralization, participatory decision-making mechanisms for accountability and equitable dispute resolution institutions and procedures.

3.1.5. Identify and remove perverse incentives and inconsistencies in sectoral policies that increase pressure on protected areas, or take action to mitigate their perverse effects. Whenever feasible, redirect these to positive incentives for conservation.

3.1.6. Identify and establish positive incentives that support the integrity and maintenance of protected areas and the involvement of indigenous and local communities and stakeholders in conservation.

3.1.7. Adopt legal frameworks to national, regional and sub-national protected areas systems of countries where appropriate.

3.1.8. Develop national incentive mechanisms and institutions and legislative frameworks to support the establishment of the full range of protected areas that achieve biodiversity conservation objectives including on private lands and private reserves where appropriate.

3.1.9. Identify and foster economic opportunities and markets at local, national and international levels for goods and services produced by protected areas and/or reliant on the ecosystem services that protected areas provide, consistent with protected area objectives and promote the equitable sharing of the benefits.

3.1.10. Develop necessary mechanisms for institutions with responsibilities for conservation of biological diversity at the regional, national and local level to achieve institutional and financial sustainability.

3.1.11. Cooperate with neighbouring countries to establish an enabling environment for transboundary protected areas and for neighbouring protected areas across national boundaries and other similar approaches including regional networks.

*Suggested supporting activities of the Executive Secretary*

3.1.12. In collaboration with key partners such as OECD, IUCN, WWF and the secretariats of other conventions compile information on relevant guidance, resource kits and other information on incentive measures including those relating to the development of incentive options.

3.1.13. Compile and disseminate, through the CHM and other media, case-studies on best practices on the use of incentive measures for the management of protected areas.

3.1.14. Compile and disseminate through the CHM and other media best practices on ways and means to integrate the use of incentive measures into protected area management plans, programmes and policies including opportunities for the removal or mitigation of perverse incentives.

**GOAL 3.2:** To build capacity for the planning, establishment and management of protected areas

**TARGET:** By 2010, comprehensive capacity building programmes and initiatives are implemented to develop knowledge and skills at individual, community and institutional levels, and raise professional standards.

*Suggested activities of the Parties*

3.2.1. By 2006 complete national protected-area capacity needs assessments, and establish capacity-building programmes on the basis of these assessments including the creation of curricula, resources and programs for the sustained delivery of protected areas management training.

3.2.2. Establish effective mechanisms to document existing knowledge and experiences on protected area management, including traditional knowledge in accordance with Article 8(j) and Related Provisions, and identify knowledge and skills gaps.

3.2.3. Exchange lessons learnt, information and capacity-building experiences among countries and relevant organizations, through the Clearing-house Mechanisms and other means.

3.2.4. Strengthen the capacities of institutions to establish cross-sectoral collaboration for protected area management at the regional, national and local levels.

3.2.5. Improve the capacity of protected areas institutions to develop sustainable financing through fiscal incentives, environmental services, and other instruments.

*Suggested supporting activities of the Executive Secretary*

3.2.6. Cooperate with IUCN and other relevant organizations to compile and disseminate available information.

3.2.7. Cooperate with initiatives such as the Protected Areas Learning Network (PALNet-IUCN) and explore lessons learned from those experiences, in collaboration with relevant organizations.

GOAL 3.3: To develop, apply and transfer appropriate technologies for protected areas

TARGET: By 2010 the development, validation, and transfer of appropriate technologies and innovative approaches for the effective management of protected areas is substantially improved, taking into account decisions of the Conference of the Parties on technology transfer and cooperation.

*Suggested activities of the Parties*

3.3.1. Document and make available to the Executive Secretary appropriate technologies for conservation and sustainable use of biological diversity of protected areas and management of protected areas.

3.3.2. Assess needs for relevant technologies for protected area management involving indigenous and local communities and stakeholders such as the research institutions, non-governmental organizations and the private sector.

3.3.3. Encourage development and use of appropriate technology, including technologies of indigenous and local communities with their participation, approval and involvement in accordance with Article 8(j) and Related Provisions, for habitat rehabilitation and restoration, resource mapping, biological inventory, and rapid assessment of biodiversity, monitoring, *in situ* and *ex situ* conservation, sustainable use, etc.

3.3.4. Promote an enabling environment for the transfer of technology in accordance with decision VII/29 of the Conference of Parties on technology transfer and cooperation to improve protected area management.

3.3.5. Increase technology transfer and cooperation to improve protected area management.

*Suggested supporting activities of the Executive Secretary*

3.3.6. Compile and disseminate information provided by Parties and relevant international organizations on appropriate technologies and approaches for efficient management of protected areas and conservation and sustainable use of biological diversity of protected areas.

GOAL 3.4: To ensure financial sustainability of protected areas and national and regional systems of protected areas

TARGET: By 2008, sufficient financial, technical and other resources to meet the costs to effectively implement and manage national and regional systems of protected areas are secured, including both from national and international sources, particularly to support the needs of developing countries and countries with economies in transition and small island developing States.

*Suggested activities of the Parties*

3.4.1. Conduct a national-level study by 2005 of the effectiveness in using existing financial resources and of financial needs related to the national system of protected areas and identify options for meeting these needs through a mixture of national and international resources and taking into account the whole range of possible funding instruments, such as public funding, debt for nature swaps, elimination of perverse incentives and subsidies, private funding, taxes and fees for ecological services.

3.4.2. By 2008, establish and begin to implement country-level sustainable financing plans that support national systems of protected areas, including necessary regulatory, legislative, policy, institutional and other measures.

3.4.3. Support and further develop international funding programmes to support implementation of national and regional systems of protected areas in developing countries and countries with economies in transition and small island developing States.

3.4.4. Collaborate with other countries to develop and implement sustainable financing programmes for national and regional systems of protected areas.

3.4.5. Provide regular information on protected areas financing to relevant institutions and mechanisms, including through future national reports under the Convention on Biological Diversity, and to the World Database on Protected Areas.

3.4.6. Encourage integration of protected areas needs into national and, where applicable, regional development and financing strategies and development cooperation programmes.

*Suggested supporting activities of the Executive Secretary*

3.4.7. Convene as soon as possible, but not later than 2005, a meeting of the donor agencies and other relevant organizations to discuss options for mobilizing new and additional funding to developing countries and countries with economies in transition and small island developing States for implementation of the programme of work.

3.4.8. Compile and disseminate case-studies and best practices concerning protected area financing through the clearing-house mechanism and other media.

3.4.9. Review and disseminate by 2006 studies on the value of ecosystem services provided by protected areas.

**GOAL 3.5:** To strengthen communication, education and public awareness

**TARGET:** By 2008 public awareness, understanding and appreciation of the importance and benefits of protected areas is significantly increased.

*Suggested activities of the Parties*

3.5.1. Establish or strengthen strategies and programmes of education and public awareness on the importance of protected areas in terms of their role in biodiversity conservation and sustainable socio-economic development, in close collaboration

with the Communication, Education and Public Awareness Initiative (CEPA) under the Convention on Biological Diversity and targeted towards all stakeholders.

3.5.2. Identify core themes for education, awareness and communication programmes relevant to protected areas, including *inter alia* their contribution to economy and culture to achieve specific end results such as compliance by resource users and other stakeholders or an increased understanding of science-based knowledge by indigenous and local communities and policy makers and an increased understanding of the needs, priorities and value of indigenous and local communities' knowledge, innovations and practices by Governments, non-governmental organizations and other relevant stakeholders.

3.5.3. Strengthen, and where necessary, establish information mechanisms directed at target groups such as the private sector, policy makers, development institutions, community-based organizations, the youth, the media, and the general public.

3.5.4. Develop mechanisms for constructive dialogue and exchange of information and experiences among protected-area managers, and between protected area managers and indigenous and local communities and their organizations and other environment educators and actors.

3.5.5. Incorporate the subject of protected areas as an integral component of the school curricula as well as in informal education.

3.5.6. Establish mechanism and evaluate the impacts of communication, education and public awareness programmes on biodiversity conservation to ensure that they improve public awareness, change behaviour and support the achievement of protected area objectives.

*Suggested supporting activities of the Executive Secretary*

3.5.7. Collaborate with IUCN and other relevant organizations to collect and disseminate educational tools and materials for adaptation and use in the promotion of protected areas as an important means of achieving the conservation and sustainable use of biodiversity.

3.5.8. Establish, in collaboration with the IUCN and other relevant partners, an initiative to engage the global news and entertainment industry (television, film, popular music, Internet, etc.) in a global campaign to raise awareness of the consequences of biological diversity loss and the important role of protected areas in biodiversity conservation.

PROGRAMME ELEMENT 4: STANDARDS, ASSESSMENT, AND MONITORING

GOAL 4.1: To develop and adopt minimum standards and best practices for national and regional protected area systems

TARGET: By 2008, standards, criteria, and best practices for planning, selecting, establishing, managing and governance of national and regional systems of protected areas are developed and adopted.



*Suggested activities of the Parties*

4.1.1. Collaborate with other Parties and relevant organizations, particularly IUCN, on the development, testing, review and promotion of voluntary protected areas standards and best practices on planning and management, governance and participation.

4.1.2. Develop and implement an efficient, long-term monitoring system of the outcomes being achieved through protected area systems in relation to the goals and targets of this work programme.

4.1.3. Draw upon monitoring results to adapt and improve protected area management based on the ecosystem approach.

*Suggested supporting activities of the Executive Secretary*

4.1.4 In collaboration with the key partners and based upon the best practices promote available guidance for parties minimum standards for planning, selecting, establishing, managing and governance of protected area sites and systems.

4.1.5 Compile information on best practices and case-studies on effective management of protected areas and disseminate it through clearing-house mechanism and facilitate exchange of information.

**GOAL 4.2:** To evaluate and improve the effectiveness of protected areas management

**TARGET:** By 2010, frameworks for monitoring, evaluating and reporting protected areas management effectiveness at sites, national and regional systems, and trans-boundary protected area levels adopted and implemented by Parties.

*Suggested activities of the Parties*

4.2.1. Develop and adopt, by 2006, appropriate methods, standards, criteria and indicators for evaluating the effectiveness of protected area management and governance, and set up a related database, taking into account the IUCN-WCPA framework for evaluating management effectiveness, and other relevant methodologies, which should be adapted to local conditions.

4.2.2. Implement management effectiveness evaluations of at least 30 percent of each Party's protected areas by 2010 and of national protected area systems and, as appropriate, ecological networks.

4.2.3. Include information resulting from evaluation of protected areas management effectiveness in national reports under the Convention on Biological Diversity.

4.2.4. Implement key recommendations arising from site- and system-level management effectiveness evaluations, as an integral part of adaptive management strategies.

*Suggested supporting activities of the Executive Secretary*

4.2.5. Compile and disseminate information on management effectiveness through the clearing-house mechanism and develop a database of experts in evaluation of

protected area management effectiveness and consider the possibility of organizing an international workshop on appropriate methods, criteria and indicators for evaluating the effectiveness of protected area management.

4.2.6. In cooperation with IUCN-WCPA and other relevant organizations, compile and disseminate information on best practices in protected area design, establishment and management.

**GOAL 4.3: To assess and monitor protected area status and trends**

**TARGET:** By 2010, national and regional systems are established to enable effective monitoring of protected-area coverage, status and trends at national, regional and global scales, and to assist in evaluating progress in meeting global biodiversity targets.

*Suggested activities of the Parties*

4.3.1. Implement national and regional programmes to monitor and assess the status and trends of biodiversity within protected area systems and sites.

4.3.2. Measure progress towards achieving protected area targets based on periodic monitoring and report on progress towards these targets in future national reports under the Convention on Biological Diversity as well as in a thematic report at COP 9.

4.3.3. Improve and update national and regional databases on protected areas and consolidate the World Database on Protected Areas as key support mechanisms in the assessment and monitoring of protected area status and trends.

4.3.4. Participate in the World Database on Protected Areas maintained by UNEP-WCMC, and the United Nations List of Protected Areas and the State of the World's Protected Areas assessment process.

4.3.5. Encourage the establishment and establishment use of new technologies including geographic information system and remote sensing tools for monitoring protected areas.

*Suggested supporting activities of the Executive Secretary*

4.3.6. Develop and consolidate working partnerships with appropriate organizations and institutions that have developed and maintained monitoring systems and databases on protected areas, in particular with the UNEP-WCMC and the IUCN World Commission on Protected Areas.

4.3.7. Explore establishment of a harmonized system and time schedule for reporting on sites designated under the Convention on Wetlands, the World Heritage Convention, and UNESCO MAB programme, and other regional systems, as appropriate, taking into account the ongoing work of UNEP-WCMC on harmonization of reporting and the IUCN protected area management category system for reporting purpose.

4.3.8. Prepare an updated format for the thematic report on protected areas covering, *inter alia*, integration of protected areas and national systems of protected

areas into relevant sectors and spatial planning taking into account decision VII/25 on national reporting.

**GOAL 4.4:** To ensure that scientific knowledge contributes to the establishment and effectiveness of protected areas and protected area systems

**TARGET:** Scientific knowledge relevant to protected areas is further developed as a contribution to their establishment, effectiveness, and management.

*Suggested activities of the Parties*

4.4.1. Improve research, scientific and technical cooperation related to protected areas at national, regional and international levels.

4.4.2. Promote interdisciplinary research, to improve understanding of the ecological social and economic aspects of protected areas, including methods and techniques for valuation of goods and services from protected areas

4.4.3. Encourage studies to improve the knowledge of the distribution, status and trends of biological diversity.

4.4.4. Encourage collaborative research between scientists and indigenous and local communities in accordance with Article 8(j) in connection with the establishment and the effective management of protected areas

4.4.5. Promote the dissemination of scientific information from and on protected areas including through the clearing-house mechanism.

4.4.6. Promote the dissemination of, and facilitate access to, scientific and technical information, in particular publications on protected areas, with special attention to the needs of developing countries and countries with economies in transition, in particular least developed countries and small island developing States.

4.4.7. Develop and strengthen working partnerships with appropriate organizations and institutions which undertake research studies leading to an improved understanding of biodiversity in protected areas.

