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SYNTHESIS OF INFORMATION CONTAINED IN THIRD NATIONAL REPORTS

Note by the Executive Secretary

I. INTRODUCTION

- 1. In paragraph 9 of decision VII/25 B, the Conference of the Parties requested the Executive Secretary to prepare an analysis of the information contained in the third national reports for consideration by the Conference of the Parties at its eighth meeting.
- 2. The following synthesis is prepared on the basis of the information contained in 30 out of a total of 37 third national reports that had been received by the end of October 2005. Some reports were not included in the synthesis either because they were received in a draft form or because they were submitted using a format inconsistent with the finalized guidelines for the third national report. In case of the Global Taxonomy Initiative, more reports are included in the synthesis, because the third national reports and a report on implementing the programme of work for the GTI 1/ contain a similar set of questions.
- 3. The overall structure of this synthesis basically follows that of the guidelines for the third national report, with a few changes. 2/ It is divided into three sections. Section I presents a synthesis of information related to general issues, primarily those covered in part B of the guidelines for the third national report. Section II provides a synthesis of information concerning implementation of the provisions of the Convention and some cross-cutting issues adopted under the Convention. Section III contains a synthesis of information related to the implementation of programmes of work adopted under

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^{*} Reposted for technical reasons.

^{**} UNEP/CBD/COP/8/1.

 $[\]underline{1}$ / In paragraph 6 of decision VI/9, the Conference of the Parties requested Parties to submit a report on implementing the programme of work for the Global Taxonomy Initiative to assist with the review of implementation of GTI.

 $[\]underline{2}$ / A few issues or articles, such as Article 19, are not included in the synthesis either because there is no adequate information from third national reports or because the Conference of the Parties is not going to review them at its eighth meeting.

the Convention. Annex I to the note contains a list of Parties that had submitted their third national reports (as of the end of November 2005).

4.

- 5. There is no uniform structure for each individual section because the amount and type of information varies considerably from section to section. In most cases, the synthesis of each section will focus on: (a) status and trends; (b) achievements and/or developments; and (c) obstacles encountered in implementation. In cases where such information is difficult to be categorized as such, a summary is made of key findings from reports along the issues raised in the questionnaire. In cases where the first and second aspects overlap, the synthesis will be presented by combining both. In cases where a particular format for review has been proposed by relevant review expert groups, the suggested format is also used for the synthesis.
- 6. In presenting statistical results, some percentages may be cited in some cases. However, it should be noted that they represent only those that had submitted their third national reports and are included in the synthesis, rather than a total number of Parties to the Convention (188 as of the end of October, 2005).
- 7. It should be stressed that findings emerging from this synthesis are very preliminary considering the small number of third national reports available for this exercise. In addition, the depth of analysis or synthesis is very much limited by the size of this document.

II. SYNTHESIS OF INFORMATION CONTAINED IN THIRD NATIONAL REPORTS

A. General issues

1. Priorities for implementation

- 8. Obviously, different countries have different priorities because of their different national circumstances. However, many reports show that a high priority is attached to Article 8 (*In situ* conservation). This indicates that the majority of reporting Parties resort to *in situ* conservation or establishment of protected areas for biodiversity conservation. It should be noted that Article 8(h) (Alien species) and Article 8(j) (Traditional knowledge and related provisions) do not enjoy the same level of priority as high. On the contrary, Article 8(j) is among the provisions of the Convention to which a considerable number of Parties give a low priority. This may be partly due to the fact that some countries do not have indigenous people and communities. In addition, the implementation of Article 6 enjoys a high priority level among many reporting Parties.
- 9. With regards to ranking of other priority levels, a considerable number of Parties (almost or a bit over a half of reporting Parties) accord a medium-level priority to most provisions of the Convention, notably Articles 8(h), 9, 13, 14, 15, 18, 19 and 21. A considerable number of reporting countries give a low priority to Articles 11, 16 and 8(j).
- 10. As far as the programmes of work are concerned, those on forest biodiversity and marine and coastal biodiversity enjoy a relatively high level of priority, while the programmes of work on dry and subhumid land biodiversity and mountain biodiversity are accorded a relatively low priority. This may be related to the fact that some reporting countries do not have dryland or mountain ecosystems. The programmes of work on agricultural biodiversity and inland water ecosystems biodiversity are accorded 50 per cent of high priorities and 50 per cent of medium priorities among all the reporting Parties.

2. Progress towards the 2010 target

Progress on establishment or integration of targets and development of related indicators

- 11. Most reporting Parties have made efforts to develop national targets corresponding to the global, outcome-oriented targets of the framework adopted by decision VII/30, and to integrate these targets into national biodiversity strategies and action plans, and/or other sectoral strategies, plans and programmes (see figures 1 and 2). Where a number of Parties have developed very specific targets (sometimes by adding a quantitative aspect where the global target does not have one), many other Parties have identified general objectives, or reviewed existing activities, rather than setting concrete targets.
- 12. More Parties have established targets related to conservation (especially targets 1.1, 1.2 and 2.2), addressing threats to biodiversity (especially targets 5.1, 6.1 and 7.2), and maintaining the capacity of ecosystems to support goods and services (target 8.1), than to other targets of the decision VII/30 framework. These are the same targets that the greatest number of Parties have integrated or plan to integrate into their national biodiversity strategies and action plans and other related strategies. Sectoral or cross-sectoral integration of these targets appears to be occurring, with Parties reporting more than integration into national biodiversity strategies and action plans. Meanwhile, lack of cross-sectoral integration is also consistently mentioned as an obstacle to implementation of the targets. Where Parties reported on development of national targets, generally about a half of them had also established national targets relevant to each of the thematic programmes of work of the Convention. 3/ This proportion varied however, in part because different countries contain different types of ecosystems.
- 13. The number of Parties that have developed indicators for national targets varies from target to target. Only a small number of Parties have developed indicators for all (or nearly all) targets established. Target 1.1 has the biggest number of Parties measuring progress toward it, through indicators *inter alia* on protected area size, number, management effectiveness, representativeness, and species richness.
- 14. In efforts to seek synergies with other processes in meeting the 2010 target, some Parties are making use of complementary targets/indicators developed by different processes, such as those from NATURA 2000 directives on establishing protected areas, CITES obligations, or FAO indicators for crop genetic diversity.

Status and trends as measured by the targets

- 15. A brief overview can be presented here. In terms of protecting the components of biodiversity, the extent of protected areas is generally increasing, and most Parties have, at the least, compiled lists of threatened species, though management plans and monitoring are generally lacking, and the number of species targeted may be relatively small. Progress on conserving genetic diversity and associated knowledge varies widely, from no action to some gene banking projects, to the establishment of national committees/advisory boards and dedicated research institutes. To promote sustainable use, Parties report increases in forest certification in Europe, increases in organic agriculture, but continued declines in marine fish stocks. Issues of trade in endangered species are reportedly addressed through CITES mechanisms.
- 16. In terms of addressing threats to biodiversity, habitat loss and degradation is widespread, as a result of population growth, economic development, agriculture, urbanization as well as misuse of cultural landscapes, although some Parties have implemented some restoration and management projects that may counter this loss to some degree. Progress on controlling threats from invasive alien species is generally limited, with the exception of a very few Parties who have put research, legislation and management plans in place to control invasive species of major importance. Even Parties that expect

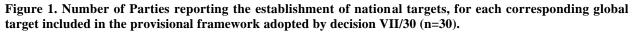
^{3/} The programmes of work considered in the third national report guidelines were those on: agricultural, inland waters, marine and coastal, dry and sub-humid lands, forests, and mountains (i.e., all thematic areas but islands).

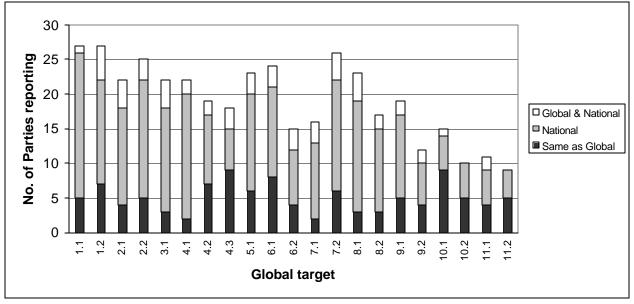
substantial effects on biodiversity due to climate change note that the lack of data makes it difficult to plan for adaptation activities; current progress in this area is limited, and primarily related to research and monitoring. More Parties are taking actions to reduce pollution with some Parties reporting improved air and water quality, particularly in Europe, but pollution impacts remain severe overall.

- 17. Where Parties report on progress in maintaining ecosystem goods and services, status and trends are similar to those described for targets on sustainable use (see above). Protection of traditional knowledge, innovations and practices appears limited. A few Parties describe providing support to local indigenous organizations in other countries, to maintaining domestic traditional agricultural practices, and documenting and protecting traditional medical knowledge. As with protecting traditional knowledge, legislation and activities on access and benefit-sharing is largely lacking.
- 18. Very little information is available on status and trends related to target 4.2 (Unsustainable consumption), or targets 11.1 and 11.2 (Provision of adequate resources).

