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Sixth meeting

The Hague, 7-19 April 2002

Item 16 of the provisional agenda*

**THEMATIC PROGRAMMES OF WORK—PROGRESS REPORTS ON
IMPLEMENTATION: BIOLOGICAL DIVERSITY OF INLAND WATERS; MARINE AND
COASTAL BIOLOGICAL DIVERSITY; BIOLOGICAL DIVERSITY OF DRY AND SUB-
HUMID LANDS; AND AGRICULTURAL BIOLOGICAL DIVERSITY**

Report of the first meeting of the Ad Hoc Technical Expert Group on Dry and Sub-Humid Lands

Note by the Executive Secretary

1. The Executive Secretary is circulating herewith, for the information of participants in the sixth meeting of the Conference of the Parties to the Convention on Biological Diversity, the report of the first meeting of the Ad Hoc Ad Hoc Technical Expert Group on Dry and Sub-Humid Lands, which was held in Montreal from 18 to 22 March 2002.
2. The report is available in English only and has not been formally edited.

* UNEP/CBD/COP/6/1 and Corr.1/Rev.1.

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REPORT OF THE FIRST MEETING OF THE AD HOC TECHNICAL EXPERT GROUP ON DRY AND SUB-HUMID LANDS

18-22 March 2002 - Montreal, Canada

INTRODUCTION

A. Background

1. At its fifth meeting in May 2000, the Conference of the Parties adopted the programme of work on dryland, Mediterranean, arid, semi-arid, grassland, and savannah ecosystems, also referred to as programme of work on "dry and sub-humid lands", as contained in annex I of decision V/23. To assist with the implementation of the programme of work, the Conference of the Parties requested the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA), in paragraph 7 of this decision, to establish an ad hoc technical expert group (AHTEG) on dry and sub-humid lands with a view to carrying out the following tasks:

- Consolidate and assess information on the status and trends of biodiversity of dry and sub-humid lands, on the possible establishment of an international network of dry and sub-humid areas of particular value for biodiversity, on indicators, on processes affecting biodiversity, on global benefits derived from biodiversity, and on the socio-economic impacts of its loss, including the interrelationship between biodiversity and poverty;
- Assess the progress and the effects of the specific measures that have been taken for the conservation and sustainable use of biodiversity, for resource management and for the support of sustainable livelihoods; and
- Assess international priorities set up at the regional and global levels and make proposals for expected outcomes, further activities, possible actors that may implement them, and timetables for action;

2. Recognizing the urgency and importance of dealing with threats on the biodiversity of dry and sub-humid lands, SBSTTA, in its meeting held in November 2001, urged the convening of the Ad Hoc Technical Expert Group on Dry and Sub-Humid Lands before the sixth meeting of the Conference of the Parties (preamble and paragraph 2 of recommendation VII/3 contained in document UNEP/CBD/COP/6/4). In the same recommendation, SBSTTA requested that, in its work, the Expert Group should take into consideration the views expressed at the seventh meeting of the Subsidiary Body and, in particular, those relating to the importance of:

- The value of goods and services of the dry and sub-humid lands, and preparation of case studies on valuation of biodiversity of these environments;
- A balanced consideration of conservation, sustainable use and the equitable sharing of benefits in any set of recommendations;
- Capacity development, and the needs of some Parties for assistance in seeking resources to develop proposals;
- The important complementary role of *ex-situ* conservation in implementing the programme of work;

- Indicators of biodiversity loss, as well as preventive measures, monitoring, and early warning systems.

3. The Ad Hoc Technical Expert Group on Dry and Sub-humid Lands is expected to meet twice, and its first meeting was held from 18 to 22 March 2002 at the premises of the Secretariat of the Convention on Biological Diversity, in Montreal, Canada.

4. The members of the expert group were selected by the Executive Secretary in consultation with the SBSTTA bureau from nominations provided by national focal points of the Convention on Biological Diversity (CBD) and Convention to Combat Desertification (UNCCD), in accordance with the *modus operandi* of SBSTTA (Decision IV/16, annex I). The selection was undertaken by the Executive Secretary, in consultation with the Bureau of the Subsidiary Body. The experts were selected based on their competence in the relevant field of expertise, with due regard to geographical representation and to the special conditions of least developed countries and small island developing states.

B. Attendance

5. The meeting was attended by government-nominated experts from Botswana, Burkina Faso, Sri Lanka, Mongolia, India, Bahamas, Uruguay, Belgium, United Kingdom, a representative of local and indigenous communities and representatives of the following intergovernmental and non-governmental organizations. The United Nations Secretariat of the Convention to Combat Desertification (CCD), the Food and Agriculture Organization of the United Nations (FAO), UNEP-World Conservation Monitoring Centre (WCMC), the World Bank Group and the International Centre for Agricultural Research in the Dryland Areas (ICARDA).

ITEM 1. OPENING OF THE MEETING

6. The Meeting was opened by the Executive Secretary of the Convention on Biological Diversity at 9:30 a.m., on Monday 22 March 2002. In his statement, he welcomed the participants and mentioned the importance and timeliness of this ad hoc technical expert group meeting. The Executive Secretary also stressed that the loss of species in dry and sub-humid lands could have more significant impact on the livelihoods of people depending on these ecosystems.

7. The representative of the Executive Secretary of the Secretariat of the CCD also made an opening statement. He emphasized in particular the importance of biodiversity for livelihood in dry and sub-humid lands.

ITEM 2. ORGANIZATIONAL MATTERS

2.1. Election of officers

8. At the opening session, participants elected Prof. Willem Van Cotthem from Belgium and Dr. G. V. Sarat Babu from India, as co-chairs of the meeting.

2.2. Adoption of the agenda

9. The AHTEG meeting adopted the following agenda on the basis of the provisional agenda proposed in document UNEP/CBD/AHTEG-Dryland/1/1:

1. Opening of the meeting

2. Organizational matters
 - 2.1 Election of officers
 - 2.2 Adoption of the agenda
 - 2.3 Organization of work
3. Substantive issues
 - 3.1 Consolidation and assessment of information on the following issues
 - 3.1.1 Status and trends of biodiversity of dry and sub-humid lands
 - 3.1.2 Possible establishment of an international network of dry and sub-humid areas of particular value for biodiversity
 - 3.1.3 Indicators of the status and trends of biological diversity; monitoring and early warning systems
 - 3.1.4 Processes affecting biodiversity
 - 3.1.5 Global benefits derived from biodiversity and valuation of biodiversity
 - 3.1.6 Socio-economic impacts of biodiversity loss, including the interrelationship between biodiversity and poverty
 - 3.2 Assessment of the progress and the effects of the specific measures
 - 3.2.1 Measures taken for the conservation and sustainable use of biodiversity (including the role of *ex-situ* conservation, resource management and preventive measures)
 - 3.2.2 Measures taken for the support of sustainable livelihoods
 - 3.2.3 Consideration of capacity development, and the need of some Parties for assistance in seeking resources to develop proposals
 - 3.3 Priority setting
 - 3.3.1 Assessment of international priorities set up at the regional and global levels
 - 3.3.2 Proposals for expected outcomes, further activities, possible actors that may implement them, and timetables for action
4. Scoping of inter-sessional work and preparation for the second meeting
 - 4.1 Consideration of the scope of work for addressing the gaps identified under agenda item 3
 - 4.2 Consideration of modalities to undertake such work in the inter-sessional period and preparations for the second meeting of the Group
5. Other matters
6. Adoption of the report

7. Closure of the meeting

2.3. *Organization of work*

A member of the Secretariat gave a brief presentation outlining the function and structure of the Convention and its constituting institutions. This was followed by an introduction of the mandate of the group as described in Decision V/23 and complemented by SBSTTA 7 recommendation VII/3 paragraph 3, and the scope of dry and sub-humid lands which includes the arid, semi-arid, Mediterranean, grassland and savannah ecosystems. Meeting outputs and possible timeframes were also discussed.

11. At its opening plenary session, the participants contributed by giving introductory presentations covering the elements of the substantive issues. This was supplemented by exchange of view and comments after each presentation.

12. The AHTEG agreed to consider all issues first in plenary and to establish working groups as needed to draft elements and recommendations on each point in the mandate.

13. Working group 1, chaired by Mr. Jeremy Harrison of UNEP-WCMC, addressed issues outlined in 3.1.1 and 3.1.3 of the meeting agenda, namely the biodiversity status and trends in dry and sub-humid lands, including indicators, monitoring and early warning systems.

14. Working group 2, chaired by Dr. Enos Esikuri of the World Bank Group, considered the agenda issue 3.1.4, i.e., processes affecting biodiversity including conservation measures.

15. Working group 3, led by Mr. Roger Smith of the United Kingdom, examined the substantive issue mentioned in 3.2.3 of the agenda, namely the consideration of capacity development, and the need of some Parties for assistance in seeking resources to develop proposals.

16. Working group 4, chaired by Mr. Markus Lehmann of the CBD Secretariat, addressed two issues as outlined in 3.1.5 and 3.1.6 of the draft meeting provisional agenda, i.e., the global benefits derived from biodiversity and valuation of biodiversity; and socio-economic impacts of biodiversity loss, including the interrelationship between biodiversity and poverty.

17. Working group 5, chaired by Dr. Syaka Sadio of the FAO considered substantive issues 3.2.1 and 3.2.2, which are measures taken for the conservation and sustainable use of biodiversity, including the role of *ex-situ* conservation, resource management and preventive measures; and measures taken for the support of sustainable livelihoods.

18. Issue pertaining to the possible establishment of an international network of dry and sub-humid areas of particular value for biodiversity (substantive issues 3.1.2), was considered in the plenary chaired by Prof. Willem Van Cotthem.

19. As regards the assessment of international priorities set up at the regional and global levels, and proposals for expected outcomes, further activities, possible actors, and timetables for action (substantive issues 3.3.1 and 3.3.2), a representative of the CBD Secretariat prepared the initial draft. Suggestions for refinements were called for in the plenary.

20. Introduction to the CBD Clearing House Mechanism (CHM) was also presented to the AHTEG by the Secretariat representative during the course of the meeting.

ITEM 3. SUBSTANTIVE ISSUES

3.1. Status and trends of biodiversity of dry and sub-humid lands, including indicators of the status and trends of biodiversity, monitoring and early warning systems

21. The expert group discussed the status and trends of biological diversity in dry and sub-humid lands which comprise a wide range of natural habitats, ranging from barren deserts to grasslands and savannah.