**APPENDIX  
INDICATIVE LIST OF PARTNERS AND OTHER COLLABORATORS**

**Partners**

Convention on Conservation of Migratory Species

Food and Agriculture Organization

Global Environment Facility

Intergovernmental Oceanic Commission of the United Nations Educational, Scientific and Cultural Organization

International Coral Reef Initiative

International Maritime Organization

International Association for Impact Assessment

IUCN—The World Conservation Union and its World Commission on Protected Areas, Commission on Ecosystem Management, and Species Survival Commission

International Whaling Commission

Man and Biosphere Programme of the United Nations Educational, Scientific and Cultural Organization

Ramsar Convention

United Nations Framework Convention on Climate Change

United Nations Convention on the Law of the Sea

United Nations Convention to Combat Desertification

United Nations Development Programme

UNEP—World Conservation Monitoring Centre

United Nations Forum on Forests

World Heritage Centre of the United Nations Educational, Scientific and Cultural Organization

World Bank

### **Other Collaborators**

BirdLife International

Conservation International

Fauna and Flora International

The Nature Conservancy

Wildlife Conservation Society

World Resources Institute

WWF

Indigenous and local communities

Private sector

Other relevant national, regional and international non-governmental organizations and other organizations

## **DECISION VII/29 | Transfer of technology and technology cooperation (Articles 16 to 19)**

*The Conference of the Parties,*

*Noting* that technology transfer and cooperation are essential elements for the implementation of the three objectives of the Convention,

*Recalling* the provisions of Articles 16 to 19 of the Convention,

*Recalling* principle 9 of the Rio Declaration on Environment and Development which states that States should cooperate to strengthen endogenous capacity-building for sustainable development by improving scientific understanding through exchanges of scientific and technological knowledge, and by enhancing the devel-

opment, adaptation, diffusion and transfer of technologies, including new and innovative technologies,

*Also recalling* paragraphs 105 and 106 of the Plan of Implementation of the World Summit on Sustainable Development (WSSD), which call upon States to promote, facilitate and finance, as appropriate, access to and the development, transfer and diffusion of environmentally sound technologies and corresponding know-how, in particular to developing countries and countries with economies in transition on favourable terms, including on concessional and preferential terms, as mutually agreed,

*Recognizing* the vital role of indigenous and local communities, in particular the role of women, and the value of traditional knowledge related to the conservation and sustainable use of biological diversity,

*Recalling* paragraph 44(h) of the Plan of Implementation of the World Summit, which calls upon States to provide financial and technical support to developing countries, including capacity-building, in order to enhance indigenous and community-based biodiversity conservation efforts,

*Recognizing* the value of initiatives such as the Cooperative Initiative on Alien Species on Islands in providing a focused clearing-house for facilitating scientific and technical cooperation,

*Reiterating* that work on technology transfer under the Convention shall be conducted in an integrated manner that is consistent with the thematic and cross-cutting programmes of work, in line with decision III/16 endorsing the SBSTTA recommendation II/3,

*Noting with appreciation* the role of the Norway/United Nations Conference on Technology Transfer and Capacity-building, held in Norway from 23 to 27 June 2003, in the development of the programme of work on technology transfer and scientific and technological cooperation, as requested in decision VI/30,

*Mindful* that the activities under its programme of work on technology transfer and technological and scientific cooperation shall be part of a comprehensive implementation support strategy for the Convention on Biological Diversity consistent with the multi-year programme of work and the Strategic Plan of the Convention, and should draw upon experiences from other international conventions and processes such as the UNFCCC or the Intergovernmental Strategic Plan on Technology Support and Capacity Building under preparation by UNEP,

1. *Adopts* the programme of work on technology transfer and cooperation as contained in the annex to the present decision;
2. *Decides* that implementation of the programme of work should be undertaken in close coordination with relevant activities under thematic programmes of work and programmes of work of other cross-cutting issues, in order to prevent duplication of work and maximize synergy;
3. *Invites* Parties and relevant international organizations, and *requests* the Executive Secretary, to carry out the activities under their respective responsibilities as

spelled out in the programme of work up to the eighth meeting of the Conference of the Parties, as a first phase in the implementation of the programme of work;

4. *Invites* the United Nations Environment Programme, upon approval by the Governing Council, to take into account the need for technology transfer and technology cooperation and capacity-building under the Convention when preparing and implementing the Intergovernmental Strategic Plan on Technology Support and Capacity-Building, in order to ensure synergy and support in the implementation of the programme of work on technology transfer and cooperation, and to work with UNDP as the leader on capacity building in the United Nations;

5. *Invites* Parties, in accordance to their identified needs and priorities and taking into account the information gaps identified in the synthesis report of information contained in national reports on technology transfer and cooperation (UNEP/CBD/COP/7/INF/9), to convene national, subregional and regional workshops to exchange information and experiences on, and to enhance capacity for, successful cooperation, transfer, diffusion and adaptation of environmentally sound technologies;

6. *Requests* the Executive Secretary to convene the informal advisory committee of the clearing-house mechanism, further to decision V/14, to assist the Executive Secretary, including through electronic consultation and long distance communication, to:

- (a) Provide advice on the development of proposals on the possible role of the clearing-house mechanism as a central mechanism for exchange of information on technologies, as a core element in its role to facilitate scientific and technical cooperation, and for facilitating technology transfer and cooperation and to promote and facilitate technical and scientific cooperation relevant for the conservation and sustainable use of biodiversity, and for technologies that make use of genetic resources and do not cause significant damage to the environment;
- (b) Develop guidance for implementation by national clearing-house mechanism nodes for common or similar frameworks for identifying the availability of relevant technologies to enhance international cooperation and to facilitate the interoperability with relevant existing systems of national and international information exchange, including technology and patent databases;
- (c) Assist in the implementation of proposals for enhancing the clearing-house mechanism as a central mechanism for exchange of information on technologies, as a core element in its role to promote and facilitate scientific and technical cooperation, and for facilitating and promoting technology transfer and cooperation and for the promotion of technical and scientific cooperation as adopted by the Conference of the Parties;

7. *Requests* the Executive Secretary to establish an expert group on technology transfer and scientific and technical cooperation, balanced regionally as well as in respect to expertise, which shall assist the Executive Secretary, through electronic consultations and long-distance communications as well as through meetings in conjunction with the informal advisory committee of the clearing-house mechanism, in the:

- (a) Preparation of proposals on options to apply institutional, administrative, legislative and policy measures and mechanisms, including best practices, as well as to overcome barriers, to facilitate access to and adaptation of technologies on the public domain and to proprietary technologies by developing countries and countries with economies in transition; and in particular, on measures and mechanisms that:
- (i) Foster an enabling environment in developing and developed countries for cooperation as well as the transfer, adaptation and diffusion of relevant technologies;
  - (ii) Provide, in accordance with existing international obligations, incentives to private-sector actors as well as public research institutions in developed country Parties, to encourage cooperation and transfer of technologies to developing countries, through, e.g., technology transfer programmes or joint-ventures;
  - (iii) Promote and advance priority access for Parties to the results and benefits arising from technologies based upon genetic resources provided by those Parties, in accordance with Article 19, paragraph 2 of the Convention, and to promote the effective participation in related technological research by those Parties;
  - (iv) Promote innovative approaches and means of technology transfer and cooperation such as Type 2 partnerships,<sup>229</sup> in accordance with the outcome of the World Summit on Sustainable Development, or transfers among actors, involving in particular the private sector and civil society organizations;
- (b) Exploration of possibilities and mechanisms of cooperation with processes in other Conventions and international organizations, such as the UNFCCC Expert Group on Technology Transfer (EGTT);
8. *Requests* Parties, governments and relevant organizations to develop means to provide access to translation services for scientific and technical information, including by identifying sources of free translation and/or by finding funding for translation;
9. *Invites* Parties, governments, the private sector and relevant civil society organizations to develop innovative approaches and means of technology transfer and cooperation such as Type 2 partnerships in accordance with the outcome of the World Summit on Sustainable Development (WSSD);
10. *Urges* Parties, governments and relevant organizations to identify further areas in which international or regional cooperative initiatives—such as the proposed cooperative initiative on marine alien species—would support implementation of the Convention;

229 “Type 2” partnerships/initiatives for sustainable development are non-negotiated and complementary to the commitments by Governments in the Johannesburg Declaration on Sustainable Development and the Plan of Implementation of the World Summit on Sustainable Development. They shall contribute to translating those political commitments into actions of a voluntary, self-organizing nature, thus enabling all stakeholders to make a concrete contribution to the Plan of Implementation.

11. *Requests* the Subsidiary Body on Scientific, Technical and Technological Advice and the Ad Hoc Open-ended Working Group on Access and Benefit-sharing to identify, during the development or review of work programmes, methods to increase the contribution of organizations, communities, academia and the private sector to the development and dissemination of scientific knowledge and the diffusion of technology needed for the implementation of those work programmes;
12. Agrees that the Conference of the Parties at its eighth meeting will, under the agenda item “refining mechanisms to support implementation”, review the results of the work referred to the previous paragraph, and will identify generic approaches for broadening the practical scientific and technical support for the implementation of the Convention;
13. *Urges* Parties, Governments and relevant international and regional organizations to provide financial and technical support and training, as appropriate, in order to assist in the implementation of the programme of work;
14. *Urges* Parties, Governments, relevant international and regional organizations and the private sector to remove any unnecessary impediments to funding of multi-country initiatives for technology transfer and for scientific and technical cooperation;
15. *Requests* the Executive Secretary to consult with multilateral financial institutions, regional banks and other relevant funding bodies to consider ways and means of involving them in the work of the Convention and in the efforts of Parties in its implementation, and in particular to identify mechanisms for financial support of capacity development, technology transfer and scientific, technical and technological cooperation.

## **ANNEX PROGRAMME OF WORK ON TECHNOLOGY TRANSFER AND TECHNOLOGICAL AND SCIENTIFIC COOPERATION**

1. The purpose of this programme of work is to develop meaningful and effective action to enhance the implementation of Articles 16 to 19 as well as related provisions of the Convention by promoting and facilitating the transfer of and access to technologies from developed to developing countries, including the least developed among them and small island developing States, as well as to countries with economies in transition, as well as among developing countries and other Parties, necessary to ensure implementation of the three objectives of the Convention, and in support of the target to achieve a significant reduction of the current rate of biodiversity loss at the global, regional and national level by 2010. Implementation of this programme of work shall also contribute to the attainment of the Millennium Development Goals to ensure environmental sustainability and to eradicate extreme poverty and hunger by 2015, and shall fully take into account specific national circumstances and constraints such as remoteness or vulnerability.
2. The successful transfer of technology and technology cooperation requires a country-driven, flexible and integrated approach at international, regional as well as national and sectoral levels, based on partnership and cooperation among



*inter alia* the private sector, Governments, indigenous and local communities, bilateral and multilateral institutions, funding institutions, non-governmental organizations and academic and research institutions, to enhance activities on technology assessments, on information systems, on creating enabling environments and on capacity-building.

3. Implementation of the activities spelt out in this programme of work, and the indicated timelines, shall not delay the immediate transfer of technologies, in accordance with Articles 16 to 19 of the Convention, in those cases where technology needs and opportunities for the transfer of environmentally sound technologies are already identified and the enabling environment supports their successful transfer, diffusion and adaptation.

4. In implementing this programme of work, the various actors enumerated above are invited to take into account the following strategic considerations:

- (a) In the light of largely varying socio-economic and cultural conditions among countries, technology transfer, and in particular the assessment of technology needs and of the related needs for the building or enhancement of capacity, is necessarily a country-driven and flexible process;
- (b) Implementation of the programme of work should promote and facilitate the transfer of technology and cooperation among all countries, with special emphasis among developed and developing countries as well as countries with economies in transition consistent with Articles 16 to 19 of the Convention;
- (c) The participation, approval and involvement of indigenous and local communities and all relevant stakeholders is key for the successful transfer and diffusion of technology for conservation and sustainable use of biological diversity;
- (d) Mechanisms for ensuring that technology transfer and cooperation fully respect the rights of indigenous and local communities need to be taken into account in the implementation of the programme of work;
- (e) Consideration should be given to identifying and facilitating the use of local solutions to local issues, as the most innovative solutions are often developed locally, but remain unknown to a wider community of potential users;
- (f) The strengthening of national, regional and international information systems including through the development and use of common formats, standards and protocols, providing, *inter alia*, access to information on existing technologies for the purposes of the Convention, and the improvement of the Convention clearing-house mechanism as a central gateway to such information systems, are crucial for the implementation of Articles 16 to 19 of the Convention;
- (g) The development of innovative partnerships, involving governmental agencies, public and private research institutions, the private sector, and national and local stakeholders, is a tool that facilitates enabling environments that are conducive to the successful cooperation and transfer of technologies;
- (h) In light of the numerous ongoing activities on technology transfer and technology cooperation under existing programmes and initiatives, particular

attention should be given to the establishment of synergies with such programmes and initiatives, in order to avoid the duplication of work;

- (i) Building or enhancing human and institutional capacity at all levels, in particular in developing countries, least developed countries and small island developing States, as well as in countries with economies in transition, is of paramount importance to implement the present programme of work.

**PROGRAMME ELEMENT 1: TECHNOLOGY ASSESSMENTS**

Technology assessment is a set of country-driven activities which involve relevant stakeholders in a consultative process to identify and determine the needs of Parties in response to national priorities and policies, particularly developing countries, least developed countries and small island developing States, as well as countries with economies in transition, with regard to the cooperation and transfer of technology for conservation and sustainable use of biodiversity, or technology that makes use of genetic resources and do not cause significant damage to the environment, and with regard to building or enhancement of scientific, legal and administrative capacity, and training. Furthermore, assessments should also identify, as appropriate, the potential benefits, costs and risks of such technologies, with a view to ensuring that transferred technologies are economically viable, socially acceptable and environmentally friendly. Any international cooperation in this field should be on mutually agreed terms.

**OBJECTIVE:** Technology needs, the potential benefits costs and risks of such technologies, and the related capacity-building needs of Parties are identified in response to national priorities and policies.

**OPERATIONAL TARGET 1.1:** *Technology needs assessments are conducted as appropriate, with the participation of stakeholders, in accordance with the activities foreseen in the thematic and cross-cutting work programmes under the Convention and in line with national priorities as set out, inter alia, in the national biodiversity strategy and action plan.*

*Activities*

1.1.1. Preparation, in accordance with the activities foreseen in the thematic and cross-cutting work programmes under the Convention and in line with national priorities, of technology assessments addressing:

- (a) Technology needs, opportunities and barriers in relevant sectors;
- (b) Related needs in the building of capacity.

**OPERATIONAL TARGET 1.2:** *Impact and risk assessments are conducted, as appropriate, with the participation of stakeholders and, if needed and requested, with international cooperation.*

### *Activities*

1.2.1. Preparation, as appropriate, of transparent impact assessments and risk analysis of the potential benefits, risks and associated costs with the introduction of technologies, including new technologies, whose risks and benefits are not yet determined.

1.2.2. Dissemination of assessments and related experiences at national and international levels.

*Main actors:* Parties to the Convention on Biological Diversity, in collaboration with relevant national and international stakeholders and with support from GEF and from relevant international funding organizations, as appropriate

*Timeline for Implementation:* Ongoing.

OPERATIONAL TARGET 1.3: *Information on methodologies for the assessment of technology needs are widely available to Parties through the clearing house mechanism and other means as appropriate.*

### *Activities*

1.3.1. Collect information on technology needs assessment methodologies, analyse their applicability and adaptation needs for technologies that are relevant to the conservation and sustainable use of biodiversity or make use of genetic resources and do not cause significant damage to the environment, and disseminate this information through the clearing-house mechanism or other means, as appropriate.

*Main actor:* the Secretariat of the Convention on Biological Diversity, in collaboration with relevant organizations and with input by Parties and Governments.

*Timeline for Implementation:* the eighth meeting of the Conference of the Parties.

## PROGRAMME ELEMENT 2: INFORMATION SYSTEMS

The development or strengthening of national, regional and international systems for the gathering and dissemination of relevant information on technology transfer and cooperation and technical and scientific cooperation, including the establishment of effective networks of electronic databases of relevant technology, has been recognized as a tool that facilitates the transfer of technology for the conservation and sustainable use of biodiversity and of technology that makes use of genetic resources and do not cause significant damage to the environment, as well as a tool that promotes and facilitates scientific and technical cooperation. Activities under this programme element should build on existing initiatives and programmes with a view to maximizing synergy and avoiding the duplication of work, and should ensure accessibility of such systems for indigenous and local communities and all relevant stakeholders. At the international level, these systems, using the clearing-house mechanism, would provide, *inter alia*, information on the availability of relevant technologies, including their technical parameters, economic and social aspects, data on patents (owners and date of expiration), models of con-

tracts and associated legislation; the identified technology needs of Parties, as well as case-studies and best-practices on measures and mechanisms to create enabling environments for technology transfer and technology cooperation.