Obstacles

19. For many of the targets, Parties reported similar challenges to implementation, including lack of financial, human and technical resources; lack of scientific information, including inventory, mapping and monitoring data; weak institutions and inadequate legislation and regulation; limited cross-sectoral integration; lack of political will; and limited public awareness of the importance of biodiversity. At the international level, Parties noted the need for increased cooperation on transboundary issues (e.g., pollution abatement and control of invasive alien species), and improved regulatory frameworks (e.g., on intellectual property rights). Broader issues are also cited as obstacles to achieving the 2010 target, including population growth; increasing urbanization; lack of economic incentives for conserving biodiversity; and conceptual problems (such as defining "sustainable use").





NOTE: For some Parties, the national target is identical to the global target ('Same as Global'). Others have developed one or more tailored national targets ('National') or have established both 'Global and National' targets.

30 25 No. of Parties reporting 20 ☐ Biodiversity & Sectoral ■ Sectoral 15 ■ Biodiversity 10 5 6.2 8.2 3.1 5.1 6.1 7.1 8. 9.1 Global target

Figure 2. Number of Parties reporting the integration of targets into relevant plans, programmes and strategies.

NOTE: The total number of Parties reporting the integration of targets into plans, programmes and strategies does not always match the number of Parties who reported having established targets, i.e., some Parties reported having no targets, but describe integrating similar objectives into biodiversity and/or sectoral plans.

3. Implementation of the Global Plant Conservation Strategy (GSPC)

Status and trends

20. Most Parties have not developed specific national and/or regional responses but rather have interpreted the implementation of the GSPC targets in the context of pre-existing national and/or regional initiatives, plans, policies, legal and institutional frameworks. Only one Party has developed national GSPC targets and thus, the responses indicated in the figure below refer to general targets implicit within pre-existing national biodiversity strategies and action plans as well as sectoral policies that correlate with the relevant GSPC targets.

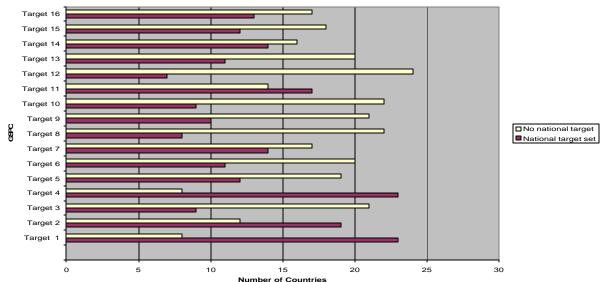


Figure 3: Number of Parties reporting development of national GSPC targets

Achievements and/or developments

- Most progress in the implementation of the GSPC has been made in countries whose national 21. institutions are actively involved in regional and international initiatives related to the GSPC targets. Outcomes of the Southern African Botanical Network, Planta Europa's Important Plant Areas Project in Eastern Europe, and the Natura 2000 Project of the European Community, have been cited by Parties as directly contributing to the national implementation of the Strategy. Other measures include the national implementation of the Convention's programmes of work on forest biodiversity, protected areas and invasive alien species; national implementation of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and of the International Treaty on Plant Genetic Resources for Food and Agriculture, as well as various regional directives such as those of the European Community. These instruments are indicated by the Parties as the primary means for implementing targets 4, 5, 6, 7, 9, 10, 11, 12 and 13. Various international initiatives have been cited as contributing to national GSPC implementation as well. These include various international and regional networks such as Botanic Gardens Conservation International, the Global Biodiversity Information Facility and the International Plant Genetic Resources Institute, and the IUCN-Species Survival Commission and PlantLife International for targets 2, 8, 14, 15 and 16. Regional Initiatives include the Southern East Asian Botanical Collections Information Network (SEABCIN) and Plant Resources of Tropical Africa (PROTA).
- 22. The Parties indicated that the targets are generally reflected within the national biodiversity strategies and action plans, forestry policies, rural development plans, national poverty reduction strategies, protected area system legislation, agriculture and sustainable development plans, as well as in legislation and regulation related to other international treaties and obligations, such as CITES and IPPC.

Obstacles encountered in implementation

- 23. The main constraint noted was that Parties have not developed national and/or regional targets. As such, there are no national baselines, milestones or indicators for monitoring. This is compounded by lack of awareness of the Strategy at national level. Whilst national institutions and various agencies are contributing to the implementation of various facets of the Strategy, there is a serious lack of human and financial resources; weak institutional, policy and legal frameworks; and insufficient data and knowledge for planning and decision-making. In some instances, there are many players in both the formal and informal sectors, making consensus building and consistency in implementation a challenge. Targets 12 and 14 were noted as complex and not measurable.
- 24. In general, the Parties could not adequately and effectively report on the implementation of the Strategy at national level, as the targets are global in context.
 - 4. Implementation of the ecosystem approach
- 25. Overall state of application of the ecosystem approach. The majority (75%) of the reporting Parties were applying some aspects of the ecosystem approach. Only a few countries (6%) were not doing so at all. 12% were considering doing so even though they were not implementing it for the time being. Very few countries (6%) were substantially implementing the ecosystem approach. These responses indicate that even though progress is being made, more efforts still need to be made in promoting the implementation of the ecosystem approach.
- 26. Development of practical expressions for applying the ecosystem approach. Similarly, 63% of the responding countries have developed practical expressions for applying some principles of the ecosystem approach, while only 7% have developed them for all the principles. Development of such practical expressions was being considered in 27% of the countries, while only 3% have not developed any practical expressions. This indicates that many countries have either developed or are considering

developing national policies and legislation, or planning to undertake some activities to enable the application of the ecosystem approach.

- 27. Enabling the implementation of the ecosystem approach. None of the responding countries have, as yet, developed comprehensive policies and programmes for creating an enabling environment for the implementation of the ecosystem approach, including through the development of appropriate institutional frameworks. However, in a relatively large number of countries (52%) some programmes in this regard are being implemented, while 32% of the countries are developing such programmes. In 13% of the responding countries no such programmes are in place or under development.
- 28. Capacity-building for applying the ecosystem approach. The responses relating to capacity-building for application of the ecosystem approach were mixed. Fifty-three per cent of the responding countries have strengthened capacities for the application of the ecosystem approach, and provided technical and financial support to enable the application of the ecosystem approach within their own countries. A relatively large number (32%) of countries had not undertaken such capacity-building activities, indicating that there is still a large need for this type of activity. Some countries (16%) had not only built capacity in their own countries, but also had provided support to other Parties.
- 29. Programmes or activities to assist with the implementation of the ecosystem approach. Over a half (52%) of the responding countries are implementing some programmes to exchange experiences, undertake capacity-building, technology transfer and awareness raising in order to assist with the implementation of the ecosystem approach, while such programmes are under development in 19% of the responding countries. None of the responding countries were implementing comprehensive programmes in this regard, and 29% of the responding countries had no such programmes in place or under development.
- 30. Cooperation to implement the ecosystem approach. Regional and transboundary cooperation in applying the ecosystem approach was relatively common. Sixty-one per cent of the responding countries were undertaking formal cooperation to apply the ecosystem approach across national borders or at the regional level. An additional 13% were doing this informally. However, 26% of countries were not undertaking or promoting such cooperation.
- 31. *Conclusion*. These early results indicate that while progress is being made in implementing the ecosystem approach, much still remains to be done before the ecosystem approach does, in practice, become the primary framework for implementing the Convention. In this regard, there is still a great deal of need for capacity-building, technology transfer and sharing of experiences.
 - 5. An overview of obstacles to implementation
- 32. Different countries may encounter different obstacles in implementing different provisions, thematic programmes and issues, due to their different national circumstances and capacities, among others. For this reason, almost all the sections contain an analysis of specific obstacles encountered. This section presents a general overview of obstacles, which Parties were requested to rank among a list of challenges contained in the annex to decision VI/26.
- 33. At the outset, a few common observations could be made across challenges, though there are slight variations in only a few cases. First, very few countries, even no countries in some cases, believe that all these challenges have been overcome. Second, in many cases, the majority of reporting countries rank most of the challenges as medium or low ones. Third, only a small number of reporting countries consider these challenges high ones.
- 34. However, there are some observations different from the above to varying extents.