22. The group then proposed actions and recommendations including steps that they need to undertake over the next few months in order to better focus future development and implementation of the programme of work on dry and sub-humid lands (Annex I).

3.2. Processes affecting biodiversity including conservation measures

23. The expert group recognized that the information contained in the Global Biodiversity Outlook (UNEP/SCBD, 2001) was substantial. For the purpose of utilizing this information and structure in a proper manner, a problem-tree that depicted the processes leading to degradation and loss of dry and sub-humid lands biodiversity was developed. The group also recognized that the problem-tree is not comprehensive and cannot be universally applied. Further elaborations to the problem-tree will be made during the inter-sessional work.

24. The group also commented on the importance of addressing the underlying causes of processes affecting biodiversity and recommended that effective dryland biodiversity management strategies should be an integral part of poverty reduction strategies and measures aimed at combating desertification based on lessons learned from good practices (Annex II)

3.3. Consideration of capacity development, and the need of some Parties for assistance in seeking resources to develop proposals

25. The expert group recognized the sovereignty of Parties and the national responsibilities which accompany it, and welcomed the “Operational Guidelines for Expediting Funding of National Self Assessment of Capacity Building Needs, the Capacity Development Identity (CDI)” of the Global Environmental Facility (GEF) which assists in capacity building of developing countries (Annex III).

3.4. Global benefits derived from biodiversity and valuation of biodiversity; and Socio-economic impacts of biodiversity loss, including the interrelationship between biodiversity and poverty

26. The expert group reviewed the values and uses of dry and sub-humid lands biodiversity, focusing on global benefits taking into account traditional knowledge. The group agreed that the value of dry and sub-humid land biodiversity resides not only in its direct and indirect uses, but also in its socio-cultural and spiritual benefits and concluded that most of identified benefits of dry and sub-humid land diversity are of a global nature.

27. The group recognized the potential of economic valuation to elicit the hidden economic benefits of dry and sub-humid land biodiversity. The group also noted that many economic valuation tools exist, and that these have specific advantages and disadvantages. Specifically, a specific tool may perform well to value some benefits of dry and sub-humid land biodiversity, but may perform poorly for others (Annex IV).

3.5. *Measures taken for the conservation and sustainable use of biodiversity, including the role of ex-situ conservation, resource management and preventive measures; and measures taken for the support of sustainable livelihoods*

28. The expert group agreed to initiate and build discussions from Activity 7, 8 and 9 of Annex 1 of Decision V/23 Draft Programme of Work on Dry and Sub-humid Lands (p 637-8 in the CBD handbook), which outlines the promotion of specific measures for the conservation and sustainable use of biodiversity in dry and sub-humid lands, responsible management of resources and support for sustainable livelihoods.

29. Based on this, the group agreed to recommend additional measures or strengthen what has already been outlined following its inter-sessional work (Annex V).

3.6. *Possible establishment of an international network of dry and sub-humid areas of particular value for biodiversity*

30. The expert group noted that there is already a considerable experience with the establishment of networks of internationally recognized sites, both at global and regional levels, and assessment needs to be made of whether a further network of sites might be established for biological diversity of dry and sub-humid lands.

31. It was also agreed that networks of institutions and/or individuals could be a powerful mechanism for sharing knowledge, information and experience, and coordinating research and other action on the ground (Annex VI).

3.7. *Assessment of international priorities set up at the regional and global levels, and proposals for expected outcomes, further activities, possible actors that may implement them, and timetables for action*

32. The experts decided to focus on the CBD programme of work on the biodiversity of dry and sub-humid land. After considering all the activities of the programme of work, they recommended that the draft programme of work in CBD COP Decision V/23 be considered as the CBD programme of work on biodiversity on dry and sub-humid lands. Then the group developed a table including, for each activity, possible outcomes and timeframes; potential actors, and indicators of progress in the implementation of the programme of work (Annex VII).

ITEM 8. INTER-SESSIONAL WORK AND PREPARATIONS FOR THE SECOND MEETING

33. For the inter-sessional period, the AHTEG decided to establish two working groups under the coordination of Prof. Willem Van Cotthem who will liaise with the secretariats of the CBD and UNCCD.

34. The inter-sessional working group 1 will be looking at the following items on dry and sub-humid lands biodiversity chaired by Mr. Jeremy Harrison (UNEP-WCMC):

- Status and trends
- Indicators
- Global networks
- Capacity development

35. The inter-sessional working group 2 will be looking at the following items on dry and sub-humid lands biodiversity chaired by Dr. Syaka Sadio (FAO):

- Processes

- Measures
- Global benefits
- Socio-economic aspects

36. The date for the second AHTEG meeting was proposed on the second or third week of August 2002.

37. The AHTEG agreed to forward the progress report to the sixth meeting of the COP and produce a 15-page report and recommendations to the eighth meeting of SBSTTA addressing the mandate. The group will also consider preparing a peer-reviewed information document(s) for the eighth meeting of SBSTTA in 2002 and/or the seventh meeting of the COP scheduled in 2004.

38. The outputs of the inter-sessional and two AHTEG meetings should be finalized by 9 September 2002 for the eighth meeting of SBSTTA.

ITEM 9. OTHER MATTERS

39. No other matters were discussed.

ITEM 10. ADOPTION OF THE REPORT

40. The present report was adopted at the plenary meeting, on Friday 22 March 2002.

ITEM 11. CLOSURE OF THE MEETING

41. Following the customary exchange of courtesies, the AHTEG meeting was closed at 11:30 a.m. on Friday, 22 March 2002 by the meeting chair, Prof. Willem Van Cotthem.

Annex I

STATUS AND TRENDS OF BIODIVERSITY OF DRY AND SUB-HUMID LANDS;
INDICATORS OF STATUS AND TRENDS OF BIOLOGICAL DIVERSITY, MONITORING AND EARLY
WARNING (ITEMS 3.1.1 AND 3.1.3)

Summary of Dryland Characteristics

Drylands comprise a very wide range of natural habitats, ranging from barren deserts and semi-desert with xerophytic plants, to grasslands and savannah, and many different kinds of scrubland, woodlands and forests.

Dryland biodiversity is unique in its adaptation to survive and thrive in a highly variable climate of low rainfall and prolonged dry periods. The two billion people (20% of the human population) rely on the resilience of dryland biodiversity to provide their daily needs.

The programme of work agreed by the CBD Conference of Parties in Decision V/23 covers the biological diversity of dryland, Mediterranean, arid, semi-arid, grassland and savannah ecosystems.

When assessing and monitoring biodiversity the following characteristics of drylands need to be taken into account:

Biological diversity: Biological diversity assessed in terms of species number tends to be moderate in semi-arid areas and to decline to low or very low levels as aridity increases. In contrast to this general rule, diversity in some groups such as scorpions and other predatory arthropods, terepionid beetles, ants, termites, snakes and lizards, and annual plants, tends at first to increase as aridity increases but to decrease at extreme desert conditions. Diversity at the genetic level in dryland species has been sampled very unevenly, but is well marked in some groups, particularly so in some desert plants where different forms of the same species may vary in karyotype or carbon metabolism.

Mediterranean ecosystems: Species richness and endemism in Mediterranean ecosystems is generally high, with countries around the Mediterranean basin holding some 25,000 vascular plants (10 % of the known vascular plants) of which around 60% are endemic.

Grassland and savannah ecosystems: Around 20 per cent of the Earth's land surface supports grasslands of varying degree of naturalness from those that are in pristine state to those that are influenced to a greater extent by human activity. Natural grasslands and savannahs host very distinctive plant and animal communities where diversity tends to increase towards tropics. All these systems hold an array of native herbivores and these in turn support a number of high profile mammals and avian predators. The savannah communities of East Africa, for example, are typified by large herds of ungulate herbivores including more than 70 species of antelope and other medium to large sized bovids. At very fine spatial scales, natural grasslands can be among the most species-rich habitats on Earth. Up to 80 plant species have been identified in a square metre in the Central Asian steppe, and 42 plant species in a quarter of a square metre in pine savannah on the United States Atlantic Coastal Plain.

Desert species adaptations: True desert species show a wide range of adaptation to the extreme environment. Strategies for survival amongst both plants and animals often include long periods of dormancy punctuated with brief periods of high activity. Much interest is currently focused on identifying

the genetic basis for drought tolerance, salt tolerance and other traits associated with stress conditions that could eventually be utilized to improve productivity in dryland agriculture.

Species associated with humans: Dry and sub-humid ecosystems are the centres of origin of many major crops including wheat, barley, sorghum, millet, many pulses, and cotton. They are also ecosystems in which are naturally found animals that have become closely linked to the development of human civilizations, including the horse, sheep, goats, cattle, camel and lama. Our human past has therefore relied significantly on the biodiversity of dry lands.

Threatened species: At present data is insufficient to determine whether species in drylands are relatively more or less prone to extinction than elsewhere. However, in general dryland mammals tend to be relatively wide ranging but to occur at low population densities. Summary analysis of the habitat distribution of globally threatened mammals and birds shows that drylands, scrublands and grasslands make up the second most important group of threatened species of mammals, and a high percentage of continental species believed or known to have become extinct since 1600 occurred in dry land ecosystems. Some critically endangered dryland species are listed in the *Global Biodiversity Outlook*.

Surveys of species biodiversity: Most surveys in the drylands have been concentrated on species composition and abundance within habitats (alpha diversity), between habitats (beta diversity) and between regions, each of which is made of many habitats (gamma diversity). The ability of the flora and fauna of drylands to bounce back after dry spells calls for long-term series of habitat monitoring to ascertain degradation of gamma, beta and alpha diversity in the context of permanent desertification

Threats: Humans have an enormous impact on dryland, grassland and Mediterranean ecosystems, often with major negative impacts on biodiversity. These impacts are often complex and interrelated, and may lead to land degradation and desertification. This tends to promote poverty, resulting in even greater stress on natural resources.

Proposed Action/Recommendations

The following includes:

- actions that need to be undertaken by the AHTEG members and the CBD Secretariat over the next few months in order to better focus future development and implementation of the programme of work on dry and sub-humid lands (Decision V/23); and
- preliminary recommendations on how the programme of work might be further elaborated and/or implemented.

1. *Review of existing assessments*

Carry out a review of existing assessments and assessment processes to assess the extent to which they adequately and systematically cover all biodiversity levels and components, all conservation actions and threats, and all geographical areas relevant to the programme of work on dry and sub-humid lands.