**OBJECTIVE:** National, regional and international information systems for technology transfer and cooperation provide comprehensive information of relevance to foster technology transfer and technology cooperation.

**OPERATIONAL TARGET 2.1:** *The clearing-house mechanism is a central mechanism for the exchange of information on and facilitation of technology transfer and technical and scientific cooperation relevant for the Convention on Biological Diversity, providing access to information on national technology needs, available relevant proprietary technologies and technologies in the public domain, including access to databases of existing technologies, and information on best-practices to create enabling environments for technology transfer and technology cooperation.*

### *Activities*

2.1.1. Develop provisional Web pages and print media that provide access to information on relevant initiatives and databases for the transfer of technology and for technology cooperation.

*Main actor:* The Secretariat of the Convention on Biological Diversity in collaboration with relevant organizations and initiatives.

*Timeline for Implementation:* Post seventh meeting of the Conference of the Parties.

2.1.2. Development of proposals to enhance the clearing-house mechanism, including its national nodes, particularly those in developing countries, as a key mechanism for exchange of information on technologies and as a core element in its role to promote and facilitate scientific and technical cooperation, for facilitating and promoting technology transfer and cooperation and for the promotion of technical and scientific cooperation relevant for the conservation and sustainable use of biodiversity or make use of genetic resources and do not cause significant damage to the environment.

2.1.3. Development of advice and guidance on the use of new information exchange formats, protocols and standards to enable interoperability among relevant existing systems of national and international information exchange, including technology and patent databases.

*Main actor:* The Secretariat of the Convention on Biological Diversity in collaboration with Parties, the informal advisory committee of the clearing house mechanism and relevant organizations and initiatives, with support from relevant international funding organizations as appropriate.

*Timeline for Implementation:* The eighth meeting of the Conference of the Parties

2.1.4. Implementation of proposals for enhancing the clearing-house mechanism as a central mechanism for exchange of information on technologies, as a core element in its role to promote and facilitate scientific and technical cooperation, for facilitating and promoting technology transfer and for the promotion of technical and scientific cooperation as adopted by the Conference of the Parties, in full synergy with similar initiatives and mechanisms of other Conventions and international organizations.

*Main actor:* The Secretariat of the Convention on Biological Diversity in collaboration with the informal advisory committee of the clearing-house mechanism, Parties and relevant organizations and initiatives with support from relevant international funding organizations, as appropriate. This arrangement may be reviewed after a reasonable trial period.

*Timeline for Implementation:* The ninth meeting of the Conference of the Parties, then ongoing.

**OPERATIONAL TARGET 2.2:** *Opportunities to establish or strengthen national information systems for technology transfer and technology cooperation are identified, with consultation of and input from indigenous and local communities and all relevant stakeholders.*

#### *Activities*

2.2.1. Compilation and synthesis of information on national and regional information systems for technology transfer and cooperation, including the identification of best-practices and of needs for further improvements, in particular in regard to the accessibility of such systems for indigenous and local communities and all relevant stakeholders as well as information on capacity and human resources available and needed.

*Main actor:* The Secretariat of the Convention on Biological Diversity, with input from Parties and in cooperation with relevant organizations as appropriate, and with support from relevant international funding organizations as appropriate.

*Timeline for Implementation:* The eighth meeting of the Conference of the Parties, then ongoing.

2.2.2. Develop or strengthen national information systems of technology transfer and technology cooperation.

*Main actors:* Parties In cooperation with the Secretariat and relevant organizations as appropriate, and with support from GEF and from relevant international funding organizations as appropriate.

*Timeline for Implementation:* The eighth meeting of the Conference of the Parties.

**OPERATIONAL TARGET 2.3:** *National information systems for technology transfer and technology cooperation, especially those functioning through national clearing-house mechanisms, are established or*

*strengthened, are effectively linked to international information systems and contribute effectively to technology transfer, diffusion and adaptation and to the exchange of technologies, including South-South technology transfer.*

*Activities*

2.3.1. Development or improvement of national systems of information exchange on technology transfer and technology cooperation, in consultation with indigenous and local communities and all relevant stakeholders, with a view to fostering dialogue between technology holders and prospective users through, inter alia, the application of ways and means to ensure:

- (a) Effective linkages with existing national, regional and international information systems;
- (b) Accessibility and adaptability of such systems by indigenous and local communities and all relevant stakeholders;
- (c) Information on local needs for adaptation, and related capacity, to be effectively channelled into national systems.

*Main actors:* Parties to the Convention on Biological Diversity, in consultation with indigenous and local communities and all relevant national stakeholders, with support by relevant organizations and well as with support from GEF and from relevant international funding organizations as appropriate.

*Timeline for Implementation:* The ninth meeting of the Conference of the Parties.

**OPERATIONAL TARGET 2.4:** *Promote the development of regional and international information systems to facilitate technology transfer and technological cooperation.*

*Activities*

2.4.1. Initiate and conduct consultations among relevant organizations, indigenous and local communities and all relevant stakeholders with a view to identifying options to further regional and international cooperation in the development or improvement of information systems on technology transfer and technology cooperation.

*Main actors:* Relevant organizations, indigenous and local communities and all relevant stakeholders with support by national, regional and international donors, and by national Governments with support from relevant international funding organizations as appropriate.

2.4.2. Compilation and synthesis of information on regional and international information systems, including best-practices and opportunities for further development and make this information available through the clearing-house mechanism and other means, as appropriate.

*Main actor:* the Secretariat of the Convention on Biological Diversity with input from Parties and in cooperation with relevant organizations, as appropriate,

with support from relevant international funding organizations, as appropriate.

*Timeline for Implementation:* The eighth meeting of the Conference of the Parties, then ongoing.

2.4.3. Identify and implement measures to develop or strengthen appropriate information systems of technology transfer and technology cooperation, including at the local level.

*Main actor:* Parties in cooperation with the Secretariat of the Convention, relevant organizations, as appropriate, and with support from GEF as well as from relevant international funding organizations, as appropriate.

*Timeline for Implementation:* Ongoing.

### PROGRAMME ELEMENT 3: CREATING ENABLING ENVIRONMENTS

Creating enabling environments refers to activities of governments at national and international levels that aim to create an institutional, administrative, legislative and policy environment conducive to private and public sector technology transfer and to the adaptation of transferred technology, and that aim to remove technical, legislative and administrative barriers to technology transfer and technology adaptation, inconsistent with international law. Multi-faceted enabling environments in both developed and developing countries are a necessary tool to promote and facilitate the successful and sustainable transfer of technologies for the purpose of the Convention on Biological Diversity. Such government activities may, *inter alia*, focus on: national institutions for research and technology innovation; legal and institutional underpinnings of technology markets both at national and international levels; and legislative institutions that introduce codes and standards, reduce environmental risk and protect intellectual property rights.

**OBJECTIVE:** To identify and put in place institutional, administrative, legislative and policy frameworks conducive to private and public sector technology transfer and cooperation, taking also into account existing work of relevant international organizations and initiatives.

**OPERATIONAL TARGET 3.1:** *Development of guidance and advice for the application of options on measures and mechanisms to facilitate access to and transfer of technologies in the public domain and to proprietary technologies of relevance for the Convention on Biological Diversity, and to foster technology cooperation.*

#### *Activities*

3.1.1. Preparation of technical studies that further explore and analyse the role of intellectual property rights in technology transfer in the context of the Convention on Biological Diversity and identify potential options to increase synergy and overcome barriers to technology transfer and cooperation, consistent with paragraph 44 of the Johannesburg Plan of Implementation. The benefits as well as the costs of intellectual property rights should be fully taken into account.

*Main actors:* Secretariat of the Convention on Biological Diversity, WIPO, UNC-TAD and other relevant organizations.

*Timeline for Implementation:* The eighth meeting of the Conference of the Parties.

3.1.2. Compilation and synthesis of information, including case studies, and preparation of guidance on institutional, administrative, legislative and policy frameworks that facilitate access to, adaptation and adaptation of technologies in the public domain and to proprietary technologies, especially by developing countries and countries with economies in transition, and, in particular, on measures and mechanisms that:

- (a) Foster an enabling environment in developing and developed countries for cooperation as well as the transfer, adaptation and diffusion of relevant technologies in accordance with the needs and priorities identified by countries;
- (b) present obstacles that impede transfers of relevant technologies from developed countries;
- (c) Provide, in accordance with existing international obligations, incentives to private-sector actors as well as public research institutions in developed country Parties, to encourage cooperation and transfer of technologies to developing countries, through, e.g., technology transfer programmes or joint-ventures;
- (d) Promote and advance priority access for Parties to the results and benefits arising from technologies based upon genetic resources provided by those Parties, in accordance with Article 19, paragraph 2 of the Convention, and to promote the effective participation in related technological research by those Parties;
- (e) Promote innovative approaches and means of technology transfer and cooperation such as Type 2 partnerships, in accordance with the outcome of the World Summit on Sustainable Development, or transfers among actors, involving in particular the private sector and civil society organizations.

*Main actor:* the Secretariat of the Convention on Biological Diversity, assisted by the group of experts on technology transfer and cooperation and based on input from Parties and relevant international organizations.

*Timeline for implementation:* The eighth meeting of the Conference of the Parties, then ongoing.

**OPERATIONAL TARGET 3.2:** *Development and implementation of national institutional, administrative, legislative and policy frameworks to facilitate cooperation, as well as access to and adaptation of technologies in the public domain and to proprietary technologies of relevance for the Convention on Biological Diversity, and to foster technical and scientific cooperation, consistent with national priorities and existing international obligations.*

*Main actors:* National Governments in collaboration with indigenous and local communities and all relevant stakeholders, with support of relevant international



organizations as well as with support from GEF, from relevant international funding organizations and the Secretariat as appropriate.

### *Activities*

#### PHASE I (PREPARATORY PHASE)

3.2.1. Identification of relevant stakeholders and sources on information.

3.2.2. Design and implement mechanisms for effective involvement and participation of indigenous and local communities and all relevant stakeholders.

3.2.3. As appropriate, review, in collaboration with indigenous and local communities and all relevant stakeholders, existing policies and programmes and identify possible impediments to the transfer of technology of relevance for the Convention on Biological Diversity, capacity-building needs and priority areas for policy action. The study should also identify the necessary steps, if any, to improve accordingly national biodiversity strategy and action plans, national research and technology strategies and other policy planning tools.

3.2.4. Identify and support community-based opportunities and initiatives for the development of sustainable livelihood technologies for local application and facilitate the pursuit of those opportunities at the local community level.

*Timeline for implementation:* The eighth meeting of the Conference of the Parties, with further reviews, as appropriate.

#### PHASE II

Consistent with relevant international obligations and national priorities, and in synergy with activities foreseen under the programme areas and cross-cutting issues of the Convention:

3.2.5. Implementation of institutional, administrative, legislative and policy measures and mechanisms to foster an enabling environment in developing countries and countries with economies in transition that would facilitate access to and adaptation of relevant technologies, and that would provide cooperation among developed and developing countries and countries with economies in transition.

3.2.6. Adoption of legal and regulatory frameworks where appropriate and provision of incentives to private-sector actors as well as public research institutions in developed country Parties, with a view to encourage the transfer of technologies to developing countries and countries with economies in transition.

3.2.7. Encourage and facilitate community-to-community sharing and transferring of knowledge and technologies through such means as community personnel exchanges, workshops and publications.

3.2.8. Promotion and advancement of priority access for Parties to the results and benefits arising from technologies based upon genetic resources provided by those Parties, in accordance with Article 19, paragraph 2, of the Convention, and to promote the effective participation in related technological research by those Parties.

3.2.9. Encouragement of scientific and technical research, including joint research programmes with associated jointly held patents or other protection of intellec-

tual property rights as well as other mechanisms to facilitate transfer of technologies that make use of genetic resources and do not cause significant damage to the environment.

3.2.10. Promotion of cooperation and technology transfer through innovative approaches such as Type 2 partnerships or transfers among actors, involving in particular the private sector and civil-society organizations.

3.2.11. Strengthening of national research institutions for the adaptation and further development of imported technologies, including through academic training, consistent with their transfer agreement and international law, as well as the development and use of environmentally sound technologies;

3.2.12. Dissemination of related experiences at national and international levels.

*Timeline for implementation:* The ninth meeting of the Conference of the Parties, then ongoing review as appropriate.

#### PROGRAMME ELEMENT 4: CAPACITY-BUILDING AND ENHANCEMENT

The building or enhancement of technical, scientific, institutional and administrative capacity is an issue of cross-cutting importance for the effective and timely conduct of technology assessments, for the building and strengthening of national or regional technology information systems and for the creation of enabling environments for technology transfer and cooperation. Activities under this programme element should build on existing initiatives and programmes, for instance, under other conventions and international agreements, with a view to maximize synergies and avoid the duplication of work. The long-term benefits arising from technology transfer should be understood as investments by relevant institutions and initiatives.

**OBJECTIVE:** Technical, scientific, institutional and administrative capacity is adequate for the effective cooperation, transfer, diffusion and adaptation of technology as well as technical and scientific cooperation.

**OPERATIONAL TARGET 4.1:** *Technical, scientific, institutional and administrative capacity is adequate for the effective and timely conduct of national technology assessments.*

##### *Activities*

4.1.1. Financial and technical support and training is provided by relevant international, regional and national organizations and initiatives as appropriate for the building or enhancement of capacity for the effective and timely conduct of national technology assessments;

*Main actors:* International, regional and national organizations and funds, as appropriate.

*Timeline for implementation:* Ongoing, starting at the seventh meeting of the Conference of the Parties.

**OPERATIONAL TARGET 4.2:** *Technical, scientific, institutional and administrative capacity is adequate for the development or strengthening and effective operation of national, regional and international information systems for technology transfer and technology cooperation of relevance for the Convention on Biological Diversity.*

#### *Activities*

4.2.1. Assessment of capacity-building needs and opportunities for the development or strengthening and effective operation of national information systems for technology transfer and technology cooperation, including risk analysis and impact assessment.

*Main actors:* Developing country Parties, including least developed countries and small island developing States, and Parties with economies in transition, in collaboration with indigenous and local communities and all relevant stakeholders and with support of relevant international organization as appropriate as well as with support from GEF and relevant international funding organizations.

*Timeline for implementation:* The eighth meeting of the Conference of the Parties.

4.2.2. Financial and technical support as well as training is provided to improve the capacity of national systems of information gathering and dissemination with regard to needs and opportunities for technology transfer, in particular with regard to capacity for the effective application and use of electronic information technologies, in full synergy with existing initiatives and programmes.

*Main actors:* GEF, international, regional and national organizations and funds as appropriate.

*Timeline for implementation:* Ongoing, starting at the eighth meeting of the Conference of the Parties.