- 35. First, relatively more countries, though small in number, believe that they had overcome challenges such as lack of political will and support.
- 36. Second, a considerable number of countries have identified the following as high challenges:
 - (a) Lack of economic incentive measures;
 - (b) Lack of financial, human and technical resources;
 - (c) lack of precautionary and proactive measures;
 - (d) Lack of mainstreaming and integration of biodiversity issues into other sectors;
 - (e) Inadequate capacity to act, caused by institutional weakness;
 - (f) Lack of benefit-sharing, particularly in the case of implementing Articles 15, 16 and 19.
- 37. Third, nearly a half of reporting countries have identified the following as medium-level challenges:
 - (a) Limited public participation and stakeholder involvement;
 - (b) Lack of mainstreaming and integration of biodiversity issues into other sectors;
 - (c) Inadequate capacity to act, caused by institutional weakness;
 - (d) Lack of transfer of technology and expertise;
 - (e) Lack of accessible knowledge and information;
 - (f) Lack of public education and awareness at all levels;
 - (g) Not full utilization of existing scientific and traditional knowledge;
- (h) Improper understanding and documentation of the loss of biodiversity and the corresponding goods and services it provides;
 - (i) Lack of synergies at national and international levels;
 - (i) Lack of horizontal cooperation among stakeholders;
 - (k) Lack of effective partnerships;
 - (l) Lack of engagement of scientific community;
 - (m) Lack of appropriate policies and laws;
 - (n) Lack of capacities for local communities;
 - (o) Unsustainable consumption and production patterns;
 - (p) Lack of knowledge and practice of ecosystem-based approaches to management.
- 38. Fourthly, relatively more countries, though small in number, have identified the following as low-level challenges:
 - (a) Natural disasters and environmental changes;
 - (b) Population pressures;
 - (c) Lack of appropriate policies and laws;
 - (d) Weak law enforcement capacity;
 - (e) Lack of accessible knowledge and information;
 - (f) Lack of transfer of technology and expertise;

- (g) Lack of political will and support.
- 39. It should be noted that in cases where some challenges are mentioned twice, this indicates that a similar number of reporting countries have identified them as high, medium or low challenges.
- 40. In ranking obstacles to the implementation of the programmes of work, many reporting Parties have identified most of them as medium-level ones. However, a considerable number of Parties consider the following as low-level challenges in implementing all but those on mountain and dry and subhumid land biodiversity:
 - (a) Inadequate capacity to act, caused by institutional weakness;
 - (b) Lack of transfer of technology and expertise;
 - (c) Lack of adequate scientific research capacities to support all the objectives;
 - (d) Lack of accessible knowledge and information;
 - (e) Not full utilization of existing scientific and traditional knowledge;
 - (f) Lack of financial, human and technical resources;
 - (g) Lack of synergies at national and international levels;
 - (h) Lack of effective partnerships;
 - (i) Lack of engagement of scientific community;
 - (j) Lack of appropriate policies and laws;
 - (k) Weak law enforcement;
 - (l) Natural disasters and environmental change.
- 41. Quite a few reporting Parties have identified the following as high challenges in implementing most programmes of work except for those on mountain and dry and subhumid lands biodiversity:
 - (a) Poverty;
 - (b) Unsustainable consumption and production patterns;
 - (c) Loss of biodiversity and improper understanding and documentation of the corresponding goods and services it provides.

B. Implementation of the provisions of the Convention

- 1. Article 6 (General Measures for Conservation and Sustainable Use)
- 42. Status of national biodiversity strategies and action plans. A large majority of reporting Parties have put in place some or comprehensive strategies, plans and programmes for achieving the objectives of the Convention. In addition, some countries reported that they had updated their national biodiversity strategies and action plans in light of developments at national and international level.
- 43. Integration of targets into national biodiversity strategies and action plans. Less than half the reporting countries had included some targets within their national biodiversity strategies and action plans. More than half the reporting countries are at various stages of developing some targets. For example, China has aimed to increase the number of nature reserves to around 1,200 by 2010, covering 10% of its total land areas.
- 44. Sectoral or cross-sectoral integration of biodiversity concerns. A considerable number of reporting countries had integrated biodiversity consideration into other sectoral and cross-sectoral plans, programmes and policies. For example, German National Sustainability Strategy has not only covered the

objectives of the Convention but also adopted the ecosystem approach, which is promoted by the Convention. Botswana's National Development Plan has clearly provided that conservation and sustainable use of natural resources should be given high attention in the process of development.

- 45. Identification of priorities for implementing national biodiversity strategies and action plans. A large majority of reporting Parties have identified priority actions for implementing national biodiversity strategies and action plans. For example, Lesotho has identified as its main priorities: (a) identification of threats to biodiversity; (b) legislative strengthening for biodiversity conservation and sustainable use; (c) work on issues related to access and benefit-sharing; and (d) support training on taxonomy, monitoring and public awareness.
 - 2. *Identification, monitoring and impact assessment (Articles 7 and 14)*

Article 7 (Identification and monitoring)

Status and trends

- 46. Most reporting countries have ongoing inventory and monitoring programmes to identify components of biological diversity, but only one out of ten countries characterize their monitoring programmes as being comprehensive and the quality of their monitoring programmes is variable. The monitoring programmes of two thirds of responding countries focus on key ecosystems and major species groups. One of three reporting countries has established programmes to identify and monitor genetic diversity.
- 47. The majority of reporting countries have ongoing, systematic monitoring programmes on key threats to biodiversity with slightly more countries monitoring threats from pollution/eutrophication and land use change/land degradation than those from overexploitation or unsustainable use, climate change or invasive alien species.
- 48. With regard to the management of information generated through monitoring programmes, only one out of five countries reported as having a comprehensive mechanism to maintain and organize data derived from inventories and monitoring programmes and to coordinate information collection and management at the national level. Half of the responding countries do not use—or have not yet used—biodiversity indicators for monitoring. Almost a half of the reporting countries have put some indicators in place while two countries have identified and used a relatively complete set of indicators.

Achievements and/or developments

49. Several countries are currently reviewing and revising national monitoring programmes in light of the set of global goals, targets and indicators relevant to the 2010 biodiversity target and as part of the process of developing/identifying complementary national targets and indicators. In doing so, the majority of reporting countries have adopted a participatory approach involving a wide range of stakeholders.

Obstacles encountered in implementation

50. A major shortcoming reported by many countries is the lack of coordination among monitoring programmes, methodological differences, including differences in the indicators being used and in the level of aggregation, and the absence of a coherent information system. The latter is attributed to different institutions responsible for different aspects of identification and monitoring of biological diversity and the focus on one-time reports. As a result, existing biodiversity information is not always easily accessible, even for government agencies, which may limit their usefulness and cost-effectiveness. Another obstacle hampering monitoring activities is limited financial resources, particularly in developing countries.

Article 14.1 (Impact assessment)

Status and trends

- 51. In most reporting countries, environmental impact assessment (EIA) is an integral part of the planning process for projects with potential negative impacts on the environment and three out of four countries require strategic environmental assessment (SEA) of plans, programmes and policies that may affect the environment. However, biodiversity is not always among the parameters to be specifically assessed and the degree to which this is done therefore varies in practice. Only a limited number of countries (one out of six) have reviewed the effectiveness of their EIA legislation and procedures. The majority of countries (three out of four) have agreements with other countries on activities that could affect biological diversity in those countries, and just over half of reporting countries have established mechanisms to prevent or minimize danger or damage to biological diversity in the territory of other countries. At the same time, mechanisms for emergency response have been established in less than 50 percent of reporting countries.
- 52. The draft guidelines for incorporating biodiversity-related issues into environment-impact-assessment legislation or processes and in strategic impact assessment are being applied to some extent in many reporting countries.

Achievements and/or developments

53. Several countries report that they are in the process of developing, reviewing and revising their procedures and legislation on EIA and SEA. Where this is taking place biodiversity is usually explicitly listed among the parameters to be assessed and the draft guidelines for assessment are frequently being considered for guidance. Moreover, revisions of EIA/SEA procedures and legislation help to introduce environmental considerations at an earlier stage of the planning and decision making process, and tend to incorporate sustainable development principles.

Obstacles encountered in implementation

54. Some countries report that even if they have put an environmental impact assessment policy in place for several years, the legislation to support the policy is still pending. Others report that although they have adopted relevant legislation, the enforcement is weak. Some countries report on lacking the appropriate procedures to decide about the level of detail in which biodiversity should be assessed in a given EIA or SEA. To date, only a few countries have developed specific national guidelines to help EIA practitioners consider biodiversity while carrying out assessments of proposed developments.

3. Global Taxonomy Initiative

- 55. National level commitment to taxonomy. Most responding countries indicated a commitment to taxonomy at national level, including through investment in infrastructure, training programmes, and ensuring sustainable financing. There has been no clear trend from the time of the second to third national reports.
- 56. National taxonomic needs and priorities. At the national level, about half of responding countries have made at least a basic assessment of taxonomic needs and priorities, a slightly lower proportion than indicated in the GTI thematic report. Very few countries have completed comprehensive needs assessments. In the second national reports, a relatively high proportion of countries had reported being in at least the early stages of assessment; hence, there is no evidence of a positive trend over time.

- 57. Regional taxonomic needs and priorities. Slightly more than half of responding countries have collaborated with other countries in carrying out the programme of work including assessing regional taxonomic needs and priorities. The GTI thematic report also showed that just over half of responding countries have collaborated with other countries to undertake regional needs assessments. However, comprehensive collaboration regarding regional needs has been rare.
- 58. Global Taxonomic Needs and Priorities. About half of responding countries indicated in the GTI thematic report that they are involved in global needs assessments, although only a few of the supporting comments were directly related to global needs assessment.
- 59. Capacity-building. Less than half of responding countries indicated that they are carrying out regional or global capacity-building activities to support access to, and generation of, taxonomic information in collaboration with other Parties, although some reported that such activities are under development. In the GTI thematic reports, a higher proportion of responding countries indicated that at least some activities are being carried out.
- 60. *Networking*. Most responding countries indicated that they are working with other countries to create or strengthen regional networks.
- 61. *Global Taxonomy Information System.* Most responding countries indicated that they are involved in the development of a coordinated global taxonomy information system.
- 62. *Public education and awareness*. Most responding countries indicated that they are undertaking at least some public education and awareness activities to promote the implementation of the programme of work.
- 63. Taxonomic support to implementation of thematic work programmes. The results in the table below show that many responding countries have undertaken at least some such activities, but results are difficult to generalize because the proportion of countries undertaking such activities is consistently higher in the thematic reports compared to the national reports. This difference could be partly due to the fact that countries responding to the GTI thematic report are more likely to be those countries for which the GTI is a priority, and partly due to the fact that the third national report questions do not account for countries for which certain thematic work programmes are not applicable (e.g., marine issues may be irrelevant for a land-locked country). On the other hand, the questions in the GTI thematic reports were somewhat more specific, therefore one might otherwise expect fewer positive responses to the more specific questions.