Those studies which would be reviewed include: Millennium Ecosystem Assessment; Global Environmental Outlook; CGIAR system and SINGER; FAO Domestic Animals Information

Network; UNESCO MAB programme; Asia-Pacific Network of IGBP; LADA; UNCCD TPNs; UNEP GRID activities.

Outputs of this review would include:

- Summary of coverage as identified above
- Identification of the extent to which dryland-relevant information can be extracted
- Preliminary recommendations on adaptation of existing surveys to meet needs
- Identification of gaps
- Identification of examples/case studies where adequate information is not available

2. *Periodic drylands assessment*

Once the review of assessments is complete, consideration should be given as to whether a period drylands assessment needs to be carried out in similar manner to the Forest Resources Assessment carried out by FAO and UNECE. This should also take into account the current work on harmonization of assessments initiated by UNEP.

3. *Simple presentation of assessment results*

In order to increase accessibility of the results of assessments, consideration also needs to be given to presentation of some of the results of such assessments in simpler forms in order to guide decisions and to promote understanding of dryland issues. For example in a series of posters or maps concerning key issues.

4. *Completion of gap relating to human use issues*

There is a concern that existing assessments of status and trends of dryland biodiversity do not take adequate account of biodiversity linked to human development. This includes the biodiversity of crop plants and animal feeds, *ex-situ* collections, and the manner in which human conversion of dryland habitats impacts on these resources directly relevant to human development. It is noted that much of this information already exists, and can be readily compiled.

5. *Areas of particular value to biodiversity*

Also with assessments, particular attention might need to be paid to the areas of particular value for biodiversity identified by the liaison/contact group established by the secretariats of CBD and UNCCD. These are: rangelands; desert margins; species "hot spots"; protected areas; parklands/croplands; dryland forests; and wetlands and oases.

6. *Voluntary national report*

It is recommended that consideration be given to asking Contracting Parties to submit voluntary national reports on dryland issues. However, it is noted that if this is to occur an information paper needs to be drafted by the end of the AHTEG meeting, submitted to the Secretariat immediately, and that one or more Contracting Parties will need to introduce the item at the COP during discussion on future reporting (presumably under agenda item 16).

7. *Assessment at regional and national levels*

It was agreed that while that international community could direct and carry out assessments of status and trends at the global level, at regional, sub-regional and national levels it was more

appropriate to provide guidance where necessary, and to strongly promote the sharing of information and collaboration in information management and assessment.

8. *Use of indicators at the national level*

It was noted that indicators were likely to be most effective when focused on specific planning and management needs in key thematic areas. It was also noted that indicators needed to address a wide range of issues also beyond status and trends of biodiversity, including *inter alia* threats and pressures, use and sustainability, economic values and imperatives, etc. A range of existing SBSTTA and COP papers are relevant to this work.

It was agreed that it was important to promote the development and testing of indicators at the national level, and to promote the sharing of experience. This might include the compilation of case studies from Contracting Parties, or the extension of existing work in this area (such as the GEF-funded project working with national level indicators relevant to other CBD programmes of work).

9. *Use of indicators at the global level*

There are clear concerns about the use of global level indicators because of the potential political problems of defining and using them. Such indicators are of no use unless they are practicable, feasible and applicable both technically and politically, and there is no point taking time and effort to develop and test them unless it is clear what the resulting indicators will be used to achieve. It was noted, however, that there are examples of areas where indicators or early warning at an international level are acceptable and used, for example in early warning of locusts.

The group recognized that there was already work in this area under way under the auspices of the UNCCD, and proposed that consideration be given to working with the UNCCD *ad hoc* panels on benchmarks and indicators and on monitoring and early warning systems to investigate how work with them might incorporate issues relevant to biodiversity concerns including habitat loss and water availability. In the first instance a “brain storming” meeting is proposed between the chairs of these two *ad hoc* panels and relevant members of the AHTEG.

10. *Public awareness and education*

The group emphasized the importance of recognizing both good and bad messages coming out of assessment and indicator programmes, and using these in public awareness programmes. It was noted that this was particularly the case for good messages.

11. *Capacity development*

It was agreed that capacity development in information management and use was often needed, but that often the necessary skills and information were already available in country but not focused on the needs. Capacity development in this area needs to take the form of facilitation and guidance.

Annex II

PROBLEM-TREE: PROCESSES THAT LEAD TO DEGRADATION AND LOSS OF DRY AND SUB-HUMID LANDS BIODIVERSITY (ITEMS 3.1.4)

The Group recognized that the information in the Global Biodiversity Outlook (GBO) was sufficient. To use this information and structure it in a proper way, the method of the problem-tree was followed which shows the processes that lead to degradation and loss of dry-and sub-humid lands biodiversity. Hereby the Group realizes, that:

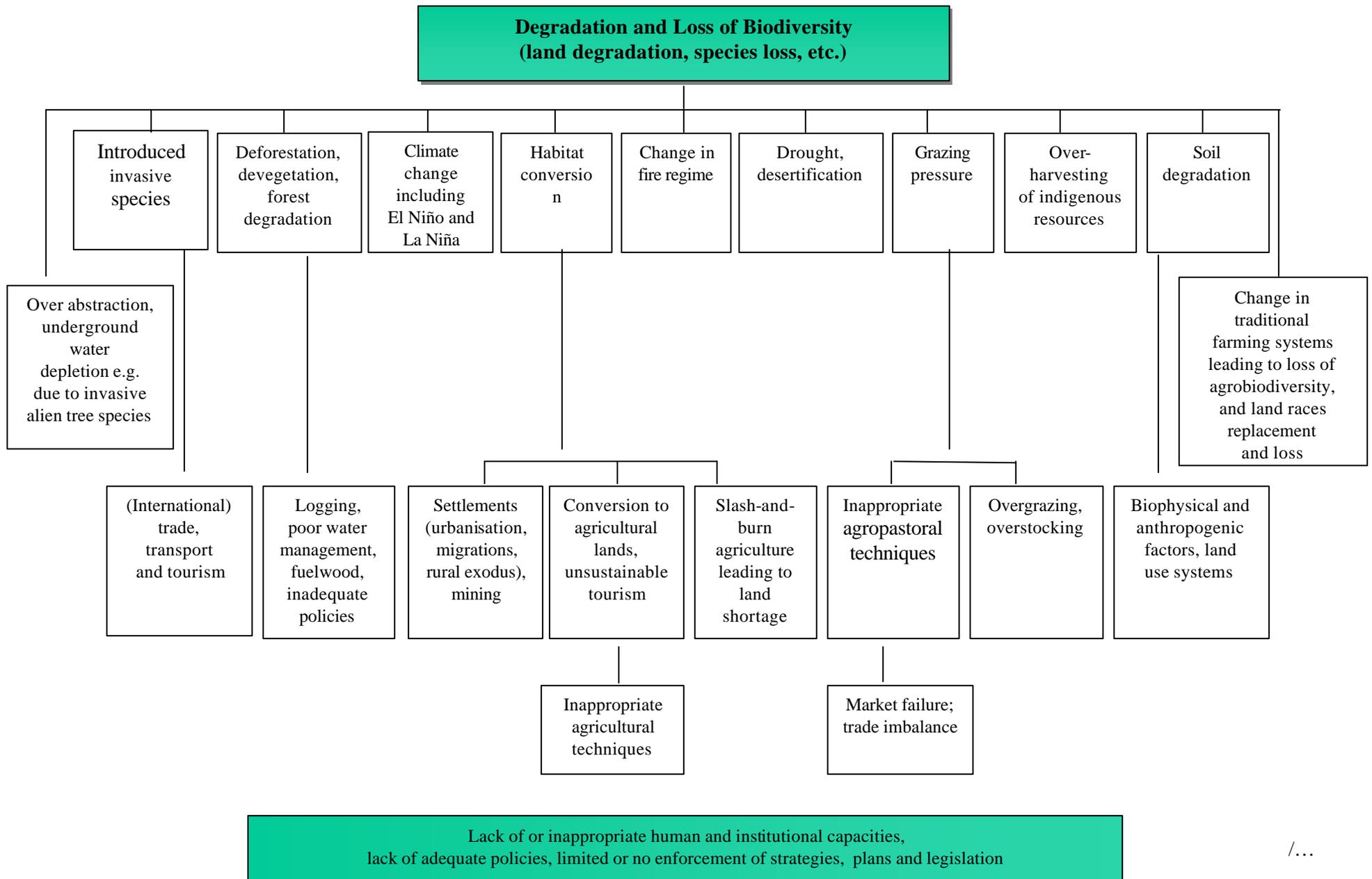
- this-problem tree is fairly generic and intended to highlight the processes and the underlying causes that lead to degradation and loss of drylands biodiversity; there are appreciable sources of existing information that provide details on these processes and underlying causes¹;
- dry and sub-humid lands are not homogeneous and therefore this problem tree is not universal; different processes will have different impacts in different ecosystems;
- there are forward and backward linkages between these processes whether they are biophysical (natural) or anthropogenic (human induced);
- the identification and description of these processes and the underlying causes should be done in a way that is useful to decision-making processes, especially at national and local levels.

Recommendations:

1. for effective interventions, it is important to analyze and address the underlying causes of these processes; in this respect linkages and interrelationship between biodiversity and poverty, including an analysis of: (i) the benefits from biodiversity for poverty alleviation; and (ii) the impact of biodiversity conservation on the poorest (activity 5 of the programme of work on dry and sub-humid lands) should be taken into account;
2. given that 2 billion people derive their livelihoods from drylands ecosystems, we recommend that effective dryland biodiversity management strategies should be an integral part of poverty reduction strategies and linked directly to measures aimed at combating desertification; and most importantly they should be based on lessons learned from interventions and good practices;
3. in order to achieve the goals of sustainable livelihoods in drylands, we support the Maputo principles of sustainable use of biological diversity (Annex I: UNEP/CBD/SBSTTA/7/INF/9) as applicable in both Conventions (CBD and UNCCD).

¹ Source: Global Diversity Outlook (GBO): Major impacts on drylands, page 103.