**OPERATIONAL TARGET 4.3:** *Technical, scientific, institutional and administrative capacity is adequate for the review of national policies and programmes and the identification of barriers for the transfer of technology of relevance for the Convention on Biological Diversity, capacity-building needs and priority areas for policy action.*

#### *Activities*

4.3.1. Financial and technical support and training is provided by relevant international, regional and national organizations and initiatives as appropriate for the building or enhancement of capacity for the review of existing policies and programmes and the identification of possible impediments to cooperation and the transfer of technology of relevance for the Convention on Biological Diversity, of capacity-building needs and priority areas for policy action.

*Main actors:* Developing country Parties, including least developed countries and small island developing States, and Parties with economies in transition, in collaboration with indigenous and local communities and all relevant stakeholders and

with support of relevant international organizations, as appropriate, as well as with support from GEF and from relevant international funding organizations.

*Timeline for implementation:* The eighth meeting of the Conference of the Parties, then ongoing.

**OPERATIONAL TARGET 4.4:** *Technical, scientific, institutional and administrative capacity is adequate for the implementation of measures and mechanisms that create an environment conducive to private and public sector technology transfer and cooperation, and to the adaptation of transferred technology.*

#### *Activities*

4.4.1. Based on needs and priorities identified by countries, financial and technical support and training is provided by relevant international, regional and national organizations and initiatives as appropriate to foster enabling environments for technology transfer and cooperation, and in particular with regard to:

- (a) Building policy, legal, judicial and administrative capacity;
- (b) Facilitating access to relevant proprietary technologies, consistent with Article 16.2;
- (c) Providing other financial and non-financial incentives for the diffusion of relevant technologies;
- (d) Building capacities of, and empowering indigenous and local communities and all relevant stakeholders with respect to access to and use of relevant technologies, including strengthening of decision-making skills;
- (e) Providing financial and technical support and training to improve the capacity of developing countries and countries with economies in transition national research institutions for the development of technologies as well as for adaptation, diffusion and the further development of imported technologies consistent with their transfer agreement and international law including through fellowships and international exchange programmes;
- (f) Supporting the development and operation of regional or international initiatives to assist technology transfer and cooperation as well as scientific and technical cooperation, particularly those initiatives designed to facilitate South-South cooperation and South-South joint development of new technologies, as well as such cooperation among countries with economies in transition, and cooperation between the South and countries with economies in transition.

*Main actors:* GEF, international, regional and national organizations and funds, as appropriate.

*Timeline for implementation:* Ongoing, starting at the seventh meeting of the Conference of the Parties.

**DECISION VII/30 | Strategic Plan: future evaluation of progress**

*The Conference of the Parties,*

## REVIEW AND EVALUATION

*Recognizing* the need to: (i) facilitate assessment of progress towards the 2010 target, and communication of this assessment; (ii) promote coherence among the various programmes of work of the Convention; and (iii) provide a flexible framework within which national and regional targets may be set, and indicators identified, where so desired by Parties; as well as (iv) the need for a mechanism to review implementation of the Convention,

*Recalling* the statement in the Johannesburg Plan of Implementation that a more efficient and coherent implementation of the three objectives of the Convention and the achievement by 2010 of a significant reduction in the current rate of loss of biological diversity will require the provision of new and additional financial and technical resources to developing countries,

1. *Decides* to develop a framework to enhance the evaluation of achievements and progress in the implementation of the Strategic Plan and, in particular, its mission, to achieve a significant reduction in the current rate of biodiversity loss at global, regional and national levels. The framework includes the following focal areas:

- (a) Reducing the rate of loss of the components of biodiversity, including: (i) biomes, habitats and ecosystems; (ii) species and populations; and (iii) genetic diversity;
- (b) Promoting sustainable use of biodiversity;
- (c) Addressing the major threats to biodiversity, including those arising from invasive alien species, climate change, pollution, and habitat change;
- (d) Maintaining ecosystem integrity, and the provision of goods and services provided by biodiversity in ecosystems, in support of human well-being;
- (e) Protecting traditional knowledge, innovations and practices;
- (f) Ensuring the fair and equitable sharing of benefits arising out of the use of genetic resources; and
- (g) Mobilizing financial and technical resources, especially for developing countries, in particular least developed countries and small island developing States among them, and countries with economies in transition, for implementing the Convention and the Strategic Plan;

Goals and sub-targets will be established, and indicators identified, for each of the focal areas. The goals and sub-targets will complement the existing goals of the Strategic Plan;<sup>230</sup>

2. For the purposes of assessing progress towards the target to achieve by 2010, a significant reduction in the current rate of biodiversity loss, *defines* biodiversity loss as the long-term or permanent qualitative or quantitative reduction in components of biodiversity and their potential to provide goods and services, to be measured at global, regional and national levels;

#### INDICATORS FOR ASSESSING PROGRESS TOWARDS, AND COMMUNICATING THE 2010 TARGET AT THE GLOBAL LEVEL

3. In order to assess progress at the global level towards the 2010 target, and to communicate effectively trends in biodiversity related to the three objectives of the Convention, *agrees* that a limited number of trial indicators, for which data are available from existing sources, be developed and used in reporting, *inter alia*, through the Global Biodiversity Outlook. A balanced set of indicators should be identified or developed, according to the principles for choosing indicators identified by the Expert Group on Indicators and Monitoring (UNEP/CBD/SBSTTA/9/10) referred to in decision VII/8, on monitoring and indicators, to assess and communicate trends in the focal areas listed in paragraph 1. The global application of those indicators as well as the assessment of the progress towards the 2010 target should not be used to evaluate the level of implementation of the Convention in individual Parties or regions. As far as is feasible, the indicators should be identified or developed in such as way that:

- (a) The same indicators may be used at the global, regional, national and local levels as tools for the implementation of the Convention and of national biodiversity strategies and action plans, where so desired by Parties;
- (b) The indicators relate to one or more of the various Programmes of Work of the Convention;
- (c) The indicators should take into consideration relevant Millennium Development Goals and indicators developed by other relevant international processes; and
- (d) Existing data sets are used.

Full use should be made of the report of the London meeting (UNEP/CBD/SBSTTA/9/INF/9), and the notes by the Executive Secretary: on proposed biodiversity indicators relevant to the 2010 target (UNEP/CBD/SBSTTA/9/INF/26); on using existing processes as building blocks in reporting on the 2010 target (UNEP/

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230 These are:

- Goal 1: The Convention is fulfilling its leadership role in international biodiversity issues.
- Goal 2: Parties have improved financial, human, scientific, technical, and technological capacity to implement the Convention.
- 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.
- 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.

CBD/SBSTTA/9/INF/27), on proposed global indicators (UNEP/CBD/COP/7/INF/33), and on monitoring and indicators (UNEP/CBD/SBSTTA/9/10);

4. *Agrees* that the indicators to be tested, identified or developed, are listed in annex I to the present decision. Indicators for immediate testing are listed in column B of annex I; indicators requiring further development are listed in column C of annex I;

5. *Requests* the Subsidiary Body on Scientific, Technical and Technological Advice at its tenth or eleventh meetings to evaluate information on the changes in trends and status of biodiversity, particularly the current rate of biodiversity loss at the global level *inter alia* by reviewing a draft of the Second Global Biodiversity Outlook;

6. *Requests* the Subsidiary Body on Scientific, Technical and Technological Advice at its tenth or eleventh meetings, with the assistance of an ad hoc technical expert group, subject to the availability of the necessary voluntary contributions to:

- (a) Review the use of the indicators listed in annex I, column B, to the present decisions, *inter alia*, by reviewing a draft of the second Global Biodiversity Outlook;
- (b) Identify or develop indicators listed in annex I, column C, to the present decision, ensuring that the full set of indicators is limited in number;

and report on the results to the Conference of the Parties at its eighth meeting;

7. *Requests* the Ad Hoc Open-ended Working Group on Access and Benefit-sharing and the Ad Hoc Open-ended Inter-sessional Working Group on Article 8(j) and Related Provisions of the Convention on Biological Diversity, respectively, to explore the need and possible options for indicators for access to genetic resources and in particular for the fair and equitable sharing of benefits arising from the utilization of genetic resources, and associated innovations, knowledge and practices of indigenous and local communities, and for the protection of innovations, knowledge and practices of indigenous and local communities, and to report the results to the Conference of the Parties at its eighth meeting;

8. *Requests* the Executive Secretary, with the assistance of the World Conservation Monitoring Centre of the United Nations Environment Programme and other relevant international organizations, to

- (a) Prepare the second Global Biodiversity Outlook for publication prior to the eighth meeting of the Conference of the Parties following peer review and review by the Subsidiary Body on Scientific, Technical and Technological Advice at its tenth or eleventh meeting. The second Global Biodiversity Outlook should provide an assessment of progress towards the 2010 biodiversity target at the global level and communicate effectively trends in biodiversity related to the three objectives of the Convention, based on the focal areas listed in paragraph 1 of the present decision, and making use of the indicators listed in annex I below that are successfully developed and tested, information provided in the national reports, as well as information provided by international organizations;

(b) Prepare the necessary background documentation to assist the Subsidiary Body on Scientific, Technical and Technological Advice in the work outlined in paragraph 6 above;

9. *Invites* related conventions, assessment processes and relevant organizations to contribute reports and information that assist the monitoring of progress towards the 2010 targets;

10. *Invites* the World Conservation Monitoring Centre of the United Nations Environment Programme to support the Secretariat in facilitating the compilation of information necessary for reporting on achievement on the 2010 target.

#### GOALS AND SUB-TARGETS TO FACILITATE COHERENCE AMONG THE PROGRAMMES OF WORK, AND TO PROVIDE A FLEXIBLE FRAMEWORK FOR NATIONAL TARGETS

11. *Decides* to establish, goals and sub-targets for each of the focal areas identified in paragraph 1 above, as set out in annex II to the present decision, in order to clarify the 2010 global biodiversity target adopted by decision VI/26, help assess progress towards the target, and promote coherence among the programmes of work of the Convention. Such goals would complement the existing goals of the Strategic Plan;

12. *Requests* the Subsidiary Body on Scientific, Technical and Technological Advice at its tenth or eleventh meetings to:

(a) Review, and, as necessary, further refine the goals and sub-targets, ensuring that they are linked to relevant Millennium Development Goals, initiatives of the World Summit on Sustainable Development, and the goals articulated by other relevant international processes;

(b) Identify indicators for the sub-targets, where possible, by association with the indicators provided in annex I to the present decision;

(c) Refine proposals for the integration of outcome-oriented targets proposals for the integration of outcome-oriented targets into the programmes of work of inland water biodiversity and of marine and coastal biodiversity, according to the framework in annex II and using the approach set out in annex III to the present decision, identifying more precise targets, including, as appropriate, quantitative elements and decides that outcome oriented targets are a key priority for the Subsidiary Body on Scientific, Technical and Technological Advice;

(d) When the programmes of work of the Convention, are reviewed according to the multi-year programme of work of the Conference of the Parties develop recommendations for the integration of outcome-oriented targets into each of the thematic programmes of work, according to the framework in annex II and using the approach set out in annex III to the present decision, identifying more precise targets, including, as appropriate, quantitative elements;

13. *Requests* the Executive Secretary:

(a) To prepare proposals for the integration of goals and targets into the programmes of work when these programmes are due for review according to the



multi-year programme of work of the Conference of the Parties, taking into account that these goals and targets should be viewed as flexible framework within which national and/or regional targets may be developed, according to national priorities and capacities; and

- (b) To make full use of the clearing-house mechanism in promoting technical cooperation to achieve the 2010 targets and facilitating information exchange on progress made;

#### NATIONAL IMPLEMENTATION AND NATIONAL BIODIVERSITY STRATEGIES AND ACTION PLANS

14. *Emphasizes* that the goals and targets referred to in paragraph 12 above 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 diversity between countries;

15. *Invites* Parties and Governments to develop national and/or regional goals and targets, and, as appropriate, to incorporate them into relevant plans, programmes and initiatives, including national biodiversity strategies and action plans;

16. *Invites* Parties and Governments to use existing national indicators or to establish national indicators using the tools (UNEP/CBD/SBSTTA/9/10) referred to in decision VII/8, on monitoring and indicators, and according to their national needs and priorities, to assess progress towards their national/and or regional targets;

17. *Emphasizes* the need for capacity-building, especially in developing countries, in particular the least developed countries and the small island developing States among them, and countries with economies in transition, in order to enable them to implement activities to achieve and monitor progress towards the goals and targets;

18. *Invites* Parties, Governments, international and funding organizations to provide adequate and timely support for the implementation of activities to achieve and monitor progress towards the goals and targets to developing country Parties, in particular the least developed countries and small island developing States among them, and Parties with economies in transition, as appropriate;

19. *Requests* the Executive Secretary to continue to explore ways to expand active support for developing country Parties in particular least developed countries and small island developing States among them, and Parties with economies in transition, where appropriate, in the development, revision and implementation of national biodiversity strategies and action plans. This process should include the commitment and resources of civil society in the development and implementation of national biodiversity strategies and action plans;

20. *Emphasizes* that national biodiversity strategies and action plans, as the primary mechanisms for the implementation of the Convention and the Strategic Plan, should be developed or reviewed with due regard to the relevant aspects of the four goals of the Strategic Plan, and the goals established by this decision, to enable greater contribution to the achievement of the 2010 target, consistent with national needs and priorities; and invites Parties to incorporate the goals, as appropriate, into the national biodiversity strategies and action plans when these are revised;

21. *Invites* developed country Parties continue to provide support to developing country Parties, in particular least developed countries and small island developing States among them, and Parties with economies in transition, as appropriate, to develop national-level indicators;

22. *Requests* the Executive Secretary to report to Conference of the Parties at its eighth meeting on the work required by decision V/20, paragraph 41, to allow further work to be undertaken to identify ways to support the review by Parties of national implementation.

#### REVIEW OF IMPLEMENTATION OF THE CONVENTION

23. *Recognizing the need* to establish a process, for evaluating, reporting and reviewing the Strategic Plan 2002-2010, *decides* to allocate adequate time in subsequent meetings of the Conference of the Parties and the Subsidiary Body on Scientific, Technical and Technological Advice, as well as ad hoc open-ended working groups, as appropriate, and *establishes* an Ad Hoc Open-ended Working Group on Review of Implementation of the Convention, subject to the availability of the necessary voluntary contributions, to consider progress in the implementation of the Convention and the Strategic Plan and achievements leading up to the 2010 target in line with the multi-year programme of work for the Conference of the Parties (decision VII/31), to review the impacts and effectiveness of existing processes under the Convention, such as meetings of the Conference of the Parties, the Subsidiary Body on Scientific, Technical and Technological Advice, national focal points and the Secretariat, as part of the overall process for improving the operations of the Convention and implementation of the Strategic Plan, and to consider ways and means of identifying and overcoming obstacles to the effective implementation of the Convention;

24. *Invites* Parties, other Governments and relevant organizations to submit views on these issues to the Executive Secretary, and requests the Executive Secretary to compile and make available these views for consideration by the Ad Hoc Open-ended Working Group on Review of Implementation of the Convention;

25. *Requests* the Executive Secretary to participate in processes arising from the twenty-second session of the Governing Council of the United Nations Environment Programme relating to consideration of the development and establishment of an intergovernmental strategic plan for implementation support, linked to the outcome of the international environmental governance process, to ensure that it will contribute to the implementation of the Convention;

26. *Decides* to address explicitly the need to provide focused support and improve existing support mechanisms where obstacles to implementation of national biodiversity strategies and action plans have been identified, particularly when considering the results of the evaluation of progress in achievement the goals and mission of the Strategic Plan as well as the goals and sub-targets established in this decision;

27. *Recognizing* in the development of better methods to evaluate progress in the implementation of the Convention that consideration could be given to making full use of the experiences of other multilateral environmental agreements, such as the United Nations Framework Convention on Climate Change, *requests* the Executive Secretary to initiate action as a follow-up to paragraph 41 of decision V/20.