Table 1. Taxonomic support to thematic areas and cross-cutting issues under the Convention

Thematic Work Programme	Responding Countries Which Have Undertaken at Least Some Activities		
	Third National Report	GTI Thematic Report	
Forests	15/30	40/46	
Marine and coastal	11/30	33/41	
Dry and sub-humid lands	8/30	17/39	
Inland waters	10/30	36/45	
Mountains	9/30	26/44	
Protected areas	10/30	32/44	
Agricultural biodiversity	10/30	28/43	
Islands	4/30	No relevant question	
Access and benefit-sharing	6/30	15/44	
Article 8(j)	6/30	17/39	
Ecosystem approach	7/30	26/44 (combined in one question)	
Monitoring/indicators/assessment	9/30		

Invasive Alien Species	9/30	28/46

64. Obstacles to implementation. A number of countries report that they suffer from lack of expertise in taxonomy, lack of interest among students in taxonomy, and lack of funds to support taxonomic activities.

4. Protected areas

- 65. Suitable time-bound and measurable national-level protected areas targets and indicators. More than two thirds of the reporting countries indicated that they had established targets, with some of them having established comprehensive targets. Only one responding country did not establish any targets for protected areas whereas in eight countries the process is ongoing. Some member States of the European Union linked protected area targets to NATURA 2000 process. In other countries area based protected area targets have been included in the national conservation strategies or national environment programmes. The area based protected area targets ranged from 10% to 25% of the total geographical area of countries respectively by 2010, 2015 and 2050. A majority of countries have not developed indicators in this regard.
- 66. Expansion of protected areas in large or relatively unfragmented natural areas under high threat including securing threatened species. The majority of responding countries reported taking significant action on this issue whereas only one country submitted a negative response. Measures reported include expansion of existing protected areas to cover various biomes (plateau wetlands, cold meadows, moor lands, high mountain forests, bogs, salt marshes), populations of threatened species (Tibetan antelope, wild yak, wild ass), consideration of designating new protected areas both terrestrial and marine (North sea, Baltic sea).
- 67. Address under representation of marine and inland water ecosystems in the existing national or regional systems of protected areas. About 50% of responding countries reported undertaking significant action, and in about 10% of the reporting countries, relevant actions are under way. Countries that have designated or are designating NATURA 2000 sites include marine, inland water systems and important bird areas in the national protected area systems. Some countries are specifically considering increasing the proportion of marine protected areas covering rare and endangered marine species. In some countries, existing terrestrial protected areas also include marine territories covering wintering, nesting and resting sites of migratory species. A new marine protected area was established in the Baltic Sea in 2005.
- 68. Practical steps for improving the integration of protected areas into broader land and seascapes. Only nine responding countries reported identification and implementing actions for integrating protected areas into broader land and seascapes; most of them being developed country Parties. Some countries reported expanding protected areas into surrounding areas through ecological corridors and networks. One reporting country informed application of ecosystem approach for management of protected areas.
- 69. Application of environmental impact assessment guidelines to projects or plans for evaluating effects on protected areas. Only 13 responding countries indicated the application of impact assessment guidelines to all relevant projects. Two countries reported negative response, whereas two countries did not provide any response. In many responding countries, statutory guidelines and directives for EIA are in vogue.
- 70. Identification of legislative and institutional gaps and barriers that impede effective establishment of protected areas. The majority of responding countries have identified only some gaps and barriers, and in some countries the process is still under way. Some countries have already put in place comprehensive legislation for protected areas. Some others are in the process of developing new legislations for nature conservation including for marine areas. Some of the gaps and barriers identified include: insufficient legal and institutional regimes, conflicting/ competitive land use (agriculture,

urbanization, and infrastructure/ economic development), and very inadequate funding, lack of funding for research and manpower training.

- 71. Undertaking national protected area capacity needs assessment and establishing capacity-building programmes. Only three responding countries reported having undertaken thorough assessments of capacity needs and established capacity-building programmes. In majority of responding countries, some basic assessments have been undertaken. Two percent of responding countries are yet to undertake any assessment and in another two per cent of responding countries, assessments are under way.
- 72. Implementation of country-level sustainable financing plans that support national systems of protected areas. About 30% of responding countries did not have any sustainable financing plans while more than a half of reporting countries indicated that they had relevant plans in place or were implementing relevant plans. In all responding countries, the major source of funding for protected areas is national budgets. Only one country reported supplementary funding through proceeds from environmental taxes.
- 73. Implementation of appropriate methods, standards, criteria and indicators for evaluating the effectiveness of protected areas management and governance. More than a half of reporting countries indicated that some standards, criteria and indicators, both nationally and internationally developed, are in use. Whereas 20% of responding countries do not have standards, another 20% are in the process of establishing criteria and standards. Meanwhile, some countries had developed technical guidelines and conservation directives for effective management of protected areas using IUCN guidelines on management effectiveness, their implementation and effectiveness are yet to be evaluated.

5. Alien species

- 74. *Identification of alien species and tracking systems*. The majority of responding countries have identified alien species introduced into their territories. About half of countries have both identified alien species introduced into their territories and established tracking systems (12 out of 27, compared to 14 out of 105 at the time of the second national report), and approximately half have identified some alien species but have not established a tracking system.
- 75. *Risk assessment.* The majority of responding countries have assessed the risks posed to ecosystems, habitats or species by the introduction of alien species of concern (18 out of 26, compared to 85 out of 104 at the time of the second national report). A few countries have assessed risks for most alien species (5 out of 26, compared to 3 out of 104 at the time of the second national report).
- 76. Preventive, control and eradication measures. An overwhelming majority of responding countries have undertaken measures to prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats or species (23 out of 27, compared to 83 out of 105 at the time of the second national reports). Reported measures include laws, regulations, awareness campaigns, prevention measures, control and containment programmes, as well as eradication campaigns against targeted species.
- 77. *Mechanisms for international cooperation*. Approximately one-third of responding countries had developed, or been involved in, bilateral mechanisms for international cooperation, including the exchange of best practices. Two thirds had developed mechanisms for regional and/or subregional cooperation, and one third was involved in multilateral cooperation.
- 78. Ecosystem approach and precautionary and biogeographical approaches. More than half of responding countries reported that they used the ecosystem approach, the precautionary and biogeographical approaches as appropriate in their work on alien invasive alien species (17 out of 26, compared to 53 out of 103 at the time of the second national reports). It is worth noting that the scale of

application varies from country to country. Some countries reported integrating the precautionary approach in national laws, while some applied it at a project scale.

- 79. Identification of national needs and priorities for implementation of the Guiding Principles. Only a few responding countries have identified national needs and priorities for implementation of the Guiding Principles. However, approximately half of the responding countries have initiated efforts in this regard.
- 80. Mechanisms to coordinate national programmes for applying the Guiding Principles. Only two responding countries have created mechanisms to coordinate national programmes for implementing the Guiding Principles. However, slightly more than half of responding parties are developing such mechanisms.
- 81. Revision, adjustment and development of policies, legislation and institutions in the light of the Guiding Principles. Two thirds of responding countries have undertaken at least some review, adjustment, and development of relevant policies, legislation and institutions in the light of the Guiding Principles.
- 82. Enhancing cooperation between sectors. Two thirds of responding countries have considered mechanisms to enhance cooperation between various sectors in order to improve prevention, early detection, eradication and/or control of invasive alien species. Slightly less than a third of responding parties have already put mechanisms in place.
- 83. Collaboration with trading partners and neighbouring countries. The majority of responding countries have collaborated with trading partners and neighbouring countries to address threats of invasive alien species to biodiversity in ecosystems that cross international boundaries.
- 84. Capacity-building to use risk assessment to address threats of invasive alien species to biodiversity and incorporate those methodologies into EIA and SEA. Approximately half of responding countries have undertaken activities to develop capacity to use risk assessment to address threats of invasive alien species to biodiversity and incorporate such methodologies in environmental impact assessment (EIA) and strategic environmental assessment (SEA). A third of responding Parties are currently developing relevant measures and policies.
- 85. Reducing the threats of invasive species. Slightly less than half of responding countries had some measures, policies and tools in place to promote activities to reduce the threats of invasive species. A quarter of the countries were in the process of development.
- 86. Obstacles. While Parties were requested to rank challenges listed in the annex to decision VI/26, the main challenges identified for implementation of Article 8(h) are: lack of economic incentive measures, lack of financial, human, and technical resources and lack of appropriate policies and laws. Amongst obstacles reported in comments are: lack of institutional capacity and financial resources; weak and uncoordinated legislation, strategies or programmes; low interest from landowners and land users; fragmentation of legal responsibilities and conflicts of interests between the various sectors concerned; limited information on the extent and impact of invasive alien species; as well as, low awareness and insufficient priority level.