Generic Diagram Showing Processes Affecting Biodiversity in Dry and Sub-humid Lands



Annex III

CONSIDERATION OF CAPACITY DEVELOPMENT AND THE NEED OF SOME PARTIES FOR ASSISTANCE IN SEEKING RESOURCES TO DEVELOP PROPOSALS (ITEMS 3.2.3)

Recognizing the sovereignty of Parties and the national responsibilities which accompany it, the Group welcomed the “Operational Guidelines for Expediting Funding of National Self Assessments of Capacity Building Needs, the Capacity Development Identity (CDI)” of the Global Environmental Facility (GEF) which assists in capacity building of developing countries. The Group agreed that all Parties:

- (a) should undertake the comprehensive self-assessment sought by the CDI with all speed in order that gaps can be quickly identified and filled, paying particular attention to the difficulties and opportunities of developing nations;
- (b) recommend focused support to raise the project development and management skills amongst some dry and sub-humid lands Parties which currently inhibits their ability to access the available and necessary financial support for their work on behalf of both the CBD and CCD; the Group commends the CCD initiative to assist countries their capacity for developing proposals for submission to funding agencies, such as GEF;
- (c) develop a “Plan of Action” to address the critical capacity constraints identified in the overall project (“institutional strengthening and enabling activities” to comply the project to develop greater capacity) in order to achieve the enhancing of national capacities in a sustainable and cost-effective manner;
- (d) request Parties to review and where necessary amend their working practices to ensure work in support of all the three Rio Conventions is fully coordinated and so cost-effective in achieving sustainable development and promoting synergy;
- (e) consider the capacity available to bring the value of biological diversity to civil society within the dry- and sub-humid lands, particularly aware of the fact that survival of human beings on these fragile lands is often a pressing concern;
- (f) build capacity in understanding traditional value systems so they can be properly included in non-use economic valuation;

The Group welcomes and supports the capacity building elements (2.b. and 5.b.) of the recommendations to COP 6 of the Consultative Group on Biological Diversity Education and Public Awareness (UNEP/CBD/COP/6/13/Add.2)

*Annex IV***PROGRESS REPORT AND RECOMMENDATIONS OF THE WORKING GROUP ON
SOCIO-ECONOMIC ASPECTS (ITEMS 3.1.5 AND 3.1.6)**

The work of the group on socio-economic aspects (global benefits under special consideration of the role of traditional knowledge, socio-economic implications of biodiversity degradation, including the impact on poverty and poverty alleviation, economic valuation) is summarized in the first four columns of the annexed table. The ordering of the benefits given in the table reflects their *global* importance assigned by the group. Countries may come to different orderings in the light of important local and regional benefits.

Review of values and uses of dry and sub-humid lands biodiversity, focusing on global benefits taking into account traditional knowledge

- The working group reviewed the major values and uses of dry and sub-humid land biodiversity as described in the Global Biodiversity Outlook, p. 102. It came to the opinion that the value of dry and sub-humid land biodiversity resides not only in its direct and indirect uses, but also in its socio-cultural and spiritual benefits. It also recognized that it may be necessary to further differentiate and amend these benefits in regard to the specific type of dry and sub-humid land. For instance, Mediterranean ecosystems also include forests, which may generate other benefits.
- It was also concluded that most of the identified benefits of dry and sub-humid land biodiversity are of a global nature. The scope of some benefits depends on the existence and the extent of export markets. The group recognized that socio-cultural benefits are also of a global nature, as people often assign value to the existence of species or ecosystems even if they live far away from the habitat of the species or from the area hosting the ecosystem.
- The group also came to the conclusion that traditional knowledge plays an important role in most values and uses of dry and sub-humid land biodiversity. The degradation of biodiversity may often lead to the devaluation and eventual loss of traditional knowledge. Traditional knowledge may also provide useful information for nature restoration efforts (e.g., soil stabilization and rehabilitation), especially when combined with new adaptive technologies. In regard to socio-economic benefits, traditional knowledge was identified to be an integral part of the cultural identity of traditional communities.

Recommendations

1. Any assessment of the socio-economic value of dry and sub-humid land biodiversity should include both its direct and indirect economic benefits as well as its socio-cultural/spiritual value.
2. The relative importance and scope of the identified benefits will largely depend on the peculiarities of the area under consideration, for instance, on the type of dry and sub-humid land. As effective policy responses need to be based, inter alia, on the identification of these benefits and the socio-economic implications of their loss, this observation prohibits the use of “one-size-fits-all” instruments and calls for the use of a carefully tailored policy package.

3. In order to set policy priorities for the conservation and sustainable use of biodiversity of dry and sub-humid lands, attention should be given to identify areas of particular value in regard to their associated benefits. Such areas could include, e.g., hot spots (with a high degree of species and genetic diversity), vulnerable farm land or oases (important as nodes of development and as resting sites for migratory animals).
4. As traditional knowledge may provide valuable information for the setting of priorities in conservation policies and for the design of rehabilitation and restoration programmes, national governments are advised to actively involve indigenous and traditional communities in the design and implementation of such plans, policies and programmes.
5. In regard to some activities (e.g., soil stabilization measures), the use of traditional knowledge as reflected in traditional management systems and institutions may be particularly effective when combined with the introduction of new adaptive technologies. National governments and non-governmental organizations as well as development cooperation partners could play an important role to facilitate and foster the introduction of such technologies, through technology transfer, funding and capacity-building for local communities.

Socio-economic implications of biodiversity degradation and loss, including the impact on poverty and poverty alleviation

- The working group recognized important negative socio-economic impacts stemming from biodiversity degradation and the subsequent decline or loss of the benefits associated with biodiversity. Even if not directly generating losses of income or of nutritional components, biodiversity degradation may restrict future economic options, thus generating losses of opportunity. In the case of socio-cultural/spiritual benefits, biodiversity degradation may also lead to a loss of identity.
- For some benefits stemming from dry and sub-humid land biodiversity, the socio-economic impacts of a decline in biodiversity will also depend on the policy framework in place. For instance, in the case of a loss of genetic resources due to biodiversity degradation, the losses of opportunity for local communities are also contingent on whether their traditional property rights are protected and on whether benefits-sharing agreements are in place.
- In some cases, the socio-economic implications of biodiversity degradation are ambiguous, which needs to be reflected in the policy response. For instance, conservation programmes for charismatic species need to be carefully balanced when these species are a nuisance for affected local communities, e.g., through the introduction of compensation packages.
- The working group recognized the important linkages between biodiversity and poverty and that sustainable management and use of biodiversity can be an important entry point for poverty alleviation activities in dry and sub-humid areas. The working group recognized and welcomed the ongoing collaborative work by the Department for International Development, United Kingdom (DFID), the European Commission (EC), the United Nations Development Programme (UNDP) and the World Bank on “Linking Poverty Reduction and Environmental Management”.

Recommendations

5. In assessing the socio-economic implications of biodiversity degradation, it is not sufficient to consider only the actual losses. Careful consideration should also be given to the loss of opportunities that could be realized under changed policy frameworks, e.g., in regard to the protection of traditional knowledge or to the improvement of market access.
6. Even if not directly amenable to an economic analysis, the losses of socio-cultural values should be given due consideration in an assessment of the implications of biodiversity degradation.
7. Ongoing collaborative work by DFID, EC, UNDP and the World Bank on linking poverty reduction and environmental management should be included into the work programme on the biodiversity of dry and sub-humid lands of the Convention on Biological Diversity.

Economic valuation tools

- The working group recognized the potential of economic valuation to elicit the hidden economic benefits of dry and sub-humid land biodiversity. Economic valuation can play an important role in awareness-raising as well as in informing policy-makers in deciding on investment projects which have an impact on biodiversity, in setting priorities in conservation programmes and in designing adequate economic policy instruments. In the latter regard, the group noted and welcomed the work on environmental valuation as a basis for payments for ecological services, undertaken by the Unit on Environmental Economics and Indicators of the World Bank Institute.
- The working group recognized that many economic valuation tools exist, and that these have specific advantages and disadvantages. Specifically, a specific tool may perform well to value some benefits of dry and sub-humid land biodiversity, but may perform poorly for others.

Recommendations

7. As some tools are better suited to economically value a specific benefit than others, the identification of the main benefits arising from a specific area of dry and sub-humid land, by way of a careful qualitative analysis, has to be undertaken prior to any valuation exercise in order to choose the adequate valuation tool.
8. The cost and efforts related to data gathering as well as the required technical and human capacity to use a specific valuation tool should also be given due consideration in choosing the adequate tool. The principles of cost-benefit-analysis should also be applied when deciding whether and what extent economic valuation should be undertaken in a specific case.
9. Given that the application of all valuation tools requires a considerable amount of money as well as technical expertise and capacity, which limits their use on a wider scale especially in developing countries, organizations working on economic valuation should be encouraged to undertake additional research to develop effective low-cost valuation tools. It should especially be considered how valuation studies based on benefit function transfer approaches could be adapted to the peculiarities of developing countries.

10. Economic valuation is no panacea and should be embedded in a broader assessment exercise. Specifically, once a specific valuation tool is chosen, careful consideration should also be given to those benefits that are not well covered by this tool, e.g., through a flanking qualitative assessment. It has also borne in mind that even those tools able to cover bequest and existence values (the contingent valuation method) may not register the totality of socio-cultural and/or spiritual values. Research institutions are encouraged to undertake further work on how to make such benefits amenable to an economic analysis, like the work on economic valuation of cultural heritage undertaken by the World Bank Institute.

Benefits of Dryland Biodiversity

Benefits	Scope	Socio-economic Implications of Degradation, incl. Poverty.	Role of Traditional Knowledge	Type of Economic Value (to be discussed)	Possible Valuation Instruments (to be discussed)
Genetic resources (wild relatives of crops)	global	Loss of opportunity, depending on policy framework (IPR/sui generis-regimes, benefit sharing)	high (devaluation by degradation; informing conservation policies and bioprospecting)	direct use value; option value	Hedonic Pricing ²
Tourism	global	policy-dependent (wildlife and park management, benefit-sharing, compensation mechanisms)	high (interaction with local communities; knowledge on animal behavior)	use value, option value	Travel costs CVM ³
Use of plants (medicines, cosmetics, aromatics, stimulants, ornamentals)	global	loss of traditional medicine; loss of opportunity; loss of income	high (traditional medicine, use or abuse of stimulants)	use value; option value	Market value Hedonic Pricing CVM
Wildlife	global	policy-dependent (nuisance species require balanced policy approach)	high (interaction with local communities; knowledge of animal behavior)	use value;	Market value, CVM
Ecosystem services (soil stabilisation/erosion prevention, provision of habitat for wild pollinators essential for food production, recharging of water tables etc.)	global	Loss of opportunity; loss of habitats, loss of nutritional components; loss of income	medium (traditional management systems and institutions)	indirect use value (ecosystem function)	Productivity approach
Pastoralism/livestock industry	local/regional/global (depending on existence and scope of export markets)	loss of income or nutritional components (subsistence pastoralists)	high (traditional management systems and institutions)	use value	Market value CVM
Socio-cultural/spiritual values	local/regional/global	loss of identity, loss of traditional knowledge	high (traditional knowledge integral part of	bequest/existence value (with caveat)	CVM (with caveat)

² The hedonic price method relies on the fact that some goods are in demand because of characteristics relating to environmental quality (e.g., houses). It isolates the price differential that is paid on the market for these environment-related characteristics.