**ANNEX I**  
**PROVISIONAL INDICATORS FOR ASSESSING PROGRESS TOWARDS THE 2010**  
**BIODIVERSITY TARGET**

FOCAL AREA	INDICATOR FOR IMMEDIATE TESTING	POSSIBLE INDICATORS FOR DEVELOPMENT BY SBSTTA OR WORKING GROUPS
<b>Status and trends of the components of biological diversity</b>	Trends in extent of selected biomes, ecosystems and habitats	
	Trends in abundance and distribution of selected species	
		Change in status of threatened species (Red List indicator under development)
		Trends in genetic diversity of domesticated animals, cultivated plants, and fish species of major socioeconomic importance
	Coverage of protected areas	
<b>Sustainable use</b>		Area of forest, agricultural and aquaculture ecosystems under sustainable management
		Proportion of products derived from sustainable sources
<b>Threats to biodiversity</b>	Nitrogen deposition	
		Numbers and cost of alien invasions
<b>Ecosystem integrity and ecosystem goods and services</b>	Marine trophic index	Application to freshwater and possibly other ecosystems
		Connectivity/fragmentation of ecosystems
		Incidence of human-induced ecosystem failure
	Health and well-being of people living in biodiversity-based-resource dependent communities	
	Water quality in aquatic ecosystems	
		Biodiversity used in food and medicine
<b>Status of traditional knowledge, innovations and Practices</b>	Status and trends of linguistic diversity and numbers of speakers of indigenous languages	Further indicators to be identified by WG-8j
<b>Status of access and benefit-sharing</b>		Indicator to be identified by WG-ABS
<b>Status of resource transfers</b>	Official development assistance provided in support of the Convention (OECD-DAC-Statistics Committee)	
		Indicator for technology transfer

**ANNEX II**  
**PROVISIONAL FRAMEWORK FOR GOALS AND TARGETS**

PROTECT THE COMPONENTS OF BIODIVERSITY

GOAL 1: Promote the conservation of the biological diversity of ecosystems, habitats and biomes

Target 1.1: At least 10% of each of the world's ecological regions effectively conserved.

Target 1.2: Areas of particular importance to biodiversity protected.

GOAL 2: Promote the conservation of species diversity

Target 2.1: Restore, maintain, or reduce the decline of populations of species of selected taxonomic groups.

Target 2.2: Status of threatened species improved.

GOAL 3: Promote the conservation of genetic diversity

Target 3.1: Genetic diversity of crops, livestock, and of harvested species of trees, fish and wildlife and other valuable species conserved, and associated indigenous and local knowledge maintained.

PROMOTE SUSTAINABLE USE

GOAL 4: Promote sustainable use and consumption.

Target 4.1: Biodiversity-based products derived from sources that are sustainably managed, and Production areas managed consistent with the conservation of biodiversity.

Target 4.2 Unsustainable consumption, of biological resources, or that impacts upon biodiversity, reduced.

Target 4.3: No species of wild flora or fauna endangered by international trade.

ADDRESS THREATS TO BIODIVERSITY

GOAL 5: Pressures from habitat loss, land use change and degradation, and unsustainable water use, reduced.

Target 5.1: Rate of loss and degradation of natural habitats decreased.

GOAL 6: Control threats from invasive alien species

Target 6.1: Pathways for major potential alien invasive species controlled.

Target 6. 2: Management plans in place for major alien species that threaten ecosystems, habitats or species.

GOAL 7: Address challenges to biodiversity from climate change, and pollution

Target 7.1: Maintain and enhance resilience of the components of biodiversity to adapt to climate change.

Target 7.2: Reduce pollution and its impacts on biodiversity.

#### MAINTAIN GOODS AND SERVICES FROM BIODIVERSITY TO SUPPORT HUMAN WELL-BEING

GOAL 8: Maintain capacity of ecosystems to deliver goods and services and support livelihoods

Target 8.1: Capacity of ecosystems to deliver goods and services maintained.

Target 8.2: biological resources that support sustainable livelihoods, local food security and health care, especially of poor people maintained.

#### PROTECT TRADITIONAL KNOWLEDGE, INNOVATIONS AND PRACTICES

GOAL 9: Maintain socio-cultural diversity of indigenous and local communities

Target 9.1: Protect traditional knowledge, innovations and practices.

Target 9.2: Protect the rights of indigenous and local communities over their traditional knowledge, innovations and practices, including their rights to benefit sharing.

#### ENSURE THE FAIR AND EQUITABLE SHARING OF BENEFITS ARISING OUT OF THE USE OF GENETIC RESOURCES

GOAL 10: Ensure the fair and equitable sharing of benefits arising out of the use of genetic resources

Target 10.1: All transfers of genetic resources are in line with the Convention on Biological Diversity, the International Treaty on Plant Genetic Resources for Food and Agriculture and other applicable agreements.

Target 10.2: Benefits arising from the commercial and other utilization of genetic resources shared with the countries providing such resources.

#### ENSURE PROVISION OF ADEQUATE RESOURCES

GOAL 11: Parties have improved financial, human, scientific, technical and technological capacity to implement the Convention<sup>231</sup>

Target 11.1: New and additional financial resources are transferred to developing country Parties, to allow for the effective implementation of their commitments under the Convention, in accordance with Article 20.

Target 11.2: Technology is transferred to developing country Parties, to allow for the effective implementation of their commitments under the Convention, in accordance with its Article 20, paragraph 4.

<sup>231</sup> This is the existing goal 2 of the Strategic Plan of the Convention on Biological Diversity.

**ANNEX III****GENERAL APPROACH FOR THE INTEGRATION OF TARGETS INTO THE PROGRAMMES OF WORK OF THE CONVENTION**

The following steps would be carried out for each thematic programme of work, and for other programmes of work, as appropriate:

- (a) *Vision, mission and outcome-oriented targets:*
- (i) Identification of the overall vision (or long-term goal) to be ultimately achieved for the biome/issue covered by the programme of work, consistent with the Purpose of the Strategic Plan;
  - (ii) Identification of a 2010 outcome-oriented global target specific to the scope of the programme of work and consistent with the mission of the Strategic Plan;
  - (iii) Identification of a limited number of outcome-oriented targets related to the status and trends of biodiversity and its components, threats to biodiversity, and goods and services provided by biodiversity and ecosystems within the scope of the programme of work. Where appropriate, quantitative sub-targets should be established. The targets should be assigned to a number of goals according to the proposed headings in annex I above. Where possible the sub-targets of annex II above should be incorporated into the work programmes without modification to avoid unnecessary proliferation of targets. Where appropriate, identification of targets could draw upon the approach used to develop the Global Strategy for Plant Conservation. However, this process does not imply that all targets in annex I and the Global Strategy for Plant Conservation should be applied in every programme of work. Rather, targets may highlight broad strategic issues and/or particularly urgent priority issues, and each target should be associated with one or more indicators, which can draw upon existing data.
- (b) *Relationship between the programme of work, its targets, and other processes:*
- (i) Examination of how the programme of work contributes to particular Millennium Development Goals and associated targets;
  - (ii) A brief analysis of how the programme of work, and its targets, relates to the elements of the Plan of Implementation of the World Summit on Sustainable Development, categorizing such elements as follows:
    - Elements to be integrated into the programme of work (these elements should be fully within the scope of the programme of work), specifying which of these represent outcome-oriented biodiversity related targets;
    - Elements which complement the goals of the programme of work; and
    - Elements representing goals to which the programme of work contributes;

- (iii) A brief analysis of how the programme of work, and its targets, relates to the objectives, plans and targets of other multilateral environmental agreements and other relevant agreements, using the same categorization as in subparagraph (b) (ii) above.
- (c) *Intermediate output- or process-oriented targets, milestones and deadlines for the activities of the programme of work:* Identification of a number of process- or output-oriented targets, milestones and deadlines, relating to the specific objectives, programme elements, and/or activities of the programme of work, according to the structure and needs of each programme of work.

## DECISION VII/31 | **Multi-year programme of work of the Conference of the Parties to 2010**

### *The Conference of the Parties*

1. *Decides* that when undertaking in-depth reviews of the existing thematic areas and cross-cutting issues, items identified as priorities by the World Summit on Sustainable Development, should be considered in relation to the existing programmes of work;\* including the use, as appropriate, of relevant indicators at the national, regional and global level;
2. *Also decides* that the Conference of the Parties identifies, for each upcoming meeting, appropriate ways to address, including within the Ministerial Segment, issues of overarching importance, particularly the relevant socio-economic issues identified by the World Summit on Sustainable Development;
3. *Further decides* that, at each of its meetings until 2010, the Conference of the Parties, possibly including its Ministerial Segment, should assess, as an explicit agenda item, the state of progress, including obstacles, in achieving the goals of the Strategic Plan and progress towards the achievement of the Convention's 2010 target and relevant Millennium Development Goals and that, when considering progress in achievement, it shall also review the effectiveness of the Convention processes in facilitating this achievement;
4. *Decides* that, to the extent feasible, a maximum of six items for in-depth review should be considered at any meeting of the Conference of the Parties and that cross-cutting issues are dealt with in coherent manner taking into account the different requirements and characteristics of the issues;
5. *Agrees* that:
  - (a) In its reviews of the programmes of work it will focus on:
    - (i) Assessing the implementation and effectiveness of the programme of work;
    - (ii) Updating the programme of work if necessary, by retiring or replacing activities and by making adjustments to reflect changes in the international context;

\* The term "programme of work" includes work on thematic and cross-cutting issues.

- (iii) Providing practical support for national and regional implementation.
- (b) In agenda items on strategic issues, one or more priority themes will be selected for each meeting of the Conference of the Parties, taking into account the importance of that theme for enhancing the implementation of the Strategic Plan and National Biodiversity Strategies and Action Plans;
- 6. *Also decides* that some flexibility in the multi-year programme of work should be retained in order to accommodate urgent emerging issues;
- 7. *Adopts* the multi-year programme of work annexed to the present decision;
- 8. *Requests* the Executive Secretary to develop a preparatory process for the work of the Subsidiary Body on Scientific Technical and Technological Advice on island biodiversity which:
  - (a) Includes, *inter alia*, electronic forums, an Ad Hoc Technical Expert Group in mid-2004, and a liaison group held immediately after the Mauritius meeting in August/September 2004
  - (b) Allows input from the widest possible range of Parties, countries, and relevant organizations, stakeholders and indigenous and local communities, and particularly from small island developing States;
  - (c) Will provide technical advice for use by Parties on key issues facing island biodiversity managers as well as a draft programme of work and related draft recommendations;
  - (d) Will draw on the outcome of the international meeting of the small island developing States for the review of the Barbados Programme of Action, which will take place in Mauritius in August/September 2004.



**ANNEX**  
**PROPOSED MULTI-YEAR PROGRAMME OF WORK OF THE CONFERENCE OF**  
**THE PARTIES UNTIL 2010**

	NEW ISSUES FOR IN-DEPTH CONSIDERATION	IN-DEPTH REVIEW OF ONGOING WORK UNDER THE THEMATIC AREAS AND CROSS-CUTTING ISSUES	STRATEGIC ISSUES FOR EVALUATING PROGRESS OR SUPPORTING IMPLEMENTATION*
<b>COP 8</b>	1. Island biodiversity	1. Dry and sub-humid lands biodiversity 2. Global Taxonomy Initiative 3. Access and benefit sharing 4. Education and public awareness 5. Article 8(j) and related provisions	1. Progress in implementation of the Strategic Plan and follow-up on progress towards the 2010 target and relevant Millennium Development Goals (global targets and related measures, such as monitoring and indicators and trends of biodiversity) 2. Refining mechanisms to support implementation (e.g. financial mechanism, clearing-house mechanism, technology transfer, capacity-building)
<b>COP 9</b>		1. Agricultural biodiversity 2. Global Strategy for Plant Conservation 3. Invasive alien species 4. Forest biodiversity 5. Incentives 6. Ecosystem approach	1. Progress in implementation of the Strategic Plan and follow-up on progress towards the 2010 target and relevant Millennium Development Goals (global targets and related measures, such as monitoring and indicators and trends of biodiversity) 2. Refining mechanisms to support implementation (e.g. financial mechanism, clearing-house mechanism, technology transfer, capacity-building)
<b>COP 10</b>		1. Inland waters biodiversity 2. Marine and coastal biodiversity 3. Sustainable use 4. Protected areas 5. Mountain biodiversity 6. Climate change	1. Progress in implementation of the Strategic Plan and follow-up on progress towards the 2010 target and relevant Millennium Development Goals (global targets and related measures, such as monitoring and indicators and trends of biodiversity) 2. Refining mechanisms to support implementation (e.g. financial mechanism, clearing-house mechanism, technology transfer, capacity-building)

\* THE CONFERENCE OF THE PARTIES WILL CONSIDER SELECTED RELEVANT ITEMS AT EACH OF ITS MEETINGS.

## **ANNEX II**

### **TERMS OF REFERENCE OF THE AD HOC TECHNICAL EXPERT GROUP ON ISLAND BIODIVERSITY**

#### **A. Mandate**

Guided by the Strategic Plan, the Plan of Implementation of the World Summit on Sustainable Development and the Millennium Development Goals; and taking into account *inter alia* the Convention's 2010 target and related decisions, the ongoing programmes of work of the Convention on thematic and cross-cutting issues, work being carried out in the framework of the Barbados Programme of Action, and the specificities of islands as compared to main lands, the ad hoc technical expert group will:

- (a) Draw on material provided by the Secretariat which reviews, *inter alia*, the outcomes of the regional and inter-regional preparatory meetings for the 10 year review of the Barbados Programme of Action, and the status and trends of, and major threats to, island biological diversity, and identifies those characteristics;
- (b) Review how ongoing work on the different thematic areas and cross-cutting issues under the Convention on Biological Diversity and related work being carried out in the framework of other processes, in particular the Barbados Programme of Action, are contributing to the implementation of the three objectives of the Convention in island ecosystems; identify significant gaps and constraints, paying particular attention to mechanisms used to support implementation (e.g., financial mechanism, clearing-house mechanism, technology transfer, capacity-building);
- (c) Develop proposals for a programme of work on on island biological diversity incorporating priority actions to enhance conservation of island biodiversity, sustainable use of its components and the fair and equitable sharing of benefits from the utilization of genetic resources from islands. In carrying out this work:
  - (i) develop global outcome- and process-oriented targets and related indicators pertaining to the priority actions;
  - (ii) identify relevant actors and partners for the implementation of the programme of work, synergies with other programmes and ways to draw on existing best practices;
  - (iii) propose ways to link with the Secretary General's WEHAB ("water, energy, health, agriculture, and biodiversity") initiative, and support the achievement of the Millennium Development Goals and other relevant objectives identified by the World Summit on Sustainable Development.