6. *Article* 8(*j*)

Status and trends

87. A limited number of projects where governments support indigenous and local communities in undertaking field studies to determine the status, trends and threats to traditional knowledge were reported as being either implemented or under consideration by 15 out of 30 reporting countries. Only Sweden

described a nation-wide project covering all traditional uses of biological resources. Some countries described research projects within universities, such as Thailand. At least six major institutions in Thailand actively support community research with some interesting outcomes, particularly confirming the capacity of indigenous and local communities to monitor and assess their local biodiversity. Several other national reports discussed projects funded largely by non-governmental organizations, such as China, Botswana and Thailand as well as international projects running out of Belgium and Germany. There were several government-run field studies focussing on specific areas or types of knowledge, as in China, Thailand, Lesotho, Estonia and Zimbabwe.

- 88. When asked to prioritize among Articles of the Convention for national implementation, nine Parties considered Article 8(j) as a high priority of work, ten considered it to be a medium priority and ten considered it a low priority. All countries that described Article 8(j) as a high priority have acknowledged indigenous or local communities, except Germany. Germany's international cooperation efforts, however, significantly involve work with indigenous and local communities. Of the countries that ranked Article 8(j) as a low priority, only one had indigenous and local communities. Finally, those Parties that ranked 8(j) as a medium priority all acknowledge having indigenous and local communities.
- 89. Although it is difficult to establish trends or to make comparisons with the second national reports because of changes in reporting structure and different numbers and combinations of Member States reporting, compared to the second national reports, the priority given to implementing Article 8(j) would appear to have decreased. In the second national reports, 44% of the 92 Parties that responded to the question on priority of work labelled Article 8(j) as a high priority, compared to only 30% in the third national report.

Achievements and/or developments

- 90. Just over a third of reporting countries have established national, subregional and/or regional indigenous and local community bio diversity advisory committees. As well, five Parties have assisted indigenous and local community organizations to hold regional meetings to discuss the outcomes of the decisions of the Conference of the Parties and to prepare for meetings under the Conventions. For example, Mauritania, Morocco, Sweden and Zimbabwe held either national or regional workshops to assist indigenous and local communities to discuss some of the decisions of the Conference of the Parties and to prepare for meetings under the Convention. Botswana has organized local meetings to discuss these issues. Lesotho mentioned the impossibility of hosting or financing such meetings because of lack of resources.
- 91. There is some support to help indigenous and local communities in drafting their own development and biodiversity conservation plans. Some projects were described in China through their Law on Regional Nationality Autonomy and through development projects coming out of their Agenda 21 to support regional capacity-building (such as the project of development of ecological agriculture and livelihood in mountainous areas of Yunnan). There are also projects in Bangladesh, Finland, Morocco, Sweden and Thailand. There are also international support programs funded by the United Kingdom, Germany and Belgium.
- 92. Most reporting Parties discussed various initiatives undertaken or being considered to enhance the capacity of indigenous and local communities. For example, several mechanisms to redirect decision-making powers to the local level for issues particularly affecting that area have been implemented. Bangladesh has implemented a project to shift management over wetland and fisheries conservation to the community level. There is also a movement toward local decision-making in Senegal, Poland and Zimbabwe.
- 93. Overall, some progress seems to be made towards the goals of the Strategic Plan of the Convention, the 2010 target or implementing national biodiversity strategies and action plans in relation to Article 8(j). However, some countries have made steps in this direction, some with important

successes. For example, Bangladesh has community driven projects to promote local decision-making and they have drafted the Biodiversity and Community Knowledge Protection Act, to ensure there is a legal basis for ensuring the conservation and sustainable use of resources and associated traditional knowledge. Bangladesh has also been investing in the restoration of degraded ecosystems to reduce poverty. China has been very active in researching, promoting and protecting traditional medicine throughout the country and has established local programs, legislation and international agreements to ensure widespread protection of this important aspect of traditional knowledge. Comoros has acknowledged little research has been done in this area and there is no legal status or recognition of traditional knowledge. Estonia, along with Poland reported that while they have no separate indigenous communities, they are investing in the research, promotion and protection of traditional knowledge and lifestyles of local communities. Estonia noted, however, the limited effect of these measures to date (through, for example the Rural Development Plan). Poland, on the other hand, reported that they have seen significant progress towards the 2010 target.

Obstacles encountered in implementation

- 94. There are several challenges and obstacles facing countries in the implementation of Article 8(j). These range from financial, capacity, social, political, public awareness and demographic obstacles. Parties reported that the ten most significant obstacles to implementation of Article 8(j) were the following, in order of the perceived level of challenge to implementation:
 - 1. Lack of financial, human and technical resources;
 - 2. Lack of economic incentive measures:
 - 3. Lack of public education and awareness at all levels;
 - 4. Existing scientific and traditional knowledge not fully utilized;
 - 5. Lack of adequate scientific research capacities to support all the objectives;
 - 6. Lack of horizontal cooperation among stakeholders;
 - 7. Lack of capacities for local communities;
 - 8. Lack of synergies at national and international levels;
 - 9. Lack of appropriate policies and laws;
 - 10. Inadequate capacity to act, caused by institutional weaknesses.
- 95. Poverty was also considered a high challenge particularly among African countries.
 - 7. Sustainable use

Sustainable use

Status and trends

- 96. The vast majority of countries are in an advanced stage of integrating considerations of conservation and sustainable use of biodiversity into national decision-making. Half of reporting countries indicated that such consideration is integrated into some relevant sectors, and an additional third report that integration took place for most relevant sectors. A majority has identified relevant indicators and has some measures in place that avoid or minimize negative impacts on biodiversity when using biological resources. An additional one out of three countries has comprehensive measures in place.
- 97. A majority has also implemented some sustainable use practices, programmes and policies for the sustainable use of biological diversity, especially in pursuit of poverty alleviation, and has some measures in place that protect and encourage customary use consistent with conservation of biodiversity, and help local population to design and implement remedial action in degraded areas. However, only one out of ten

countries has comprehensive practices, programmes, policies and measures in place to achieve these tasks. Half of reporting countries have mechanisms in place to involve the private sector in pertinent activities.

- 98. Out of those reporting countries that are at earlier stages of implementation with regard to the issues referred to in the previous paragraph, a substantial number of countries report that steps are being undertaken and measures are under review. In most cases, only one out of ten countries reports no progress in implementation. As regard the implementation of practices, programmes and policies for the sustainable use of biological diversity, however, one out of four countries report that no progress has been made.
- 99. Approximately half of reporting countries indicate that they so far did not initiate a process of applying the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity. One factor identified is the limited amount of time since their adoption. One out of five countries reports that the Principles and Guidelines are under review, while an additional one out of five has a process planned or initiated. Two thirds of reporting countries have not yet taken any initiative or action to develop and transfer technologies and provide financial resources to assist in the application of the Principles and Guidelines.

Obstacles

100. Institutional weakness and the lack of human and financial capacity are mentioned by many countries as a major impediment in implementing Article 10, in particular by developing countries. This is reflected in poor regulations and management systems for policy implementation, as well as poor inter-departmental coordination leading to a lack of inter-sectoral integration and mainstreaming of biodiversity considerations. Lack of awareness and the persistence of attitudes that neglect the critical contribution of components of biodiversity to human well-being were also mentioned.

Biodiversity and sustainable tourism

Status and trends

- 101. A majority of countries have put mechanisms in place to assess, monitor and measure the impact of tourism on biodiversity, while a strong minority is in the early stage of implementation in that they neither have such programmes in place nor are in the process of developing such programmes. Half of reporting countries have educational and training programmes in place to raise the awareness of tour operators of the impact of tourism on biodiversity. Half of reporting countries also have at least some programmes in place to provide indigenous and local communities with capacity-building and financial resources to support their participation in tourism policy-making, development planning, product development and management.
- 102. Out of those countries that are in the early stage of implementation, half of them report that they are in the process of developing mechanisms to assess, monitor and measure the impact of tourism on biodiversity. A similar number of Parties are providing training programmes for tour operators. With regard to the support programmes for indigenous and local communities, the picture is slightly less positive in that only one third of countries indicate that they are in the process of developing such programmes.
- 103. One third of reporting countries indicate that they have integrated a few or many of the guidelines for tourism development, adopted by the seventh meeting of the Conference of the Parties, into some sectoral plans or national biodiversity strategies and action plans, while two thirds indicate that they are still in the process of reviewing the guidelines.

Obstacles

104. In addition to the general constraints identified in implementing Article 10, enhanced integration of nature and biodiversity conservation issues into tourism legislation as well as policy and strategic planning documents is identified as a major challenge, as well as to build cooperation between governmental institutions, municipalities, tourism organizations and non-governmental organizations. A need is also identified for the development of training and education programmes as well as for the development of programmes for tourism management in protected areas and/or environmental sensitive areas. One country also indicated that the Guidelines for tourism development are very complicated and that there is a corresponding need to make them more user-friendly.