³ The Contingent Valuation Method (CVM) is a questionnaire-based tool. By means of a set of carefully designed questions, it directly elicits the willingness-to-pay of a representative group in regard to changes in environmental quality.

			cultural identity)		
Wild food	local/regional	loss of nutritional components; loss of insurance (famine food); loss of income	high (knowledge on the value of wild food)	use value; option value	Market value CVM

Annex V

MEASURES TAKEN FOR THE CONSERVATION AND SUSTAINABLE USE OF BIODIVERSITY, INCLUDING THE ROLE OF EX-SITU CONSERVATION, RESOURCE MANAGEMENT AND PREVENTIVE MEASURES ; MEASURES TAKEN FOR THE SUPPORT OF SUSTAINABLE LIVELIHOODS (ITEMS 3.2.1 AND 3.2.2.)

The Working Group (WG) agreed to initiate and build discussions from **Activity 7, 8 and 9 of Annex 1 of Decision V/23 Draft Programme of Work on Dry and Sub-humid Lands** (p 637-8 in the CBD handbook), which outlines the promotion of specific measures for the conservation and sustainable use of biodiversity in dry and sub-humid lands, responsible management of resources and support for sustainable livelihoods. Based on this list, the WG could recommend additional measures or strengthen what has already been outlined following its inter-sessional work.

Activity 7. Promotion of Specific Measures for the Conservation and Sustainable Use of the Biological Diversity of Dry and Sub-humid Lands, through, *inter alia*:

(a) The use and the establishment of additional protected areas and the development of further specific measures for the conservation of the biodiversity

The WG acknowledged that many countries have established protected area (PA) networks, and extensive experience already exists. We need to tap into this pool of experience and assess the extent to which PAs are considered an effective tool for biodiversity conservation in dry and sub-humid lands.

A range of internationally operating organizations including IUCN, WWF, FAO, UNESCO have assisted member countries in establishing and managing protected areas, and their experience and advice on protected areas issues, specially in dry and sub-humid lands, needs to be fed into this exercise.

Improvement of PA management entails the involvement of the local people and relevant stakeholders, including recognizing the importance of participatory management, the incorporation of traditional systems, and the socio-economic benefits arising from such initiatives.

The role of private sector participation was also discussed and the WG noted that their participation would be facilitated if activities in question made business sense. Perhaps the first step for this initiative is to review the application of the IUCN guidelines for assessing economic benefits of PAs in dry and sub-humid lands. Further recommendations can be drawn from the outcome of this study.

Finally, the importance of improving the management of existing PAs was stressed in relation to creating new PAs.

The WG agreed the following actions:

- It was agreed to review the distribution of established PAs and compare it with dry and sub-humid land distribution to see how much of the PAs actually cover drylands.
- This exercise would be augmented by identifying sites considered as dry and sub-humid lands within the existing networks of internationally recognised sites (such as UNESCO MAB Biosphere Reserves, Ramsar sites and World Heritage sites).
- Key international organizations working on protected areas would be contacted in order to better understand areas of their work relevant to drylands. For example, the IUCN World Commission

/...

on Protected Areas would be approached concerning their guidelines for assessment of economic benefits of protected areas, and for assessment of management effectiveness. To what extent have these been tested in drylands?

- Other relevant international organizations with experience in this area include UNESCO, FAO and WWF, and their experience relevant to protected areas in dry and sub-humid lands will also be sought.
- Consideration must also be given to finding better ways to disseminate and share good “green” stories. We need to review the extent to which is this being done on protected areas.
- The outcome of all these reviews would then be fed into the deliberations and final recommendations of the expert group.

It was also noted that the issue of protected areas is the main theme for CBD COP 7 in 2004 and at the preceding SBSTTA. Hence our discussions and recommendation on PAs in dry and sub-humid lands can be put on the table for further discussion and approval in pending meetings. The World Park Congress taking place in Durban, South Africa in September 2003 will be another opportunity for better review of PAs in dry and sub-humid lands.

(b) The rehabilitation or restoration of the biodiversity of degraded dry and sub-humid lands.

The WG stressed that dry and sub-humid lands are not homogeneous. Thus restoration of biodiversity should be addressed within a specific rather than general context. The WG supported also the relevance of clear indicators that signal whether rehabilitation/restoration has taken place in a given site.

The WG also discussed the considerate expertise and possible role of the private sector, the mining industry in particular, on rehabilitation and restoration of degraded dry and sub-humid lands.

It was recommended that

- an assessment be carried out in order to identify and highlight the promising outcomes which should profit the stakeholders;
- good success stories should be actively shared and that access to relevant information be readily available;
- the governments implement an appropriate environmental policy with incentive measures to draw the private sector within the programme of work. For example the issue of carbon sequestration potential (and subsequent entitlement of certified emission reduction units) through aforestation programme could be used as a platform for pulling in private sector interest.

(c) The management of invasive alien species

The WG recognized the need to draw out dry and sub-humid land elements from existing programmes and networks, including for example the existing SBBTTA and COP papers and the work of the Global Invasive Species Programme (GISP). The Secretariat, with its programme officers, was asked to review the existing information in this regard.

(d) The sustainable management of dry and sub-humid land production systems

The WG recognized that the term “production systems” has a strong focus on people and referred to the FAO work (good farming practices, conservation agriculture and integrated production system etc.) and to the World Bank publication on “Good Practices in Drylands Management” for initial information. The WG also discussed issues regarding institutional considerations and the need for a community driven framework.

It was recommended that

- measures taken in this regard should be dependent on eco-regions and would therefore have different characteristics depending on the region in question;
- baselines of national achievements in the practice of sustainable agriculture/production systems are established before consideration of issues such as capacity building and information management (with particular reference to the use of indicators) are undertaken.
- progress is assessed in the establishment of relevant indicators for monitoring at global, regional or national levels.

(e) The appropriate management and sustainable use of water resources

This measure is linked to (d) as a part of the sustainable management of dry and sub-humid land production systems. Equally, specific measures outlined in (h) could also relate to (d).

However the Secretariat was asked to provide the AHTEG with the necessary information for the inter-sessional work.

(f) Where necessary, the conservation in-situ as well as ex-situ, as a complement to the latter, of the biodiversity of dry and sub-humid lands, taking due account of better understanding of climate variability in developing effective in-situ biological conservation strategies

The WG remarked that this statement needed clarification, especially the need for revising the phrase “in-situ as well as ex-situ as a complement to the latter” to “in-situ as well as ex-situ as a complement to in-situ”. It is assumed that this clause means use ex-situ measures as appropriate to support in-situ conservation action.

Regarding the progress made since last COP meeting in 2000, it was mentioned that there has certainly been progress in ex-situ plant conservation. The CBD’s Global Strategy for Plant Conservation, for example, revised its target to 60 percent of threatened plant species in accessible *ex-situ* collections.

Current status of ex-situ conservation for animals, however, needs to be looked into in detail to see how future programme of work can be built on the basis of existing information.

The ability of ex-situ collections to provide a relatively simple mechanism for balancing access with fair and equitable benefits to genetic resources was noted.

(g) The economic valuation of the biodiversity of dry and sub-humid lands, as well as the development and the use of economic instruments and the promotion of the introduction of adaptive technologies that enhance productivity of dry and sub-humid lands ecosystems

The AHTEG Working Group 4 is looking into this topic.

(h) The sustainable use or husbandry of plant and animal biomass, through adaptive management, bearing in mind the potential population fluctuation in dry and sub-humid lands, and the support by Parties of national policies, legislation and land-use practices, which promote effective biodiversity conservation and sustainable use

The WG noted that this could be combined with (d) and (c) to give a holistic picture of progress.

(i) The establishment and promotion of training, education and public awareness

As regards promoting public awareness, much work has been done under the Global Initiative on Biological Diversity Education and Public Awareness (UNEP/CBD/COP/6/613/Add.2) and also by the FAO. Progress has been made in this respect and these effects will be looked into in greater detail as part of the inter-sessional work. As for training, the questions of ‘more training in what?’ were raised and how this fits into capacity building issues. A general consensus was achieved on the need for identifying gaps on training under this work programme, i.e., review existing initiatives (such as relevant courses available in universities) and areas which need to be strengthened.

The WG supported appropriate training and education programme as well as public awareness raising.

The WG also mentioned the need to review and assess both good and bad experiences in training, education and public awareness and identify recommendations that would enhance positive impacts.

(j) The facilitation and improvement of the availability, the accessibility and exchange of information on sustainable use of biological diversity of dry and sub-humid lands

The WG noted that this issue linked to information/knowledge sharing and should be addressed within the networking framework. The CBD Clearing House Mechanism (CHM) has a significant role to play supported by national programmes to achieve local delivery.

(k) The establishment and promotion of research and development programmes with a focus on, inter alia, building local capacity for effective conservation and sustainable use of biodiversity of dry and sub-humid lands

This is related to most GEF funded projects. However, there is a need to assess the activity carried out to know what is being done and what are the gaps. This information might be necessary for helping to better focus the assistance. Reference was made to the possible role for national self assessment.

(l) Cooperation with the Ramsar Convention on Wetlands and the Convention on the Conservation of Migratory Species with regard to, inter alia, integrated catchment management incorporating wetlands ecosystems as integral part of dry and sub-humid lands, and the creation of migratory-species corridors across dry and sub-humid lands during seasonal periods, as well as the Convention on International Trade in Endangered Species (CITES) with regard to rare and endangered species in dry and sub-humid lands

The WG recognized that CBD and the Convention on Wetlands were already cooperating to a significant extent, and there was a joint programme of work. A joint programme of work was also already in preparation with the Convention on Migratory Species. As far as AHTEG was aware, there was limited, if any, direct cooperation with CITES. It was not clear to AHTEG without further review the extent to which existing cooperation with the other conventions is directly relevant to dry and sub-humid land biodiversity conservation issues. This may require future review.

(m) Cooperation with all relevant conventions, in particular with the Convention to Combat Desertification (CCD) with respect to, inter alia, the sustainable use of the biological diversity of dry and sub-humid lands, the application of ecosystem approach, the assessment of the status and trends of this biological diversity as well as to its threats.