#### **B. Duration of work**

The work of the Ad Hoc Technical Expert Group on Island Biological Diversity should be initiated immediately after approval of its terms of reference by the Conference of the Parties, and completed by August 2004. The report of the expert group will be forwarded for information to the international meeting of the

small island developing States for the review of the Barbados Programme of Action, which will take place in Mauritius in August 2004.

## **DECISION VII/32 | The programme of work of the Convention and the Millennium Development Goals**

*The Conference of the Parties,*

*Recognizing* that world leaders at the Millennium Summit have established the Millennium Development Goals (MDGs) as the focus of global efforts to combat poverty, hunger, disease, illiteracy, environmental degradation and discrimination against women, and that the Millennium Development Goals agenda provides the framework for the entire United Nations system to work coherently toward these common ends,

*Welcoming* the Johannesburg Plan of Implementation of the World Summit on Sustainable Development and in particular its recognition of the critical and essential role played by biodiversity in sustainable development, poverty eradication, human well-being and the livelihood and cultural integrity of people,

*Noting* that achievement of the Millennium Development Goals, in particular goal 1 (Combating poverty and hunger), Goal 6 (Combating HIV/AIDS, malaria and other diseases), and goal 7 (Ensuring environmental sustainability) are dependent on the effective 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,

*Recalling* that the Convention on Biological Diversity is the key international instrument for the integration of biodiversity-related issues into the Millennium Development Agenda,

*Concerned* that if development activities are not undertaken in a manner consistent with the objectives of the Convention on Biological Diversity, they may at the same time further degrade biological diversity and undermine sustainability and hence limit achievement of the Millennium Development Goals,

*Noting* the linkage between biodiversity, food and nutrition and the need to enhance sustainable use of biodiversity to combat hunger and malnutrition, and thereby contribute to target 2 of goal 1 of the Millennium Development Goals (To halve between 1990 and 2015, the proportion of people who suffer from hunger),

1. *Urges* Parties, Governments, international financial institutions, donors, and relevant intergovernmental organizations, as a contribution towards the Millennium Development Goals, to implement development activities in ways that are consistent with, and do not compromise, the achievement of the objectives of the Convention on Biological Diversity and the 2010 target, including by improving environmental policies in relevant development agencies and sectors such as through integrating concerns relating to biodiversity and the Millennium Development Goals more directly into environmental impact assessments, strategic envi-

ronmental assessments and other such tools, including at the national level through the national strategies for sustainable and the poverty reduction strategies and programmes.

2. *Requests* the Executive Secretary:

- (a) To work closely with the United Nations Development Programme, the United Nations Environment Programme, the United Nations Educational, Scientific and Cultural Organization, the Millennium Project of the Secretary-General of the United Nations and others to find ways to more effectively communicate the importance of biodiversity in achieving the Millennium Development Goals, and to identify and communicate the relationship between biodiversity and human development targets at all levels;
- (b) To explore with the Secretary General of the United Nations, the opportunity to establish the 2010 target as an interim milestone in achieving the Millennium Development Goal 7 of ensuring environmental sustainability by 2015; and
- (c) To work closely with the United Nations Development Programme, the United Nations Environment Programme, the Millennium Project of the Secretary General of the United Nations and others to find ways to use the 2010 targets and indicators to help achieve target 9 (to “reverse the loss of environmental resources”) of Millennium Development Goal 7 (to “ensure environmental sustainability”), and the other relevant Millennium Development goals, in particular Goal 1 to halve poverty and hunger, and the health-related goals;
- (d) To continue to work together with the United Nations Department of Economic and Social Affairs, the Food and Agriculture Organization of the United Nations and with other organizations, and to continue to represent the Convention at sessions of the Commission on Sustainable Development in order that biodiversity considerations are fully integrated into the work of the cycle of Commission at the twelfth session of the Commission;

3. *Invites* Parties to promote the integration of the relevant Millennium Development Goals into the implementation of the programmes of work of the Convention;

4. *Urges* Parties to report on their actions at the national level to link efforts to achieve relevant Millennium Development Goals and the objectives of the Convention on Biological Diversity in their next national report;

5. *Requests* the Executive Secretary, to take this into account when revising the format for national reports;

6. *Noting with appreciation* the ongoing initiatives of the Executive Secretary, *requests* the Executive Secretary to publish the full results of the study on “The programme of work of the Convention and the Millennium Development Goals,” summarized in UNEP/CBD/COP/7/20/Add.1, and to promote further the importance of biodiversity to sustainable development, livelihoods, food security, poverty reduction and eradication in all relevant forums and using a variety of appropriate media including, *inter alia*, making full use of the clearing-house mechanism and formalizing relevant activities under the programme of work for implementation and outreach, including communication education and public awareness;

7. *Requests* the Executive Secretary, in collaboration with the Food and Agriculture Organization of the United Nations and the International Plant Genetic Resources Institute, and taking into account ongoing work, to undertake the necessary consultations and bring forward options for consideration by the Conference of the Parties at its eighth meeting for a cross-cutting initiative on biodiversity for food and nutrition within the existing programme of work on agricultural biodiversity of the Convention on Biological Diversity, and to work together with relevant organizations, in order to strengthen existing initiatives on food and nutrition, enhance synergies and fully integrate biodiversity concerns into their work, with a view to the achievement of target 2 of Millennium Development Goal 1 and other relevant Millennium Development Goals.

## DECISION VII/33 | Operations of the Convention

*The Conference of the Parties,*

*Recalling* its decision VI/27 B on operations of the Convention,

*Recalling also* paragraph 1 of decision IV/17 by which the Conference of the Parties endorsed the administrative arrangements between the United Nations Environment Programme and the Secretariat of the Convention, contained in the annex to that decision,

*Further recalling* paragraph 5 of decision V/20 by which it made a number of changes to rule 21 of the rules of procedure regarding the election and terms of office of members of the Bureau of the Conference of the Parties,

*Recalling also* paragraph 6 of decision V/20 by which it decided to review the effectiveness of these changes, in light of experience, at its seventh meeting,

*Noting* that there has not been enough experience with the operation of the new arrangements to enable the Conference of the Parties to reach a firm conclusion with respect to the effectiveness of the changes to rule 21 of the rules of procedure,

1. *Decides* to retire the decisions and elements of decisions adopted at its third and fourth meetings listed in the annex to the present decision;
2. *Decides* to adopt a phased process of consolidation of its decisions, to be undertaken under the guidance of the Bureau, with a view to completing the process of consolidating all its decisions by the year 2010;
3. *Requests* the Executive Secretary to make proposals to the eighth meeting of the Conference of the Parties regarding the retirement of decisions and elements of decisions taken at its fifth and sixth meetings and to communicate such proposals to Parties, Governments and relevant international organizations at least sixth months prior to its eighth meeting;
4. *Requests* the Executive Secretary, under the guidance of the Bureau, to propose draft consolidated decisions in the areas of forest biological diversity; access to genetic resources and benefit-sharing; and guidance to the financial mechanism for

the consideration of the Conference of the Parties at its eighth meeting and to communicate the proposed draft consolidated decisions to Parties, Governments and relevant international organizations for their review and comments at least six months prior to its eighth meeting;

5. *Invites* Parties, Governments and relevant international organizations to submit to the Executive Secretary written comments on the proposals referred to in paragraphs 3 and 4 above, at least three months prior to its eighth meeting;

6. *Invites* the Executive Director of the United Nations Environment Programme and the Executive Secretary of the Convention on Biological Diversity to review and revise the administrative arrangements between the United Nations Environment Programme and the Secretariat of the Convention and report thereon to the Conference of the Parties at its eighth meeting;

7. *Decides* to review the effectiveness of the changes to rule 21 of the rules of procedure at its eighth meeting;

8. *Decides also* to review rule 4 of the rules of procedure relating to the periodicity of its ordinary meetings at its eighth meeting and, at that occasion, if needed, make the necessary adjustments in the multi-year programme of work of the Conference of the Parties up to 2010 regarding the periodicity of its meetings;

9. *Requests* the Executive Secretary to seek the views of Parties on options for a mechanism for setting priorities during the consideration of agenda items by the Conference of the Parties with a view to providing the budget group with clear guidance on how to address activities with financial implications, and report thereon to the Conference of the Parties at its eighth meeting;

10. *Emphasizes the importance* of convening regional preparatory meetings prior to meetings of the Conference of the Parties and *requests* the Executive Secretary to make the necessary arrangements for such regional meetings prior to the eighth meeting of the Conference of the Parties.

## **ANNEX**

### **DECISIONS AND ELEMENTS OF DECISIONS ADOPTED BY THE CONFERENCE OF THE PARTIES AT ITS THIRD AND FOURTH MEETINGS TO BE RETIRED**

#### DECISIONS OF THE THIRD MEETING OF THE CONFERENCE OF THE PARTIES:

Decision III/2

Decision III/3, paras. 1, 2 and 4 and 5

Decision III/4, paras. 1, 3, 5, 8, 10 and 14.

Decision III/5, para. 7

Decision III/6, paras. 2(b) and 6.

Decision III/7

Decision III/8, para. 2

Decision III/9, paras. 8 and 11

Decision III/11, paras. 1 to 12, 18, 23 and 24

Decision III/12

Decision III/13  
 Decision III/14, paras. 3, 6, 8 to 12  
 Decision III/15, paras. 1, 2 and 7  
 Decision III/16  
 Decision III/17, paras. 3 to 6  
 Decision III/18, paras. 1, 5, 7 and 8  
 Decision III/19  
 Decision III/20  
 Decision III/21, paras. 1, 4 to 7, 9 and 11  
 Decision III/22  
 Decision III/24, paras. 1 to 4  
 Decision III/25  
 Decision III/26  
 Decision III/27

DECISIONS OF THE FOURTH MEETING OF THE CONFERENCE OF THE PARTIES:

Decision IV/1 A, paras. 1, 2, 3 and 5  
 Decision IV/1 B, paras. 1 and 2  
 Decision IV/1 C, paras. 2, 5 and 6  
 Decision IV/1 D, paras. 1 and 3  
 Decision IV/2, paras. 7, 9(d), 10(a), 10(c), 10(f), 10(j) and 10(k)  
 Decision IV/3  
 Decision IV/4, para. 1, 4 to 5, 8, 10, and annex 1  
 Decision IV/5, para. I(1), I(2), II(1) to II(3) and annex  
 Decision IV/6, paras. 1, 2, 5, 7 to 13  
 Decision IV/7  
 Decision IV/8, paras. 1, 2, 3 and 6(d)  
 Decision IV/9, paras. 5, 6, 8 to 11, 14 and 16  
 Decision IV/10, Part A, paras. 1(b), 1(d), 1(e), 1(g), 5(a), (5(b), 5(c)  
 Decision IV/10, Part B, para. 6  
 Decision IV/10, Part C, paras. 2 to 4, 8 to 11  
 Decision IV/11, para. 3  
 Decision IV/12  
 Decision IV/14, paras 1 to 3  
 Decision IV/15, paras 1 to 3, 7 and 11 to 17  
 Decision IV/16, paras 1 to 4, 10, 16, 17, 19 to 21  
 Decision IV/17, paras 2 to 7, 10 to 15  
 Decision IV/18  
 Decision IV/19

**DECISION VII/34 | Administration of the Convention and the budget for the programme of work for the biennium 2005–2006***The Conference of the Parties*

1. *Welcomes* the annual contribution of US\$ 1,000,000 from the host country Canada and the Province of Quebec to the operation of the Secretariat, of which \$835,000 has been allocated per annum to offset contributions from the Parties to the Convention for the biennium 2005–2006;
2. *Approves* a core (BY) programme budget of US\$ 10,497,800 for the year 2005 and of US\$ 10,918,500 for the year 2006, for the purposes listed in the table 1 below;
3. *Adopts* the scale of assessments for the apportionment of expenses for 2005 and 2006 as contained in the table 5 below;
4. *Approves* a Secretariat staffing table for the programme budget contained in table 2 below, and requests that all staff positions be filled expeditiously;
5. *Notes* the recommendation of the Bureau of the sixth meeting of the Conference of the Parties to reappoint the current Executive Secretary. The Conference of the Parties *further invites* the President of the Conference of the Parties to consult with the Executive Director of the United Nations Environment Programme and liaise with the Office of the Secretary-General of the United Nations on future appointments;
6. *Decides* to set the working capital reserve<sup>232</sup> at a level of 5 per cent of the core budget (BY Trust Fund) expenditure, including programme support costs;
7. *Approves* a drawing of US\$ 4 million from the unspent balances or contributions (“carry-over”) from previous financial periods to cover part of the 2005–2006 budget;
8. *Authorizes* the Executive Secretary to transfer resources among the programmes between each of the main appropriation lines set out in the table 1 below 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. This authority to transfer shall not be applicable to transfers to/from the appropriation line “shared costs”;
9. *Notes with appreciation* the work of the Executive Secretary to identify categories of costs in the budget documents prepared for the consideration of the seventh meeting of the Conference of the Parties and *requests* the Executive Secretary to further define their nature and scope;
10. *Calls upon* the Executive Secretary to present to the eighth Conference of the Parties the results of further work to develop a secretariat-wide modality and tracking system for differentiating the costs for the secretariat and other services, identified as “shared” in table 1 below, between those that are common to the Con-

232 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.



vention and its Cartagena Protocol, which are borne by Parties to the Convention, and those that are distinct to each instrument, and invites Parties to provide the Secretariat with their views in this regard, and further *invites* the Executive Secretary to share the outcomes of this work with Parties to the Cartagena Protocol;

11. *Directs* the Executive Secretary, in presenting the proposed budget for the biennium 2007-2008 to the eighth Conference of the Parties, to use the modality and tracking mechanism, developed in paragraph 9 above, to apportion the line identified as “shared” in table 1 below to either the common costs to be borne by the Parties to the Convention or to costs that are distinct to each instrument;

12. *Notes* the need for the development of safeguards for the use and or distribution of common resources for secretariat and other services between the Convention and its Cartagena Protocol and *calls* on the Executive Secretary to make proposals for such safeguards within the Convention budget for the consideration of the eighth Conference of the Parties;

13. *Notes with concern* that a number of Parties have not paid their contributions to the core budget (BY Trust Fund) for 2004 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 has 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, *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 eighth meeting;

14. *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);

15. *Decides* that, with regard to contributions, due from 1 January 2001 onwards, Parties whose contributions are in arrears for two (2) or more years will:

- (a) Not be eligible to become a member of any bureau of the Conference of the Parties or its subsidiary bodies; and
- (b) Not receive any hard copies of documents from the Secretariat;

Subparagraphs (a) and (b) above will only apply in the case of Parties that are not least developed countries or small island developing States;

16. *Authorizes* the Executive Secretary to enter into arrangements with any Party whose contributions are in arrears for two or more years to mutually agree on a “schedule of payments” for such a Party, to clear all outstanding arrears, within six years depending on the financial circumstance of the Party in arrears and pay future contributions by the due date, and report on the implementation of any such arrangement to the next meeting of the Bureau and to the Conference of the Parties;

17. *Decides* that a Party with an agreed arrangement in accordance with paragraph 16 above and that is fully respecting the provisions of that arrangement will not be subject to the provisions of paragraph 15 above;

18. *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;

19. *Decides* to fund, upon request, from the core budget (BY) the participation of members of the bureaux of the Conference of the Parties and the Subsidiary Body on Scientific Technical and Technological Advice at the inter-sessional meetings of the respective bureaux;