8. *Incentive measures*

Status and trends

- 105. Implementation of Article 11 is advancing, but far from complete. While two thirds of reporting countries have some programmes in place to identify and adopt economically and socially sound measures that act as incentives for the conservation and sustainable use of components of biodiversity, no reporting country has comprehensive programmes in place and one out of five countries does not have such programmes.
- 106. One third of responding countries have identified, but not entirely removed or mitigated, policies and practices that generate perverse incentives for conservation and sustainable use of components of biodiversity. Only two countries report that they have removed or mitigated relevant policies, while one out of five countries did not make any progress on the issue.
- 107. Less than one third of responding countries have mechanisms in place to ensure adequate incorporation of both market and non-market values of biological diversity into relevant plans, policies and programmes and other relevant areas. Two out of five countries do not have such mechanisms in place. Almost half of reporting countries have programmes for capacity-building and training on incentive measures in place, but an almost equally important number of countries do not have such programmes in place.

Achievements and/or developments

- 108. One out of three countries report progress in addressing the removal or mitigation of policies or practices that generate perverse incentives by indicating that identification of such policies and practices is under way. Two out of five countries report that they are in the process of developing mechanisms to ensure the adequate incorporation of biodiversity values into relevant plans, policies and programmes.
- 109. Pertinent guidance developed under the Convention seems to be useful to countries in their efforts to implement Article 11. Almost half of responding countries report that they took the proposals for the design and implementation of incentive measures, endorsed by the Conference of the Parties in decision VI/15, into consideration when designing and implementing incentive measures for the conservation and sustainable use of biodiversity. This number seems to be consistent with the achievements and progress made as reported by countries.

Obstacles encountered in implementation

110. Lack of human and financial capacity is mentioned by many countries as a major impediment in implementing Article 11, in particular by developing countries. Lack of awareness and information are also mentioned, with countries indicating that pertinent work is "still in its infancy" and that the issue is "still a grey area." Absence of political will was mentioned by one country. One developing country identified the generation of real benefits for local communities to partake in conservation and sustainable use actions as a key challenge.

9. Scientific and technical cooperation (including the clearing-house mechanism, exchange of information and technology transfer)

Status and trends

Article 17 (Exchange of information)

- 111. Twenty-two Parties reported that some measures were in place to facilitate the exchange of information from publicly available sources with a view to assist with the implementation of the Convention and promote technical and scientific cooperation. Five countries reported that comprehensive measures were in place and only two Parties said that no measures were in place, but that potential measures were under consideration. This data may suggest that Parties may consider information exchange to be of some importance, particularly within the context of technical and scientific cooperation.
- 112. Eight out of ten developed Parties indicated that consideration was given to the special needs of developing countries while taking measures to facilitate information exchange. However, some developed countries indicated that the information exchanged does not include that listed in paragraph 2 of Article 17. This may suggest that there is potential for increased collaboration in facilitating information exchange.
- 113. A considerable number of Parties view the clearing-house mechanism as integral to the fulfilment of obligations under Article 17. For example, out of 16 Parties providing comments, six stressed the role of the clearing-house mechanism in the development of information exchange activities. Three developed country Parties reported activities related to the Global Biodiversity Information Facility as being supportive of goals established Article 17.
- 114. Due to the small sample size, extrapolation of findings to a larger group is difficult if not impossible. The available data does suggest that activities undertaken to implement Article 17 are viewed as important for assisting with the implementation of other specific obligations under the Convention, especially in light of national participation in information rich initiatives such as the Global Biodiversity Information Facility.
- 115. In general, information exchange is recognized by many Parties as an essential component of activities in support of the Convention and its thematic areas and cross-cutting issues. Comments provided by responding countries emphasized repeatedly the many activities related to information exchange, particularly with regard to technical and scientific cooperation. In addition, information exchange is seen as one of the key activities of national clearing-house mechanisms in promoting and facilitating technical and scientific cooperation.

Article 18 (Technical and scientific cooperation)

- 116. More than a half of reporting Parties attached a high priority to activities under this Article. A considerable number of Parties reported activities in support of this Article, particularly activities related to information exchange, enhancement of national capacities and joint initiatives between developed and developing countries, the Belgian and German clearing-house mechanisms being cases in point.
- 117. A large majority of Parties, 22 in total, reported some measures in place to promote international technical and scientific cooperation in the field of conservation and sustainable use of biological diversity. As well, 4 Parties reported that comprehensive measures are in place. Only one Party reported no measures in place while 4 Parties replied that some measures are under review. The data may suggest the importance attached by many Parties to international scientific and technical cooperation.
- 118. However, 21 out of 29 reporting Parties indicated that they had not developed methods of cooperation for the development and use of technologies, including indigenous and traditional technologies, in pursuit of the objectives of this Convention. The rest of reporting countries said that

relevant methods are under development. It is difficult to find reasons for these negative responses from the comments submitted by Parties. It is clear that this requires more attention and action from Parties.

- 119. In contrast, 25 out of 30 Parties responded that they had promoted the establishment of joint research programmes and initiatives and joint ventures for the development of technologies relevant to the objectives of the Convention. Most of the responding Parties had established links through the clearing-mechanism with relevant non-governmental organizations, the private sector and other institutions working on biodiversity. A few others indicated that such work was under way. Only six Parties answered that no efforts were made in this regard.
- 120. A total of 18 Parties, including two from Central and Eastern Europe, indicated that they had developed their clearing-house mechanism to assist developing countries and countries with economies in transition to gain access to information in the field of scientific and technical cooperation. The data from the responding countries may suggest that developed countries have made efforts to assist developing countries with issues related to access to information.
- 121. A majority of Partie's said that they had made information available through the clearing-house mechanism more useful for researchers and decision makers. A considerable number of Parties had further improved synergies among biodiversity-related Conventions through developing, providing and sharing services and tools to enhance and facilitate the implementation of the clearing-house mechanism.
- 122. Scientific and technical cooperation are also increasingly recognized by many relevant stakeholders and countries as one of important and effective means to promote the implementation of the Convention. Many cases and comments provided by some countries indicate that cooperation within and without countries does accelerate and enhance implementation activities. However, it is difficult to assess impacts of these cooperative activities considering lack of information concerning specific results achieved through cooperation.
- 123. There is still much to do to improve the effectiveness of the clearing-house mechanism to promote scientific and technical cooperation to assist Parties and other Governments to achieve the 2010 target and to assist with activities related to the thematic areas and cross-cutting issues of the Convention. Even though some progress is being made in establishing clearing-house mechanisms at national level, not all Parties have established national clearing-house mechanisms. Furthermore, more efforts are clearly needed to enhance their operation, particularly with regard to the use of new information and web-based technologies. Assistance should be provided to those developing countries, especially least developed countries, to help with their efforts to establish clearing-house mechanisms and build up the capacities to undertake scientific and technical cooperation for the implementation of the Convention.

Impediments to implementation

124. One impediment to implementation in common for many developing countries is the lack of financial, technical and human resources for development and operation of clearing-house mechanisms. Another common restraint for many developing countries is the limited capacity for undertaking scientific and technical cooperation in this field.

Programme of work on technology transfer

Status and trends

125. With regard to the provisions of the Convention on technology transfer, Parties seem to be generally in an early stage of implementation. While half of reporting countries indicate that they have at least some measures in place to generally provide or facilitate access for and transfer to other Parties of relevant technologies, one third have not yet taken any measures. However, most industrialized countries do at least have some measures in place.

- 126. As for specific measures taken so that Parties that are providers of genetic resources are provided access to and transfer of technology using those resources, one third of reporting countries have some measures in place, no country has comprehensive measures in place, and another third has not made progress on the issue. Half of countries have not yet taken any measures to facilitate access by the private sector to joint development and transfer of relevant technology for the benefit of Government institutions and the private sector of developing countries. Similar numbers result when considering industrialized countries alone—taking into account that the limited amount of submissions from industrialized countries does not allow drawing general conclusions at this stage.
- 127. A similar picture arises with regard to the implementation of the programme of work on technology transfer and scientific and technological cooperation. Almost two thirds did not undertake technology needs assessments, and half of reporting countries did not undertake analyses of the potential benefits, risks and associated costs with the introduction of new technologies. Half of reporting countries did not identify and implement any measure to develop or strengthen appropriate information systems for technology transfer and cooperation.
- 128. On the creation of enabling environments for technology transfer and adaptation, one third of reporting countries have undertaken some of the preparatory activities foreseen in the programme of work, while another third has not taken any measure.
- 129. Progress in implementation of the provisions on technology transfer can be expected to be limited in the near future, as only some countries—approximately one out of ten—are currently reviewing potential measures to foster implementation of the pertinent provisions of the Convention. Some progress can be expected in the further implementation of the programme of work: one out of five countries have technology needs assessments under way, and almost one third of reporting countries indicate that they consider taking a few measures as preparatory activities foreseen in the programme of work for the creation on enabling environments for technology transfer. Further progress can also be expected in enhancing technical and scientific cooperation.