This relates to current meeting and work of the AHTEG and also liaison meeting in Bonn.

Several interregional cooperation meetings between Africa and Latin America have been held: for example the Third African/Latin American and Caribbean interregional forum organized by CCD held in Caracas, Venezuela in February 2002. The outcomes are reported below:

Further to the technical questions related to the management of natural resources, capacity building, etc., there is a need to find a common way to include specific needs of our region in the development scenario, such as

- economic valuation of dry ecosystems;
- Improvement of productivity for agricultural activities and fisheries;
- improvement of the education and health indexes;
- setting up of instruments and economic mechanisms to control the deterioration of environment;
- the inclusion of concrete measures in the national development plans; and
- improvement of the quality of life of local communities so that their participation in the management of resources is facilitated.

Activity 8. Promotion of Responsible Resource Management, at Appropriate Levels, Applying the Ecosystem Approach, through an Enabling Environment, including, *inter alia*:

(a) Strengthening of appropriate local institutional structures for resource management, supporting indigenous and local techniques of resource use that enable conservation and sustainable use in the long-term, and/or combining appropriate existing institutions and techniques with innovative approaches to enable synergies; and

(b) Decentralization of management to the lowest level, as appropriate, keeping in mind the need for common resource management and with due consideration to, inter alia, involving indigenous and local communities in planning and managing projects.

The WG discussed the policy and institutional issues related to biodiversity conservation and noted that at the country level, there are various measures on desertification combating, and natural resources management.

The approach used in most GEF and donor projects is built on community-based management, and this has an increasing understanding at country level. However, how to make experiences and knowledge gained from these projects readily available to the stakeholders remains an issue.

It was noted that much information was available but there is a need for gathering and disseminating available information in a concise and accessible form.

The WG therefore recommended

- some case studies be carried out to identify whether the GEF and other donor projects are implemented within the context of biological diversity conservation in dry and sub-humid lands. This will be undertaken as part of the inter-sessional work.
- information be sought regarding the long-term outcomes which considers the issue of monitoring
- the role of CBD and its Clearing House Mechanism (CHM) for processing and disseminating the information is specified in order for the information to reach global, regional and country levels through the internet or other channels of communication.
- the Secretariat to act as a temporary gateway for accessing to experiences of case studies from international organizations. This can be done through creating a framework within the CBD for collecting information and effective dissemination of information in co-operation with other biodiversity related treaties.

(c) Creating or strengthening appropriate institutions for land tenure and conflict resolution.

The issue of land tenure and conflict resolution is very country and government specific. The WG noted that this statement was difficult to measure progress.

The WG recommended

- that case studies be carried out to identify relationship between the changes in land tenure measures and associated negative/positive impacts linked to resource access rights and management. The experiences can then be shared between countries, but leaving governments to address issues in their respective countries.

(d) Encouraging bilateral and subregional cooperation to address transboundary issues (such as facilitating access to transboundary rangelands), as appropriate, and in accordance with national legislation and international agreements.

Transboundary issues were also discussed and this was considered very relevant for addressing desertification and biodiversity issues. A number of activities have been implemented, for example GEF projects (Mauritania, Senegal), and IUCN projects etc.

It was recommended to revise the text in order to include water and wildlife issues.

(e) Harmonizing sectoral policies and instruments to promote the conservation and the sustainable use of biological diversity of dry and sub-humid lands, including by, inter alia, taking advantage of the existing national action programmes under the Convention to Combat Desertification

frameworks at the country level, as well as, as appropriate, other existing and relevant sectoral plans and policies.

It was noted that many national action programmes (NAP) in various fields relating to biological diversity have been designed and implemented by the member countries. In seeking harmonization, it was recommended that

- biological diversity conservation should be seen as a cross-cutting issue rather than a stand-alone topic; and
- the harmonization process seeks out the key priority measures that should be carried out under the CBD's National Biodiversity Strategy and Action Plan (NBSAP) and UNCCD's National Action Programme (NAP) to enhance synergy and add value to activities.

Activity 9. Support for Sustainable Livelihoods through, *inter alia*;

(a) Diversifying sources of income to reduce the negative pressures on the biological diversity of dry and sub-humid lands;

(b) Promoting sustainable harvesting including of wildlife, as well as ranching, including game-ranching;

(c) Exploring innovative sustainable uses of the biological diversity of dry and sub-humid lands for local income generation, and promoting their wider application;

(d) Developing markets for products derived from the sustainable use of biological diversity in dry and sub-humid lands, adding value to harvested produce; and

(e) Establishing mechanisms and frameworks for promoting fair and equitable sharing of the benefits arising out of the utilization of the genetic resources of dry and sub-humid lands, including bioprospecting.

Items under this activity have been considered during discussions by this group of Activities 7 and 8 of the draft programme of work on dry and sub-humid lands. Much progress has been made for implementing appropriate measures. See for example UNEP/CBD/COP6/6 on benefit sharing.

Further review will be undertaken as part of the inter-sessional work.

Annex VI

POSSIBLE ESTABLISHMENT OF AN INTERNATIONAL NETWORK OF DRY AND SUB-HUMID AREAS OF PARTICULAR VALUE FOR BIODIVERSITY (ITEM 3.1.2)

1. Networks of Sites

There is already a considerable experience with the establishment of networks of internationally recognised sites, both at global and regional levels. These various networks have different objectives ranging from cooperation in science and management practice, to recognition of global or regional importance for a particular range of features. Assessment needs to be made of whether a further network of sites might be established for biological diversity of dry and sub-humid lands, or whether existing networks of sites (or parts of networks) that might be further promoted in the context of the Convention assuming an appropriate series of objectives, and clear links to networks of people.

- **Recommendation for inter-sessional:** The experience and relevance of existing networks of sites needs to be considered further during the inter-sessional period before the next AHTEG meeting, working in collaboration with, for example, the UNESCO MAB Secretariat and the Ramsar Convention Bureau.
- **Recommendation for 2nd AHTEG meeting:** This meeting should review the information available on relevant networks of sites and make recommendations. These may require further discussion with secretariats before results can be presented to SBSTTA.

2. Networks of Institutions and/or Individuals

Networks of institutions and/or individuals working together with a clear purpose and objectives can be a powerful mechanism for sharing knowledge, information and experience, and coordinating research and other action on the ground. Many such networks exist, a number of which relate to (or incorporate in some manner) drylands and/or dryland issues. These include the UNCCD TPNs, and various networks under the auspices of FAO and the CGIAR.

The UNESCO Man and Biosphere Programme has experience of implementing and using several different types of network. The *World Network of Biosphere Reserves* is a network of sites established with defined purposes in conservation, research and training; the *Northern Sciences Network* was established to coordinate and share information, knowledge and experience relating to Arctic ecosystems; and various regional networks, such as *ArabMAB* have been established to promote cooperation between scientists in different regions.

Before making further recommendations on how networks might be developed and used in drylands, it is essential that we review existing networks to assess their objectives, working methods and thematic and geographical coverage.

- **Recommendation for inter-sessional:** AHTEG members with experience of particular networks should provide information on those networks to other AHTEG members.

- **Recommendation for inter-sessional:** UNESCO will be attending the CBD COP in The Hague. It is suggested that some AHTEG members meet with the UNESCO representative and discuss this issue further, reporting back to AHTEG members subsequently.
- **Recommendation for 2nd AHTEG meeting:** This meeting should review the information available on relevant networks and make recommendations on whether a new network (or networks) should be established, and what recommendations might be made concerning linkages with existing networks.

3. Information Networks

There is concern that where information and knowledge sharing networks exist, the information is not always available to the people who need it, or is not in a form that can be used. This needs to be recognised in the recommendations that the AHTEG makes to SBSTTA on information networks, capacity development and the Clearing-House Mechanism.

4. Focus of Networks

Further work on identification and monitoring is needed, such as a programme to study the direct links between the pressures on drylands and the impact on the state of biological diversity. A primary focus of networks should therefore be to promote establishment of an adequate knowledge base for cross-conventional problems, and the identification of solutions.

The reports by contracting parties to both the CBD and UNCCD is a valuable resource for identifying what monitoring activities are already under way at the national level (and/or where they exist). This will also help in planning a more careful approach to development of networks.

Both conventions have carried out work on indicators, and networks might promote a more systematic approach to information management and the application of guidelines on indicators, resulting in (and perhaps ensuring) a more valuable and informative outcome.

When recommendations are made on networks, careful attention needs to be paid on focusing on the works of those networks, drawing on the observations of AHTEG members and our understanding of the aims of existing networks.

Annex VII

PRIORITY SETTING (ITEM 3.3)

The group

- Considered international priorities set at the regional and global levels and decided to focus on the CBD draft programme of work on biodiversity of dry and sub-humid lands, which encompasses most of these priorities;
- Examined whether some activities in the programme of work needed refinement; and
- Prepared a list of expected outcomes for each activity of the programme of work, some timeframes where possible, potential actors that may implement the activities and potential CBD partners at both the regional and global levels, and some indicators of progress.

A. Programme of work on biodiversity of dry and sub-humid lands

The group agreed that

- The programme of work in COP decision V/23 constitutes a comprehensive programme that will allow the conservation of dry and sub-humid lands biodiversity, the sustainable use of its components, and the fair and equitable sharing of benefits derived from the utilization of dry and sub-humid lands genetic resources. However, more emphasis should be placed to support sustainable livelihoods by linking the goods and services of dry and sub-humid lands biodiversity to poverty considerations.
- In addition, implementation of this programme of work should take into account the provisions in other relevant CBD programmes of work, in particular on agrobiodiversity, biodiversity of inland water ecosystems and forest biological diversity, as well as COP decisions on all the cross-cutting issues such as, *inter alia*, ecosystem approach, sustainable use, GTI, Article 8 (j) and related provisions, access and benefit-sharing, indicators, global strategy on plant conservation, and impact assessment.

B. List of expected outcomes, timeframe, potential actors, and indicators of progress in the implementation of the programme of work (see Appendix)

The following appendix contains an indicative list of expected outcomes, timeframe, potential actors, and indicator of progress in the implementation of the programme of work.