20. *Decides* that the trust funds (BY, BE, BZ) for the Convention shall be extended for the period of two years, beginning 1 January 2006 and ending 31 December 2007;

21. *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 2004 for the calendar year 2005 and by 1 October 2005 for the calendar year 2006 the contributions required to finance expenditures approved under paragraph 2 above, as offset by amounts in paragraphs 1 and 7, 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;

22. *Urges* all Parties and States not Parties to the Convention, as well as governmental, intergovernmental and non-governmental organizations and other sources, to contribute to the trust funds of the Convention and the Cartagena Protocol;

23. *Takes note* of the funding estimates for the:

(a) Special Voluntary Trust Fund (BE) for Additional Voluntary Contributions in Support of Approved Activities for the Biennium 2005-2006 specified by the Executive Secretary and included in table 3 below;

(b) Special Voluntary Trust Fund (BZ) for Facilitating Participation of Developing Country Parties, in particular the Least Developed and the Small Island Developing States amongst them, and other Parties with Economies in Transition, for the biennium 2005-2006, as specified by the Executive Secretary and included in table 4 below;

and *urges* Parties to make contributions to these funds;

24. *Endorses* the decisions of the Bureau of the sixth 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\$ 2,436,000 from the BY Trust Fund, of which US\$ 878,259 was spent, to fund inter-sessional activities, which were not envisaged and therefore for which no budgetary allocations were approved by the Conference of the Parties at its sixth 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;

25. *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 2005-2006, 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 2005–2006, in priorities identified in the core budget (BY Trust Fund);

26. *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 2005-2006, 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;

27. *Requests* the Executive Secretary, in accordance with rule 14 of the rules of procedure, to provide Parties with an indication of the administrative and financial implications of decisions to be referred by the Subsidiary Body on Scientific, Technical and Technological Advice; an ad hoc open-ended working group; or an ad hoc technical expert group for adoption by the Conference of the Parties, that may have administrative and budgetary implications that cannot be met from existing resources within the core budget (BY Trust Fund);

28. *Requests* the Executive Secretary to prepare and submit a budget, taking fully into account paragraphs 9, 10, 11 and 12 above, for the programme of work for the biennium 2007–2008 for the consideration of the Conference of the Parties at its eighth meeting, and to report on income and budget performance as well as any adjustments made to the Convention budget for the biennium 2005–2006;

29. *Welcomes* the development and continuation of the fellowship programme as a means of enabling developing country Parties and countries with economies in transition to send their nationals to the Secretariat for the purposes of enhancing their understanding of the Convention and for increasing awareness of biodiversity and related issues;

30. *Notes* that the Junior Professional Officer programme and the internship programme afford an opportunity for Parties to learn about and further develop an understanding of the thematic or cross-cutting issues covered under the Convention;

31. *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.

**TABLE 1: BIENNIUM BUDGET OF THE TRUST FUND FOR THE CONVENTION ON BIOLOGICAL DIVERSITY 2005–2006**

EXPENDITURES	2005 (THOUSANDS OF US\$)	2006
<b>I Programmes</b>		
Executive direction and management	870.6	926.5
Scientific, technical and technological matters	1,873.2	1,910.1
Social, economic and legal matters	1,641.4	1,048.8
Implementation and outreach	886.8	946.1
Resource management and conference services	588.7	1,504.3
Shared costs	3,267.1	3,326.6
<b>SUB-TOTAL (I)</b>	<b>9,127.8</b>	<b>9,662.4</b>
<b>II Programme support charge 13%</b>	<b>1,186.6</b>	<b>1,256.1</b>
<b>SUB-TOTAL (II)</b>	<b>1,186.6</b>	<b>1,256.1</b>
<b>III Working capital reserve (5%)</b>	<b>183.4</b>	<b>–</b>
<b>SUB-TOTAL (III)</b>	<b>183.4</b>	<b>–</b>
<b>GRAND TOTAL (I + II + III)</b>	<b>10,497.8</b>	<b>10,918.5</b>
Less contribution from the host country	835.0	835.0
Less savings from previous years (surplus)	2,000.0	2,000.0
<b>NET TOTAL (AMOUNT TO BE SHARED BY PARTIES)</b>	<b>7,662.8</b>	<b>8,083.5</b>

PRIORITIES IDENTIFIED IN THE CORE BUDGET (US\$ 3,306,720 INCLUDING 13% PROGRAMME SUPPORT COSTS AND 5% WORKING CAPITAL RESERVE)

- MEETINGS OF THE BUREAU OF THE CONFERENCE OF THE PARTIES
- MEETINGS OF THE BUREAU OF THE SUBSIDIARY BODY ON SCIENTIFIC, TECHNICAL AND TECHNOLOGICAL ADVICE
- MEETINGS OF THE SUBSIDIARY BODY ON SCIENTIFIC, TECHNICAL AND TECHNOLOGICAL ADVICE
- OPEN-ENDED AD HOC WORKING GROUP ON ARTICLE 8(J) AND RELATED PROVISIONS
- OPEN-ENDED AD HOC WORKING GROUP ON ACCESS AND BENEFIT-SHARING
- EIGHTH MEETING OF THE CONFERENCE OF THE PARTIES

**TABLE 2: SECRETARIAT STAFFING REQUIREMENTS FOR THE CONVENTION FROM THE CORE BUDGET**

DESCRIPTION	2005	2006
<b>A. Professional category</b>		
ASG	1	1
D-1	3	3
P-5	4	4
P-4	16	16
P-3	9	9
P-2	0	0
<b>TOTAL PROFESSIONAL CATEGORY</b>	<b>33</b>	<b>33</b>
<b>B. Total General Service category</b>	<b>26</b>	<b>26</b>
<b>TOTAL (A + B)</b>	<b>59</b>	<b>59</b>

**TABLE 3: SPECIAL VOLUNTARY TRUST FUND (BE) FOR ADDITIONAL VOLUNTARY CONTRIBUTIONS IN SUPPORT OF APPROVED ACTIVITIES FOR THE BIENNIUM 2005–2006**

DESCRIPTION	2005	2006
<b>1. Meetings/workshops</b>		
<b>Executive Direction and Management</b>		
Regional meetings for COP 8		\$40,000
<b>Scientific Technical and Technological Matters</b>		
Ad Hoc Open-ended Working Group on Protected Areas <sup>1,2</sup>	\$370,000	
2nd AHTEG on review on forest biological diversity <sup>3</sup>		\$60,000
Regional synergy workshops with UNCCD and UNFCCC	\$120,000	
Regional training courses jointly with UNCCD and UNFCCC to promote synergy at the national level		\$120,000
AHTEG on implementation of integrated marine and coastal areas management	\$60,000	
AHTEG on invasive alien species <sup>4</sup>		\$60,000
AHTEG on indicators—further evaluation of progress	\$60,000	
Development of a preparatory process on island biodiversity for SBSTTA <sup>5</sup>	\$100,000	
<b>Social, Economic and Legal Matters</b>		
Ad Hoc Open-ended Working Group on Access and Benefit-sharing <sup>6,7</sup>		\$370,000
Four regional technical expert workshops on ecosystem services assessment, financial costs and benefits associated with conservation of biodiversity, and sustainable use of biological resources	\$160,000	
Organization of regional workshops on the composite report on the status and trends of indigenous knowledge	\$160,000	
Steering committee with indigenous and local communities to assist in the completion of the report	\$40,000	
Capacity-building and training workshops at the local, national, and subregional levels	\$160,000	\$160,000
Workshop on cultural, environmental and social impact assessments based on the Akwé: Kon Voluntary Guidelines	\$80,000	
Meeting of Legal and Technical Experts on Liability and Redress		\$80,000
<b>Implementation and Outreach</b>		
Ad Hoc Open-ended Working Group on Review of Implementation of the Convention <sup>8</sup>		\$250,000

*continues...*

DESCRIPTION	2005	2006
Regional workshops on scientific and technical cooperation	\$200,000	\$ 200,000
Workshops for the development of national level CEPA skills	\$300,000	
Informal advisory committee on CEPA		\$60,000
<b>2. Staff</b>		
Agricultural biodiversity Programme Officer (FAO)	\$146,500	\$150,900
CEPA Programme Officer	\$133,300	\$137,300
GIS specialist and database manager	\$133,300	\$137,300
<b>3. Consultants</b>		
Complete phase I 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 biological diversity	\$30,000	
Second phase of the composite report		\$40,000
Preparation of technical studies on role of intellectual property rights	\$10,000	
Development of web pages/print media that provide access to information on relevant initiatives and databases for technology transfer	\$5,000	
User's manual on biodiversity and tourism		\$20,000
Third review of the financial mechanism	\$150,000	
Update the strategic plan of the clearing-house mechanism to 2009	\$25,000	
Examine ways to develop regional portals to visualize and exchange national and regional cartographic information from all thematic areas	\$50,000	
Advice on how the clearing-house mechanism can make relevant information interoperable among the three Rio conventions	\$6,000	
Clearing-house mechanism—translation and maintenance of the Convention Website	\$100,000	\$25,000
<b>4. Publications</b>		
Publication of composite report guidelines as a booklet in the official languages of the United Nations	\$ 10,000	
Second edition of the Global Biodiversity Outlook		\$300,000
Development of a peer-reviewed web-based "sourcebook" for the ecosystem approach, accessible through the clearing-house mechanism; and production of hard copies and CD-ROM	\$ 40,000	

DESCRIPTION	2005	2006
CEPA exchange mechanisms—publications		\$40,000
User's manual on biodiversity and tourism		\$10,000
Regional report on the Arctic region		\$10,000
<b>5. Equipment</b>		
Enhanced capacity of the clearing-house mechanism to improve the infrastructure for data and information management for accurate and monitoring of mountain biological diversity	\$70,000	
CEPA electronic portal		\$100,000
<b>SUB-TOTAL I</b>	<b>\$2,753,100</b>	<b>\$2,336,500</b>
<b>II. Programme support costs (13%)</b>		
<b>SUB-TOTAL II</b>	<b>\$357,903</b>	<b>\$303,745</b>
<b>III. Working capital reserve (5%)</b>		
<b>SUB-TOTAL III</b>	<b>\$155,550</b>	<b>\$132,012</b>
<b>TOTAL COST (I + II + III)</b>	<b>\$3,266,553</b>	<b>\$2,772,257</b>

- 1 FUNDING PLEDGED BY ITALY.
- 2 GUATEMALA PLEDGED FUNDING FOR AN ADDITIONAL MEETING ON PROTECTED AREAS, BACK TO BACK WITH A MEETING OF SBSTA.
- 3 FUNDING PLEDGED BY GERMANY.
- 4 FUNDING PLEDGED BY NEW ZEALAND.
- 5 SPAIN PLEDGED TO FUND A MEETING ON ISLAND BIODIVERSITY IN 2004.
- 6 FUNDING PLEDGED BY SPAIN.
- 7 FUNDING PLEDGED BY THAILAND FOR AN ADDITIONAL MEETING OF THE AD HOC WORKING GROUP ON ACCESS AND BENEFIT-SHARING.
- 8 FUNDING PLEDGED BY CANADA.

**TABLE 4: SPECIAL VOLUNTARY TRUST FUND (BZ) FOR FACILITATING PARTICIPATION OF PARTIES IN THE CONVENTION PROCESS FOR THE BIENNIUM 2005–2006**

DESCRIPTION	2005	2006
	(US\$)	
<b>I. Meetings</b>		
Eighth meeting of the Conference of the Parties	0	750,000
Regional meetings in preparation for the Conference of the Parties (4) (COP 8)	0	200,000
Subsidiary Body on Scientific, Technical and Technological Advice	540,000	540,000
Open-ended Ad Hoc Working Group on the Strategic Plan and 2010 targets	0	540,000
Ad-Hoc Open-ended Working Group meeting on Article 8(j)	540,000	0
Open-ended Ad Hoc Working Group on Access and Benefit-sharing	540,000	540,000
Open-ended Ad Hoc Working Group on Protected Areas	540,000	300,000
Support to indigenous and local communities	100,000	100,000
<b>SUB-TOTAL I</b>	<b>2,260,000</b>	<b>2,970,000</b>
<b>II. Programme support costs (13%)</b>	<b>293,800</b>	<b>386,100</b>
<b>TOTAL COST (I + II)</b>	<b>2,553,800</b>	<b>3,356,100</b>



**TABLE 5: CONTRIBUTIONS TO THE TRUST FUND FOR THE CONVENTION ON BIOLOGICAL DIVERSITY FOR THE BIENNIUM 2005–2006**

PARTY	UN SCALE OF ASSESSMENTS	SCALE WITH 22% CEILING, NO LDC PAYING MORE THAN 0.01 %	CONTRIBUTIONS AS PER 1 JAN. 2005	UN SCALE OF ASSESSMENTS	SCALE WITH 22% CEILING, NO LDC PAYING MORE THAN 0.01 %	CONTRIBUTIONS AS PER 1 JAN. 2006	TOTAL CONTRIBUTIONS 2005-2006
	%	%	US\$	%	%	US\$	US\$
Afghanistan	0.002	0.003	198	0.002	0.003	209	407
Albania	0.005	0.006	495	0.005	0.006	522	1,017
Algeria	0.076	0.098	7,520	0.076	0.098	7,933	15,452
Angola	0.001	0.001	99	0.001	0.001	104	203
Antigua and Barbuda	0.003	0.004	297	0.003	0.004	313	610
Argentina	0.956	1.234	94,589	0.956	1.234	99,783	194,372
Armenia	0.002	0.003	198	0.002	0.003	209	407
Australia	1.592	2.056	157,517	1.592	2.056	166,165	323,682
Austria	0.859	1.109	84,992	0.859	1.109	89,658	174,650
Azerbaijan	0.005	0.006	495	0.005	0.006	522	1,017
Bahamas	0.013	0.017	1,286	0.013	0.017	1,357	2,643
Bahrain	0.030	0.039	2,968	0.030	0.039	3,131	6,100
Bangladesh	0.010	0.010	766	0.010	0.010	808	1,575
Barbados	0.010	0.013	989	0.010	0.013	1,044	2,033
Belarus	0.018	0.023	1,781	0.018	0.023	1,879	3,660
Belgium	1.069	1.380	105,770	1.069	1.380	111,577	217,347
Belize	0.001	0.001	99	0.001	0.001	104	203
Benin	0.002	0.003	198	0.002	0.003	209	407
Bhutan	0.001	0.001	99	0.001	0.001	104	203
Bolivia	0.009	0.012	890	0.009	0.012	939	1,830
Bosnia and Herzegovina	0.003	0.004	297	0.003	0.004	313	610
Botswana	0.012	0.015	1,187	0.012	0.015	1,253	2,440
Brazil	1.523	1.967	150,690	1.523	1.967	158,963	309,653
Bulgaria	0.017	0.022	1,682	0.017	0.022	1,774	3,456
Burkina Faso	0.002	0.003	198	0.002	0.003	209	407
Burundi	0.001	0.001	99	0.001	0.001	104	203
Cambodia	0.002	0.003	198	0.002	0.003	209	407
Cameroon	0.008	0.010	792	0.008	0.010	835	1,627
Canada	2.813	3.632	278,326	2.813	3.632	293,607	571,933
Cape Verde	0.001	0.001	99	0.001	0.001	104	203
Central African Republic	0.001	0.001	99	0.001	0.001	104	203
Chad	0.001	0.001	99	0.001	0.001	104	203
Chile	0.223	0.288	22,064	0.223	0.288	23,276	45,340
China	2.053	2.651	203,130	2.053	2.651	214,282	417,412
Colombia	0.155	0.200	15,336	0.155	0.200	16,178	31,514
Comoros	0.001	0.001	99	0.001	0.001	104	203
Congo	0.001	0.001	99	0.001	0.001	104	203
Cook Islands	0.001	0.001	99	0.001	0.001	104	203
Costa Rica	0.030	0.039	2,968	0.030	0.039	3,131	6,100
Cote d'Ivoire	0.010	0.013	989	0.010	0.013	1,044	2,033