Obstacles

130. In addition to institutional weakness and the lack of human and financial capacity, poor intersectoral coordination as well as a lack of cooperation and partnerships at national and international levels are identified as important constraints in implementing the provisions of the Convention on technology transfer and scientific and technological cooperation.

10. Communication, education and public awareness

Status and trends

- 131. The programme of work on communication, education and public awareness (CEPA), articulated in decision VI/19, takes its form from Article 13 of the Convention, which requests that Parties promote and encourage understanding of the importance of, and the measures required for, the conservation and sustainable use of biological diversity through the media and through education.
- 132. The development of national CEPA strategies has not been extensive. Fewer than half of the responding Parties reported implementing a CEPA strategy that reaches out to different sectors, and is linked to the national biodiversity strategy and action plan. Where a CEPA Strategy was formulated, the aims remained general. To the extent that a focus exists, activities were primarily in the sphere of education. Some intersectoral components were reported, but not for the majority of Parties. Linkages with national biodiversity strategies and action plans are beginning to emerge in some Parties, but not a great number.

- 133. The programme of work for CEPA outlined in decision VI/19 has become an important basis upon which national CEPA activities are organized and carried out. A majority of the respondents indicated that even though they did not have a national CEPA strategy, they undertook activities related to decision VI/19. The majority of these referred to the education portion of the programme of work, in particular, the development of biodiversity curriculum.
- 134. The promotion of public awareness on biodiversity issues through media is extensive, but parties are not necessarily controlling the agenda and access to local communities remains variable. Although the media was reported to be a central vehicle for promotion and the transmission of information to the general public, many Parties indicated that media coverage tended to focus on negative matters. Not all countries had strong communication networks at the local level, preventing effective communication to local media.
- 135. Implementation of CEPA activities has been strongly related to the development and activities of national clearing-house mechanisms. In many cases, CEPA activities and partnerships have been facilitated by national clearing-house mechanisms both for education and for media relations.

Achievements and/or developments

- 136. The most significant achievements in implementation of CEPA could be found in cooperative activities at the national, regional and international levels, particularly in the area of education. Parties reported a variety of examples in which education and awareness was facilitated through cooperative projects. Some examples included:
- (a) An internet-based learning project entitled "Nature Detectives," created by the German Federal Agency for Nature Conservation. This project is also being extended to Palau;
- (b) The creation of special information centres for school-aged children at local nature areas in Belgium;
 - (c) The participation of school children in the GLOBE network in a number of countries.
- 137. Many Parties related extensive coverage of biodiversity issues in the media, but indicated their inability to control the media agenda.

Obstacles to implementation

138. Although an overwhelming majority of participants reported the existence of activities in support of the programme of work on CEPA, more extensive implementation and greater strategic development was limited by a lack of capacity and/or a shortage of resources. The lack of human capacity remains one of the greatest challenges. This was particularly true at the local level, where Parties rely on partnerships with local voluntary organizations to deliver CEPA activities.

11. Access and benefit-sharing

Status and trends

- 139. More than two thirds of the reports received indicate either that measures have been taken to facilitate access to their genetic resources or that they are in the process of developing such measures. A few Parties have developed national legislation to regulate access and benefit-sharing.
- 140. With respect to measures to ensure that scientific research based on genetic resources provided by other Parties are developed and carried out with the full participation of such Parties, two thirds of the countries indicated that either some measures were in place or potential measures were under review.
- 141. Regarding measures to ensure the fair and equitable sharing of the results of research and development and of the benefits arising from the commercial and other use of genetic resources with any

Party providing such resources, three quarters of the respondents indicated that either potential measures were under review or some measures were in place.

- 142. Two thirds of the countries indicated that they had taken into account the multilateral system of access and benefit-sharing set out in the International Treaty on Plant Genetic Resources for Food and Agriculture when developing national access and benefit-sharing measures.
- 143. Examples of measures taken include bilateral material transfer agreements, the development of national policies for *ex situ* collection holders, codes of conduct for various user groups and the development of standard material transfer agreements.
- 144. Countries that have developed national access and benefit-sharing measures following the adoption of the Bonn Guidelines or are in the process of developing them have indicated that the guidelines provided useful assistance in this process.
- 145. With respect to the adoption of national policies or measures to address the role of intellectual property rights in access and benefit-sharing arrangements, a large majority of countries indicated either that measures had been adopted, were under development, or had been identified. Denmark, Norway and Germany have amended their national patent laws to address the issue of the disclosure of origin of genetic resources in applications for intellectual property rights.
- 146. Seventeen countries indicated that they had taken part in capacity-building activities either in providing financial and technical support for activities carried out in developing countries, in carrying out capacity-building in their own country or by participating in activities organized by foreigners at the national level, such as training, seminars and workshops. Germany, Sweden and the United Kingdom have been supporting capacity-building activities specifically related to access and benefit-sharing in developing countries. Activities have taken place in countries such as Botswana, China, Latvia, Namibia, Niue and Norway.

Achievements and/or developments

147. At this stage in the implementation of the access and benefit-sharing provisions of the Convention, main achievements have essentially focused on awareness raising activities of relevant stakeholders at the national level and capacity-building activities. A number of countries are in the process of developing measures at the national level to address access and benefit-sharing.

Obstacles to implementation

- 148. Obstacles to implementation include the following:
 - (a) Limited availability of resources;
 - (b) Technical capacity constraints;
- (c) Administrative burden related to obtaining funding from international bodies considered disproportionate compared to the benefits derived;
 - (d) Lack of national coordination among national government agencies;
 - (e) Absence of an adequate national legislative framework;
- (f) Low awareness of the issue of access and benefit-sharing at the national level among relevant stakeholders;
 - (g) Difficulty in monitoring the extent of misappropriation of genetic resources;
 - (h) Complexity of the issue has led to difficulty in implementation.

149. One country also highlighted that the implementation of Article 15 thus far has led to increased bureaucracy and created impediments to taxonomic research while achieving little benefit-sharing.

12. Financial mechanisms and resources

Status and trends

150. Based on the information contained in the sample of reports available the status of financing for biological diversity is unstable. Many developing country Parties are reporting that their Governments are not yet able to adequately provide financial support both from internal and external sources of funding. However, trends appear to be emerging that suggest that better tracking and monitoring of the situation is being established in both developed and developing country Parties that will assist with future analysis.

Achievements or developments

- 151. Nearly half of the reporting countries have or are in the process of establishing measures like tax exemptions in national taxation systems to encourage financial support to biodiversity.
- 152. Two thirds of the countries have reported that their respective countries are taking concrete to review and further integrate biodiversity considerations in the development and implementation of major international development initiatives, as well as in national sustainable development plans and relevant sectoral policies and plans.
- 153. Over two thirds of the countries stated that they were enhancing the integration of biological diversity into the sectoral development and assistance programmes either partially or completely.

Obstacles encountered in implementation

154. Developing country Parties are unanimous in stating that adequate financial resources are key to successful implementation of the Convention. However, to date, financial resources—especially as provided by the GEF—have proven very cumbersome and time consuming to acquire. As well, the identification and successful application of new and additional financial resources require a level of expertise not yet identified or available to some developing country Parties.

13. Cooperation

Status and trends

- 155. A large majority of reporting Parties are undertaking various forms of cooperation with other Parties in respect of areas beyond national jurisdiction for the conservation and sustainable use of biodiversity. These cooperation activities cover a wide range of areas covered by the Convention, including providing technical and financial support as well as training programmes, developing and implementing projects for conservation and sustainable use, assisting with development and implementation of relevant national and sectoral plans and programmes, joint research and development programmes and facilitating information exchange. Some regions and subregions, such as the Andean Community, ASEAN and the European Union, have been undertaking various collaborative activities for the implementation of the Convention at the regional and interregional levels.
- 156. Again, many reporting Parties are working with other Parties to develop various mechanisms and networks to support the implementation of the Convention. More than three quarters indicated that such mechanisms and networks had been established or strengthened.
- 157. At national level, an overwhelming majority of reporting Parties are taking some steps to harmonize national policies and programmes with a view to increasing coherence, synergies and

efficiency in the implementation of biodiversity-related conventions and related initiatives. Some of them have taken comprehensive steps in this regard.

158. It seems clear from the above that cooperation among Parties in the implementation of the Convention has been increasing significantly and Parties are making greater efforts in harmonizing national policies and programmes for the implementation of related conventions and initiatives in order to increase synergies and efficiency of implementation at the national level.

Achievements or developments

- 159. Almost all the reporting Parties had submitted cases of cooperation with other Parties and within countries. One example of technical cooperation is the Belgian CHM partnerships with some developing countries (21 countries and three subregional networks), which have been ongoing for years. Cooperation activities include capacity-building of national focal points, hosting of national clearing-house mechanisms for some countries, providing technical support and training for use of national biosafety clearing-houses.
- 160. A few countries reported that cooperation had generated some useful outcomes or impacts on the implementation of the Convention. One country said that main outcomes of cooperation are improved coordination of activities thus leading to better results in achieving the objectives of the Convention and some targets developed under it. One country reported that cooperation had enhanced biodiversity conservation across national boundaries, facilitated mobilization of multilateral funding to support biodiversity conservation, promoted exchange of information and encouraged and supported joint research and development programmes. Meanwhile, a number of countries, primarily developing countries, indicated that impacts of cooperation had yet to be assessed and seen.