Appendix: Indicative List of Expected Outcomes and Timeframes; Potential Actors, and Indicators of Progress in the Implementation of the Programme of Work

Activity	Expected Outcomes and Timeframe	Potential Actors	Indicators of Progress
<p>Activity 1. Assessment of the status and trends of the biological diversity of dry and sub-humid lands, including landraces, and the effectiveness of conservation measures.</p>	<p>(i) Review and assessment of information on status and trends of biodiversity in dry and sub-humid lands with specific emphasis on areas of particular value for biodiversity and/or under potential threat (Activity 2); and including review and assessment of processes affecting biodiversity (Activity 4)</p> <p>(ii) Assessment of biodiversity important for its conservation (Annex I to CBD and identified areas of specific value for biodiversity) based on national reports and other reports for COP8 in 2006</p> <p>(iii) Global assessment in 2012 when the programme of work (PoW) is reviewed in depth and every 10 years thereon if a mechanism such as FAO-FRA can be established.</p>	<p><u>For drylands:</u> Secretariat and parties to CBD, UNCCD, Ramsar Convention, CITES, and CMS, UNEP, UNEP-WCMC, Global Observing systems of UNEP, FAO, WB, ICARDA, ICRISAT, IUCN, WRI.</p> <p><u>For Mediterranean ecosystems:</u> [to be listed by experts]</p> <p><u>For grasslands and savannah ecosystems:</u> [to be listed by experts]</p> <p><u>For dry forests and forests in the Mediterranean ecosystems:</u> FAO and other CPF members, UNEP-WCMC, IUFRO</p>	<p>(i) Amount of relevant information disseminated through the CHM</p> <p>(ii) Joint work undertaken by organizations and convention Secretariats to implement this activity: workshops, MoUs,</p> <p>(iii) Inclusion of assessment needs in capacity building programmes</p>
<p>Activity 2. Identification of specific areas within dry and sub-humid lands of particular value for biological diversity and/or under particular threat, such as,</p>	<p>See Activity 1.</p> <p>In addition, establishment of an international network of dry and sub-humid areas of particular value for biodiversity.</p>	<p>(See Activity 1).</p> <p>In addition, existing UNCCD thematic programme networks (TPN) and other</p>	<p>(See Activity 1).</p> <p>In addition, strengthening and expansion of networks of dry and sub-</p>

Activity	Expected Outcomes and Timeframe	Potential Actors	Indicators of Progress
inter alia, endemic species and low lying wetlands, with reference to the criteria in Annex I to the Convention on Biological Diversity.		networks such the “DesertNet” in Europe.	humid areas of particular value for biodiversity
Activity 3. Further development of indicators of the biological diversity of dry and sub-humid lands and its loss, for the various ecosystem types, for use in the assessment of status and trends of this biological diversity.	<p>(i) National-level indicators of dry and sub-humid lands biodiversity being developed in the context of the CBD. Reports of these indicators could be ready for SBSTTA 9 in 2003 and COP 7 in 2004</p> <p>(ii) Agreed core set of indicators of dry and sub-humid lands biodiversity taking into account indicators of agrobiodiversity, forest biodiversity and inland waters biodiversity as part of the core set of indicators being developed in the CBD, to be ready for SBSTTA 9 in 2003 and COP 7 in 2004</p>	Secretariat and parties to CBD and UNCCD, FAO, UNEP-WCMC, GEF, World Bank, ICARDA and ICRISAT and other relevant CGIAR centers; IUCN, WRI, UNEP,	<p>(i) National input to the process of indicator development</p> <p>(ii) Adoption of indicators at the national level</p> <p>(iii) Progress in SBSTTA 9 and COP 7</p>
Activity 4. Building knowledge on ecological, physical and social processes that affect the biological diversity of dry and sub-humid lands, especially ecosystem structure and functioning (e.g., grazing, droughts, floods, fires, tourism, agricultural conversion or abandonment).	<p>(i) Reports and publications on the structure and functioning of dry and sub-humid lands ecosystems / ongoing with a synthesis prepared for COP 8 (2006).</p> <p>(ii) Potential impact of climate change on dry forests, on drylands, Mediterranean ecosystems and grasslands/savannah ecosystems / Being prepared by the ad hoc technical expert group on biodiversity and climate change.</p> <p>(iii) Assessment of processes affecting biodiversity positively and negatively (see Activity 1)</p>	See Activity 1	Relevant publications and reports
Activity 5. Identification of the local and global benefits, including soil and water conservation, derived from the	(i) Compilation of information on local and global benefits, possibly as part of the outputs under Activity 1. A first review of information on global benefits will be made available by the AHTEG for	See Activity 1	(i) Case-studies describing benefits derived from dry and sub-humid lands

Activity	Expected Outcomes and Timeframe	Potential Actors	Indicators of Progress
<p>biological diversity of dry and sub-humid lands, assessment of the socio-economic impact of its loss, and the undertaking of studies on the interrelationship between biodiversity and poverty, including analysis of: (i) the benefits from biodiversity for poverty alleviation; and (ii) the impact of biodiversity conservation on the poorest.</p>	<p>SBSTTA 8 (Dec. 2002)</p> <p>(ii) Assessment of the socio-economic impact of biodiversity loss and linkage to poverty. A first assessment will be made available by the AHTEG for SBSTTA 8 (Dec. 2002)</p> <p>(iii) Case-studies on interlinkages between biodiversity loss and poverty</p>		<p>biodiversity, impact of its loss at the local, national and international level</p> <p>(ii) Increased interest in workshops</p>
<p>Activity 6. Identification and dissemination of best management practices, including knowledge, innovations and practices of indigenous and local communities that can be broadly applied, consistent with the programme of work under the Convention on Article 8(j) and related provisions. Ways and means</p>	<p>(i) Case studies illustrating good and inappropriate management practices including consideration of traditional knowledge and Guidelines for assessment of good practices.</p> <p>(ii) Casestudies disseminated through the Clearing-house Mechanism as part of the web page on dry and sub-humid lands</p>	<p>See Activity 1</p>	<p>Case studies on the CHM</p>
<p>Activity 7. Promotion of specific measures for the conservation and sustainable use of the biological diversity of dry and sub-humid lands, through, inter alia:</p>			
<p>(a) The use and the establishment of additional protected areas and the development of further specific</p>	<p>(i) Additional protected areas established taking into account the ecosystem approach and guidelines on establishment of “adequate and effective protected areas networks” (comprehensiveness,</p>	<p>Secretariat and parties to CBD and UNCCD, IUCN-WCPA, UNEP, WWF, WRI, GEF, FAO, CGIAR</p>	

Activity	Expected Outcomes and Timeframe	Potential Actors	Indicators of Progress
<p>measures for the conservation of the biological diversity of dry and sub-humid lands, including the strengthening of measures in existing protected areas; investments in the development and promotion of sustainable livelihoods, including alternative livelihoods; and conservation measures;</p>	<p>representativeness) being developed through WCPA and later through CBD COP 7.</p>	<p>centers, UNESCO-MAB, WHC and various NGOs</p>	
<p>(b) The rehabilitation or restoration of the biological diversity of degraded dry and sub-humid lands, with the associated benefits arising thereof, such as soil and water conservation;</p>	<p>(i) Increased number and area of restored and rehabilitated lands or being restored or rehabilitated to be checked annually. Operational targets proposed by SBSTTA 7 can be applied.</p> <p>(ii) Enhanced experience with restoration and rehabilitation of degraded dry and sub-humid lands (technology development and transfer; guidelines; cost/benefit analysis; number and quality of research projects, and restoration/rehabilitation programmes undertaken.</p> <p>(iii) Assessment of benefits, including in terms of biodiversity and livelihood, and costs.</p> <p>(iv) Assessment of results</p> <p>(v) Integration of guidelines and good practices in NBSAPs, including systems for monitoring effectiveness of measures.</p> <p>(vi) Databases on/containing information on degraded dry and sub-humid lands</p>	<p>(i) Governments and agents responsible for degradation of ecosystems.</p> <p>In addition,</p> <p>(ii) With regards to forests in the Mediterranean ecosystems, see actors proposed in the programme of work on forest biodiversity</p> <p>(iii) In drylands, grasslands and savannahs: Secretariat and parties to CBD and UNCCD, UNEP, FAO, WB, UNDP, GEF, CGIAR (in particular ICARDA, ICRISAT, ICRAF, IITA, CIAT), regional research institutes, regional development banks</p>	<p>(i) Number and total areas of lands rehabilitated / restored or being rehabilitated / restored</p> <p>(ii) Development of new technologies and/or guidelines; number of relevant research projects; adoption of technologies and guidelines / good practices</p> <p>(iii) Financial resources for restoration and rehabilitation activities.</p> <p>(iv) Number of databases including information on degraded dry and sub-humid lands</p>

Activity	Expected Outcomes and Timeframe	Potential Actors	Indicators of Progress
(c) The management of invasive alien species;	<p>(i) See COP 6 decisions on invasive alien species and targets relevant to invasive alien species including <i>inter alia</i> adoption of guiding principles/guidelines and integration in national policies/legislation; development and strengthening of mechanisms/institutions for the prevention of introduction and control of invasive alien species and mitigation of their impact, including monitoring systems.</p> <p>(ii) Increased information and information exchange on invasive alien species (characteristics, pathways, incidence, management).</p>	<p>(i) Governments and agents responsible for introduction</p> <p>(ii) GISP, Secretariat and parties to CBD and UNCCD, UNFCCC, Ramsar Convention, CITES, and IPPC, OIE, WTO, UNEP, various research institutes including CGIAR centers such as ICARDA, ICRISAT, ICRAF, CIFOR, IITA and CIAT; IUCN, WWF.</p>	<p>(i) Increased knowledge of invasive alien species (their nature, inventory, mode of action, impacts and management)</p> <p>(ii) Guiding principles/guidelines in place and adopted</p> <p>(iii) Establishment or strengthening of mechanisms and institutions for the management of invasive alien species</p> <p>(iv) Number and importance of activities to prevent introduction and/or control of invasive alien species and their impacts.</p>
(d) The sustainable management of dry and sub-humid land production systems;	<p>(i) Operational guidelines on sustainable use of dry and sub-humid lands and their biodiversity / SBSTTA 9 (2003) and COP 7 (2004); and other guidelines/guidance for good farming practices, integrated production system and good practices in drought preparedness integrating the work of FAO, WB and relevant CGIAR centers and traditional knowledge</p> <p>(ii) Conservation of dry and sub-humid lands biodiversity goods and services and support for</p>	<p>Local and indigenous communities; Secretariat and parties to CBD and UNCCD, FAO, WB, CGIAR centers, CILSS, GEF, IFAD</p>	<p>(i) Adoption of operational guidelines and their integration into national policies, strategies and action plans</p> <p>(ii) Number of relevant research projects and workshops on the subject</p>