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PARTY	UN SCALE OF ASSESSMENTS		CONTRIBUTIONS AS PER 1 JAN. 2005		CONTRIBUTIONS AS PER 1 JAN. 2006		TOTAL CONTRIBUTIONS 2005-2006
	%	SCALE WITH 22% CEILING, NO LDC PAYING MORE THAN 0.01%	US\$	%	%	US\$	
Croatia	0.037	0.048	3,661	0.037	0.048	3,862	7,523
Cuba	0.043	0.056	4,255	0.043	0.056	4,488	8,743
Cyprus	0.039	0.050	3,859	0.039	0.050	4,071	7,929
Czech Republic	0.183	0.236	18,107	0.183	0.236	19,101	37,207
Democratic People's Republic of Korea	0.010	0.013	989	0.010	0.013	1,044	2,033
Democratic Republic of the Congo	0.003	0.004	297	0.003	0.004	313	610
Denmark	0.718	0.927	71,041	0.718	0.927	74,941	145,982
Djibouti	0.001	0.001	99	0.001	0.001	104	203
Dominica	0.001	0.001	99	0.001	0.001	104	203
Dominican Republic	0.035	0.045	3,463	0.035	0.045	3,653	7,116
Ecuador	0.019	0.025	1,880	0.019	0.025	1,983	3,863
Egypt	0.120	0.155	11,873	0.120	0.155	12,525	24,398
El Salvador	0.022	0.028	2,177	0.022	0.028	2,296	4,473
Equatorial Guinea	0.002	0.003	198	0.002	0.003	209	407
Eritrea	0.001	0.001	99	0.001	0.001	104	203
Estonia	0.012	0.015	1,187	0.012	0.015	1,253	2,440
Ethiopia	0.004	0.005	396	0.004	0.005	418	813
European Community	2.500	2.500	191,570	2.500	2.500	202,088	393,658
Fiji	0.004	0.005	396	0.004	0.005	418	813
Finland	0.533	0.688	52,737	0.533	0.688	55,632	108,368
France	6.030	7.786	596,626	6.030	7.786	629,382	1,226,007
Gabon	0.009	0.012	890	0.009	0.012	939	1,830
Gambia	0.001	0.001	99	0.001	0.001	104	203
Georgia	0.003	0.004	297	0.003	0.004	313	610
Germany	8.662	11.184	857,044	8.662	11.184	904,097	1,761,140
Ghana	0.004	0.005	396	0.004	0.005	418	813
Greece	0.530	0.684	52,440	0.530	0.684	55,319	107,759
Grenada	0.001	0.001	99	0.001	0.001	104	203
Guatemala	0.030	0.039	2,968	0.030	0.039	3,131	6,100
Guinea	0.003	0.004	297	0.003	0.004	313	610
Guinea-Bissau	0.001	0.001	99	0.001	0.001	104	203
Guyana	0.001	0.001	99	0.001	0.001	104	203
Haiti	0.003	0.004	297	0.003	0.004	313	610
Honduras	0.005	0.006	495	0.005	0.006	522	1,017
Hungary	0.126	0.163	12,467	0.126	0.163	13,151	25,618
Iceland	0.034	0.044	3,364	0.034	0.044	3,549	6,913
India	0.421	0.544	41,655	0.421	0.544	43,942	85,597
Indonesia	0.142	0.183	14,050	0.142	0.183	14,821	28,871
Iran (Islamic Republic of)	0.157	0.203	15,534	0.157	0.203	16,387	31,921

PARTY	UN SCALE OF ASSESSMENTS 2004	SCALE WITH 22% CEILING, NO LDC PAYING MORE THAN 0.01%	CONTRIBUTIONS AS PER 1 JAN. 2005	UN SCALE OF ASSESSMENTS 2004	SCALE WITH 22% CEILING, NO LDC PAYING MORE THAN 0.01%	CONTRIBUTIONS AS PER 1 JAN. 2006	TOTAL CONTRIBUTIONS 2005-2006
	%	%	US\$	%	%	US\$	US\$
Ireland	0.350	0.452	34,630	0.350	0.452	36,531	71,161
Israel	0.467	0.603	46,206	0.467	0.603	48,743	94,949
Italy	4.885	6.308	483,336	4.885	6.308	509,872	993,208
Jamaica	0.008	0.010	792	0.008	0.010	835	1,627
Japan	19.468	22.000	1,685,816	19.468	22.000	1,778,370	3,464,186
Jordan	0.011	0.014	1,088	0.011	0.014	1,148	2,236
Kazakhstan	0.025	0.032	2,474	0.025	0.032	2,609	5,083
Kenya	0.009	0.012	890	0.009	0.012	939	1,830
Kiribati	0.001	0.001	99	0.001	0.001	104	203
Kuwait	0.162	0.209	16,029	0.162	0.209	16,909	32,938
Kyrgyzstan	0.001	0.001	99	0.001	0.001	104	203
Lao People's Democratic Republic	0.001	0.001	99	0.001	0.001	104	203
Latvia	0.015	0.019	1,484	0.015	0.019	1,566	3,050
Lebanon	0.024	0.031	2,375	0.024	0.031	2,505	4,880
Lesotho	0.001	0.001	99	0.001	0.001	104	203
Liberia	0.001	0.001	99	0.001	0.001	104	203
Libya	0.132	0.170	13,060	0.132	0.170	13,778	26,838
Liechtenstein	0.005	0.006	495	0.005	0.006	522	1,017
Lithuania	0.024	0.031	2,375	0.024	0.031	2,505	4,880
Luxembourg	0.077	0.099	7,619	0.077	0.099	8,037	15,655
Madagascar	0.003	0.004	297	0.003	0.004	313	610
Malawi	0.001	0.001	99	0.001	0.001	104	203
Malaysia	0.203	0.262	20,085	0.203	0.262	21,188	41,274
Maldives	0.001	0.001	99	0.001	0.001	104	203
Mali	0.002	0.003	198	0.002	0.003	209	407
Malta	0.014	0.018	1,385	0.014	0.018	1,461	2,846
Marshall Islands	0.001	0.001	99	0.001	0.001	104	203
Mauritania	0.001	0.001	99	0.001	0.001	104	203
Mauritius	0.011	0.014	1,088	0.011	0.014	1,148	2,236
Mexico	1.883	2.431	186,310	1.883	2.431	196,538	382,848
Micronesia (Federated States of)	0.001	0.001	99	0.001	0.001	104	203
Monaco	0.003	0.004	297	0.003	0.004	313	610
Mongolia	0.001	0.001	99	0.001	0.001	104	203
Morocco	0.047	0.061	4,650	0.047	0.061	4,906	9,556
Mozambique	0.001	0.001	99	0.001	0.001	104	203
Myanmar	0.010	0.010	766	0.010	0.010	808	1,575
Namibia	0.006	0.008	594	0.006	0.008	626	1,220
Nauru	0.001	0.001	99	0.001	0.001	104	203
Nepal	0.004	0.005	396	0.004	0.005	418	813
Netherlands	1.690	2.182	167,214	1.690	2.182	176,394	343,607
New Zealand	0.221	0.285	21,866	0.221	0.285	23,067	44,933
Nicaragua	0.001	0.001	99	0.001	0.001	104	203

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PARTY	<i>UN SCALE OF ASSESSMENTS 2004</i>	<i>SCALE WITH 22% CEILING, NO LDC PAYING MORE THAN 0.01%</i>	<i>CONTRIBUTIONS AS PER 1 JAN. 2005</i>	<i>UN SCALE OF ASSESSMENTS 2004</i>	<i>SCALE WITH 22% CEILING, NO LDC PAYING MORE THAN 0.01%</i>	<i>CONTRIBUTIONS AS PER 1 JAN. 2006</i>	<i>TOTAL CONTRIBUTIONS 2005-2006</i>
	%	%	US\$	%	%	US\$	US\$
Niger	0.001	0.001	99	0.001	0.001	104	203
Nigeria	0.042	0.054	4,156	0.042	0.054	4,384	8,539
Niue	0.001	0.001	99	0.001	0.001	104	203
Norway	0.679	0.877	67,182	0.679	0.877	70,871	138,053
Oman	0.070	0.090	6,926	0.070	0.090	7,306	14,232
Pakistan	0.055	0.071	5,442	0.055	0.071	5,741	11,182
Palau	0.001	0.001	99	0.001	0.001	104	203
Panama	0.019	0.025	1,880	0.019	0.025	1,983	3,863
Papua New Guinea	0.003	0.004	297	0.003	0.004	313	610
Paraguay	0.012	0.015	1,187	0.012	0.015	1,253	2,440
Peru	0.092	0.119	9,103	0.092	0.119	9,603	18,705
Philippines	0.095	0.123	9,400	0.095	0.123	9,916	19,315
Poland	0.461	0.595	45,613	0.461	0.595	48,117	93,730
Portugal	0.470	0.607	46,503	0.470	0.607	49,056	95,559
Qatar	0.064	0.083	6,332	0.064	0.083	6,680	13,012
Republic of Korea	1.796	2.319	177,701	1.796	2.319	187,458	365,159
Republic of Moldova	0.001	0.001	99	0.001	0.001	104	203
Romania	0.060	0.077	5,937	0.060	0.077	6,263	12,199
Russian Federation	1.100	1.420	108,837	1.100	1.420	114,813	223,650
Rwanda	0.001	0.001	99	0.001	0.001	104	203
Saint Kitts and Nevis	0.001	0.001	99	0.001	0.001	104	203
Saint Lucia	0.002	0.003	198	0.002	0.003	209	407
Saint Vincent and the Grenadines	0.001	0.001	99	0.001	0.001	104	203
Samoa	0.001	0.001	99	0.001	0.001	104	203
San Marino	0.003	0.004	297	0.003	0.004	313	610
Sao Tome and Principe	0.001	0.001	99	0.001	0.001	104	203
Saudi Arabia	0.713	0.921	70,546	0.713	0.921	74,419	144,966
Senegal	0.005	0.006	495	0.005	0.006	522	1,017
Serbia and Montenegro	0.019	0.025	1,880	0.019	0.025	1,983	3,863
Seychelles	0.002	0.003	198	0.002	0.003	209	407
Sierra Leone	0.001	0.001	99	0.001	0.001	104	203
Singapore	0.388	0.501	38,390	0.388	0.501	40,498	78,887
Slovakia	0.051	0.066	5,046	0.051	0.066	5,323	10,369
Slovenia	0.082	0.106	8,113	0.082	0.106	8,559	16,672
Solomon Islands	0.001	0.001	99	0.001	0.001	104	203
South Africa	0.292	0.377	28,891	0.292	0.377	30,478	59,369
Spain	2.520	3.254	249,336	2.520	3.254	263,025	512,361

PARTY	<i>UN SCALE OF ASSESSMENTS 2004</i>	<i>SCALE WITH 22% CEILING, NO LDC PAYING MORE THAN 0.1%</i>	CONTRIBUTIONS AS PER 1 JAN. 2005	<i>UN SCALE OF ASSESSMENTS 2004</i>	<i>SCALE WITH 22% CEILING, NO LDC PAYING MORE THAN 0.1%</i>	CONTRIBUTIONS AS PER 1 JAN. 2006	<i>TOTAL CONTRIBUTIONS 2005-2006</i>
	%	%		US\$	%		%
Sri Lanka	0.017	0.022	1,682	0.017	0.022	1,774	3,456
Sudan	0.008	0.010	766	0.008	0.010	808	1,575
Suriname	0.001	0.001	99	0.001	0.001	104	203
Swaziland	0.002	0.003	198	0.002	0.003	209	407
Sweden	0.998	1.289	98,745	0.998	1.289	104,166	202,911
Switzerland	1.197	1.546	118,435	1.197	1.546	124,937	243,372
Syrian Arab Republic	0.038	0.049	3,760	0.038	0.049	3,966	7,726
Tajikistan	0.001	0.001	99	0.001	0.001	104	203
Thailand	0.209	0.270	20,679	0.209	0.270	21,814	42,493
The Former Yugoslav Rep. of Macedonia	0.006	0.008	594	0.006	0.008	626	1,220
Togo	0.001	0.001	99	0.001	0.001	104	203
Tonga	0.001	0.001	99	0.001	0.001	104	203
Trinidad and Tobago	0.022	0.028	2,177	0.022	0.028	2,296	4,473
Tunisia	0.032	0.041	3,166	0.032	0.041	3,340	6,506
Turkey	0.372	0.480	36,807	0.372	0.480	38,828	75,634
Turkmenistan	0.005	0.006	495	0.005	0.006	522	1,017
Tuvalu	0.001	0.001	99	0.001	0.001	104	203
Uganda	0.006	0.008	594	0.006	0.008	626	1,220
Ukraine	0.039	0.050	3,859	0.039	0.050	4,071	7,929
United Arab Emirates	0.235	0.303	23,252	0.235	0.303	24,528	47,780
United Kingdom of Great Britain and Northern Ireland	6.127	7.911	606,223	6.127	7.911	639,506	1,245,729
United Rep. of Tanzania	0.006	0.008	594	0.006	0.008	626	1,220
Uruguay	0.048	0.062	4,749	0.048	0.062	5,010	9,759
Uzbekistan	0.014	0.018	1,385	0.014	0.018	1,461	2,846
Vanuatu	0.001	0.001	99	0.001	0.001	104	203
Venezuela	0.171	0.221	16,919	0.171	0.221	17,848	34,767
Viet Nam	0.021	0.027	2,078	0.021	0.027	2,192	4,270
Yemen	0.006	0.008	594	0.006	0.008	626	1,220
Zambia	0.002	0.003	198	0.002	0.003	209	407
Zimbabwe	0.007	0.009	693	0.007	0.009	731	1,423
<b>TOTAL</b>	<b>80.445</b>	<b>100.00</b>	<b>7,662,800</b>	<b>80.445</b>	<b>100.00</b>	<b>8,083,500</b>	<b>15,746,300</b>

**DECISION VII/35 | Date and venue of the eighth meeting of the Conference of the Parties**

*The Conference of the Parties*

1. *Welcomes* the kind offer of Brazil to host the eighth meeting of the Conference of the Parties;
2. *Decides* that the eighth meeting of the Conference of the Parties will be held in Brazil on a date in the first half of 2006 to be specified by the Bureau.

**DECISION VII/36 | Tribute to the Government and people of Malaysia**

*The Conference of the Parties,*

*Having met* in Kuala Lumpur from 9 to 20 and 27 February 2004, at the gracious invitation of the Government of Malaysia,

*Deeply appreciating* the especial courtesy and warm hospitality extended by the Government and the people of Malaysia to the ministers, members of delegations, observers and members of the Secretariat who attended the meeting,

Expresses its sincere gratitude to the Government of Malaysia 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.