Activity	Expected Outcomes and Timeframe	Potential Actors	Indicators of Progress
	<p>sustainable livelihoods.</p> <p>(iii) Development of incentives, “fair and equitable” markets (see activity 9)</p>		(iii) Increased land area under sustainable management
(e) The appropriate management and sustainable use of water resources;	<p>(i) Guidelines on management and sustainable use of water resources</p> <p>(ii) Case studies on best practices</p>	Secretariat and Parties to CBD, UNCCD, Ramsar Convention, UNESCO, UNEP, FAO and WMO; local and indigenous communities	<p>(i) Guidelines adopted and in place</p> <p>(ii) Case studies published or disseminated through the CHM</p>
(f) Where necessary, the conservation <i>in situ</i> as well as <i>ex situ</i> , as a complement to the latter, of the biological diversity of dry and sub-humid lands, taking due account of better understanding of climate variability in developing effective <i>in situ</i> biological conservation strategies;	<p>(i) Same as 7(a) activity (i)</p> <p>(ii) Guidelines for design of protected areas that take into account the potential effects of climate change (in collaboration with the current WCPA project on climate change and protected areas)</p> <p>(iii) Linkages established with zoos and seedbanks for <i>ex-situ</i> conservation of drylands biodiversity.</p> <p>(iv) Linkages established with the GTI in this regard</p>	IUCN-WCPA, WRI, UNESCO-MAB, WWF, CGIAR centers including IPGRI, Secretariat and parties to CBD and UNFCCC, UNCCD.	<p>(i) Same as 7(a) (i)</p> <p>(ii) CBD support for the WCPA project, and the results of the project adopted and distributed by the CBD</p> <p>(iii) Formal linkages with zoos and seedbanks in place</p> <p>(iv) Drylands section of GTI work programme implemented</p>
(g) The economic valuation of the biological diversity of dry and sub-humid lands, as well as the development and the use of economic instruments and the promotion of the introduction of adaptive technologies that enhance productivity of dry and	<p>(i) Economic valuation of drylands goods and services undertaken for areas of specific value for biodiversity</p> <p>(ii) Guidance for Parties produced on the use of economic instruments and promotion of adaptive technologies.</p>	Secretariats and parties to CBD, UNCCD, UNFCCC, Ramsar Convention, CITES, and CMS; FAO, UNEP, World Bank; OECD, IUCN	<p>(i) Results of economic valuation widely utilized in decision-making</p> <p>(ii) Guidance distributed at relevant meetings and via the CHM</p>

Activity	Expected Outcomes and Timeframe	Potential Actors	Indicators of Progress
sub-humid lands ecosystems;			
(h) The sustainable use or husbandry of plant and animal biomass, through adaptive management, bearing in mind the potential population fluctuation in dry and sub-humid lands, and the support by Parties of national policies, legislation and land-use practices, which promote effective biodiversity conservation and sustainable use;	(i) Collection and distribution of case studies on best practices (ii) Incorporation by Parties of such sustainable practices in their national policies, legislation and action plans.	Secretariats and parties, IUCN, other relevant organizations on sustainable use	(i) Case studies disseminated via CHM (ii) Sustainable practices in place at the national level
(i) The establishment and promotion of training, education and public awareness;	(i) Training programmes in place nationally and regionally (ii) Increased public awareness of the importance of conservation and sustainable use of dry and sub-humid lands biodiversity	Secretariat and parties to CBD, UNCCD, and biodiversity related conventions; UNESCO, FAO, UNDP, UNITAR, educational institutions	(i) Training materials produced, courses held (ii) Increased attention to the matter paid in the media
(j) The facilitation and improvement of the availability, the accessibility and exchange of information on sustainable use of the biological diversity of dry and sub-humid lands;	(i) Development of Internet-based, non-web and non-electronic information exchange mechanisms, including traditional published materials and CD-ROMs	Secretariat and parties to CBD and UNCCD and biodiversity related conventions, UNDP, educational institutions, WCMC, GBIF	(i) Products developed and made widely available, in particular through the CBD CHM. (ii) Access to relevant CBD web pages
(k) The establishment and promotion of research and development programmes with a focus on, <i>inter alia</i> , building local capacity for effective conservation and sustainable use of the biological diversity of dry	(i) Research priorities established or revised to take into account the programme of work on dry and sub-humid lands biodiversity (ii) Pilot projects developed and implemented on the local level	Parties, CGIAR centers in particular ICARDA, ICRISAT, IITA, IPGRI, and other international research institutes	(i) Consultation with experts leading to development of widely distributed document on research priorities. (ii) Pilot projects in place

Activity	Expected Outcomes and Timeframe	Potential Actors	Indicators of Progress
of the biological diversity of dry and sub-humid lands;			and producing results
(l) Cooperation with the Ramsar Convention on Wetlands and the Convention on the Conservation of Migratory Species with regard to, <i>inter alia</i> , integrated catchment management incorporating wetlands ecosystems as an integral parts of dry and sub-humid lands, and the creation of migratory-species corridors across dry and sub-humid lands during seasonal periods, as well as with the Convention on International Trade in Endangered Species (CITES) with regard to rare and endangered species in dry and sub-humid lands;	(i) Incorporation of appropriate activities into joint work programmes with these conventions (i) Case studies, good practices and guidelines for integrated catchments management, creation of migratory species corridors, and for conservation of rare and endangered species.	Secretariat and parties to CBD, UNCCD, Ramsar Convention and Ramsar's international organization partners (WI, IUCN, Birdlife, and WWF International), CMS instruments, CITES	(i) Joint work programmes being developed on these topics and implemented
(m) Cooperation with all relevant conventions, in particular with the Convention to Combat Desertification with respect to, <i>inter alia</i> , the sustainable use of the biological diversity of dry and sub-humid lands, the application of the ecosystem approach, the assessment of the status and trends of this biological diversity as well as to its threats.	(i) Memoranda of Cooperation (MoC) and joint work programmes in place with relevant conventions (ii) Joint programme of work with UNCCD finalized and being implemented, and joint programme of work under development with UNFCCC.	Secretariat of CBD and relevant conventions	(i) Memoranda of Cooperation in place and joint work programmes being implemented
Activity 8. Promotion of			

Activity	Expected Outcomes and Timeframe	Potential Actors	Indicators of Progress
responsible resource management, at appropriate levels, applying the ecosystem approach, through an enabling policy environment, including, <i>inter alia</i> :			
(a) Strengthening of appropriate local institutional structures for resource management, supporting indigenous and local techniques of resource use that enable conservation and sustainable use in the long term, and/or combining appropriate existing institutions and techniques with innovative approaches to enable synergies;	(i) Capacity building projects in place and financial support made available as their national biodiversity strategies actions plans or national action programmes (ii) National institutions strengthened as their national biodiversity strategies actions plans (NABSAP) or national action programmes (NAP) (ii) Case studies, success stories	Governments, NGOs, UNDP, World Bank, GEF, CGIAR centers and Task Force on Integrated Natural Resource Management under CIFOR	(i) Increased number of relevant projects funded (ii) National institutions implementing sustainable management practices (iii) Success stories disseminated
(b) Decentralization of management to the lowest level, as appropriate, keeping in mind the need for common resource management and with due consideration to, <i>inter alia</i> , involving indigenous and local communities in planning and managing projects;	(i) Increased community-based management of resources (ii) Case studies and success stories	Parties, NGOs, local and indigenous communities and secretariat of the CBD for information dissemination through the CHM	(i) As specified in NABSAP (ii) Case sties and success stories dissemination through the CHM
(c) Creating or strengthening appropriate institutions for land tenure and conflict resolution;	(i) Strengthened national organization structures (ii) Case studies and success stories	Parties, NGOs	(i) As specified in NABSAP (ii) Case sties and success stories dissemination through the

Activity	Expected Outcomes and Timeframe	Potential Actors	Indicators of Progress
(d) Encouraging bilateral and subregional cooperation to address transboundary issues (such as facilitating access to transboundary rangelands), as appropriate, and in accordance with national legislation and international agreements;	(i) Practical guidance on transboundary collaboration made available (ii) Increased number of bilateral and subregional collaborative arrangements in place	Parties and the CBD secretariat	CHM (i) Guidance produced and distributed (ii) Increased number of collaborative arrangements in place
(e) Harmonizing sectoral policies and instruments to promote the conservation and the sustainable use of biological diversity of dry and sub-humid lands, including by, <i>inter alia</i> , taking advantage of the existing national action programmes under the Convention to Combat Desertification frameworks at the country level, as well as, as appropriate, other existing and relevant sectoral plans and policies.	(i) Mechanisms for collaboration between respective national focal points developed (ii) Common national databases developed (iii) Case studies, guidelines for cross sectoral integration, integration of NABSAP and NAP and other action plans and policies (for Ramsar, CMS and CITIES)	Secretariat of CBD, UNCCD and other biodiversity related conventions, UNEP, IUCN, WRI, for guidelines	(i) Formal collaborative mechanisms in place and functioning (ii) National biodiversity databases developed and utilized (iii) work on guidelines initiated and implemented
Activity 9. Support for sustainable livelihoods through, <i>inter alia</i> :			
(a) Diversifying sources of income to reduce the negative pressures on the biological diversity of dry and sub-humid lands;	(i) Financial support provided for relevant projects (ii) Case studies (iii) Enhanced livelihoods	Parties, UNDP, World Bank, GEF	(i) Alternative livelihoods providing income for local communities

(b) Promoting sustainable harvesting including of wildlife, as well as ranching, including game-ranching;	(i) Guidelines on best practices made available (ii) National policies and programmes in place	Secretariat of CBD, Parties, FAO	(i) Guidelines produced and distributed (ii) National policies and programmes in place
(c) Exploring innovative sustainable uses of the biological diversity of dry and sub-humid lands for local income generation, and promoting their wider application;	(i) Relevant case studies made available	Secretariat of CBD, IUCN and other NGO's	(i) Case studies distributed via the CHM
Activity	Expected Outcomes and Timeframe	Potential Actors	Indicators of Progress
(d) Developing markets for products derived from the sustainable use of biological diversity in dry and sub-humid lands, adding value to harvested produce;	(i) Products derived from sustainable use increasingly marketed	Private Sector, Parties	
(e) Establishing mechanisms and frameworks for promoting fair and equitable sharing of the benefits arising out of the utilization of the genetic resources of dry and sub-humid lands, including bioprospecting.	(i) Guidelines produced (ii) National-level policies in place	Parties and Governments, Secretariat of CBD, relevant international organizations such as WIPO and FAO, and regional and sub-regional organizations	