Obstacles encountered in implementation

161. Only a few countries mentioned obstacles they had encountered. A few countries were of the view that current cooperation activities undertaken at various levels were not enough to help achieve the objectives of the Convention, in particular in meeting some targets developed under the Convention. They recommended that more, active cooperation should be undertaken to meet challenges ahead. Some developing countries suggested that more funds and technology support should be provided in the cooperation. A few countries mentioned constraints such as limited political will and resources and weak links with poverty reduction goals and the 2010 target.

C. Implementation of the programmes of work under the Convention

1. Inland water ecosystems

162. Incorporation of the objectives and relevant activities of the programme of work. Incorporation into national biodiversity strategies and action plans has been achieved either partly or fully by 93% of reporting Parties; into wetland policies and strategies by 96%; into integrated water resources management by 90%; and enhanced coordination and cooperation between national actors by 93%. It is, however, unclear to what extent national biodiversity strategies and action plans have been used as a means of incorporating of relevant considerations. Other means of incorporation include through improved national legislation (10% of Parties) and through ongoing initiatives and infrastructure. Ten per cent of Parties have a clear focus only on water pollution. Of particular note among European Parties is that 90% of them refer to the importance of the European Water Framework Directive as a tool for implementing relevant activities. A number of Parties remark that many initiatives, or stakeholders, have adopted related activities but these are not explicitly linked to the programme of work. In one case, the reporting Party notes the lack of awareness of the programme of work, despite reporting implementation of significant activities related to it. Measures to improve the sustainability of inland fisheries are specifically mentioned by 13% of reporting Parties (all developing countries). Twenty per cent of reporting Parties explicitly refer to significant measures towards the restoration of inland water

ecosystems (75% of those being developing country Parties) — although it is noted that analysis is complicated by the fact that other measures reported likely also contain restoration activities (e.g., water frameworks). The Ramsar Convention is specifically mentioned as a major means of implementation of relevant activities by 20% of reporting Parties (despite most being also Parties to that Convention and the more favourable response to the specific Ramsar-related questions, as described below). Two Parties report differing degrees of implementation in different regions. River basin management plans and approaches and integrated water resources development plans feature strongly as activities. A number of Parties report that they have on-going plans to provide the institutional and legal frameworks to further improve implementation.

- 163. Identification of priorities for each activity in the programme of work, including timescales, in relation to outcome oriented targets Only 17% of reporting Parties have done this comprehensively, whilst 38% have only either developed targets or prioritised activities without targets. Thirty-two per cent of reporting Parties have not done this at all. Most European reporting Parties refer to targets developed under the European Water Framework Directive. Comments on this question rarely refer to actual targets, or their setting. Most refer to national goals to which activities are designed to contribute. One Party reports that although inland water biodiversity is a high priority, and has many national level activities with clear goals and objectives, the Convention's programme of work is not the main driver (the Party drew attention to the need to develop links).
- 164. Synergies with related activities under the Ramsar Convention and implementation of the joint work programme. Only 13% of reporting Parties have promoted this effectively. However, 80% have either undertaken some measures or potential measures have been identified. Seven per cent have not done so. Comments on this question rarely help clarify whether reports refer to actual synergies. Most, for example, refer to activities that are in harmony with the joint work plan, but do not clarify whether synergy has been developed. Most comments refer to close cooperation between focal points or that the two Conventions are administered under the same or related institutions. In comments, only 6% of Parties clearly refer to actual synergy at national level, in that the implementation of the Ramsar Convention is reported as an effective tool for the implementation of this work programme at national level. No reporting Parties answered that this section was not applicable to them (because they are not a Party to the Ramsar Convention) although one Party noted in its comments it was not a Party (but noted it needed to take on board the programme of work).
- 165. Steps to improve national data. For goods and services provided by inland water ecosystems, 96% of reporting Parties have taken steps or activities are under way, for the uses and related socioeconomic variables of such goods and services 87%, for basic hydrological aspects of water supply as they relate to maintaining ecosystem function 92%, for species and all taxonomic levels 96% and on threats to which inland water ecosystems are subjected 100%. One reporting Party refers specifically to improved datasets for fisheries, others are less specific about the datasets, although, again, many European reporting Parties point to data collection activities in relation to the European Water Framework Directive. Three reporting Parties cross-reference to data supporting activities under the Ramsar Convention.
- 166. *Promotion of the guidelines on rapid assessment*. Only 23% of reporting Parties have promoted this, or promotion is pending. However, based upon the more detailed comments received it is not clear whether the guidelines in question were used or other sources of methods.
- 167. Challenges faced in implementation. In common with most other thematic areas, overall the reporting Parties put the challenges in the lower end of the scale (medium challenge or lower). Few responding Parties report that the challenges have been overcome (generally less than 15%, the figure varies somewhat between challenges). However, one picture that is emerging is that Parties are facing higher challenges in terms of lack of benefit-sharing, population pressure, unsustainable consumption and production patterns, lack of capacities for local communities and lack of knowledge and practice of

ecosystem based approaches to management. The former more serious challenges would be expected, and are to some extent beyond the direct influence of the programme of work. However, the latter (ecosystem approaches) is a significant impediment to the overall implementation of this programme of work because of the nature of this particular ecosystem and measures required to manage the sectors that influence it.

2. *Marine and coastal biodiversity*

Status and trends

168. The countries that responded to the questionnaire have a high diversity of marine and coastal ecosystems and species, which, in many cases, are under pressure from human activities. Threats include land-based sources of marine pollution, overexploitation of resources and destructive practices. Invasive alien species and aquaculture practices also contribute to the degradation of marine and coastal biological diversity.

Achievements and/or developments

- 169. Programme element 1: Implementation of integrated marine and coastal area management (IMCAM). Eighty-eight per cent of responding countries have included in their national biodiversity strategies and action plans plans for instituting improved integrated marine and coastal area management (including catchments management) in order to reduce sediment and nutrient loads into the marine environment. Furthermore, 88% of such plans include the improvement of sewage and other waste treatment. Development of a comprehensive ocean policy was being considered in 48% of the responding countries. Fifty-six per cent of countries have plans to incorporate local and traditional knowledge into management of marine and coastal resources.
- 170. Most responding countries (52%) reported that they were currently in early stages of establishing and/or strengthening institutional, administrative and legislative arrangements for the development of integrated management of marine and coastal ecosystems. 24% of the responding countries were in advanced stages of development, while another 24% had such arrangements in place. Only 8% of countries had not yet started any development in this regard.
- 171. Most responding coastal countries (64%) were also in the early stages of implementation of ecosystem-based management of marine and coastal resources, for example through integration of coastal management and watershed management, or through integrated multidisciplinary coastal and ocean management. Twenty-four per cent of responding countries were in advanced stages of development, while 16% already had such arrangements in place. Only 4% of countries had not yet started development of ecosystem-based management of marine and coastal resources.
- 172. Programme element 2: Marine and coastal living resources. Essential for the Convention's work on living resources is the identification of components of a country's marine and coastal ecosystems that are critical for their functioning, as well as key threats to those ecosystems. Forty per cent of responding coastal countries have identified critical ecosystem components and are developing management plans for them. Sixteen per cent already have management plans in place for important components of marine and coastal ecosystems. A comprehensive assessment is currently in progress in 32% of the responding countries, while plans for such an assessment are in place in 24% of the responding countries. Twenty per cent of responding countries indicated that they have no plans for comprehensive marine and coastal assessments.
- 173. Other key components under this section of the programme of work relate to specific living resources such as fisheries and genetic resources, as well as coral reefs and related ecosystems. The national biodiversity strategies and action plans of 92% of responding countries include plans for controlling excessive fishing and destructive fishing practices. With regard to the Convention's work plan on coral reefs, the most commonly implemented (85% of responding countries with coral reefs)

activity was instituting integrated coastal management, including marine and coastal protected areas, in coral reef environments. Socio-economic assessment and monitoring of communities and stakeholders was also taking place in 75% of the responding countries with coral reefs, while stakeholder partnerships, community participation programmes and public education campaigns were taking place in 73% of the responding countries. Ecological assessment and monitoring of coral reefs was also a highly implemented activity, and was taking place in 58% of the responding countries with coral reefs, while another 42% of responding countries indicated that there was a priority need to undertake this activity. The highest priority is the provision of training and career opportunities for marine taxonomists and ecologists (58% countries indicated that this was a yet-to-be-implemented need). The identification and implementation of additional and alternative measures for securing livelihoods of people who directly depend on coral-reef services was also seen as a priority need in 42% of responding countries with coral reefs. A similar number of countries identified the rehabilitation and restoration of degraded reefs as a priority activity that has yet to be implemented.

- 174. Programme element 3: Marine and coastal protected areas. The national biodiversity strategies and action plans of all the responding countries include strategies for establishing new marine and coastal protected areas, while the majority (92%) also have plans for improving the management of existing marine and coastal protected areas. In 92% of responding countries these include plans for the protection of areas important for reproduction, such as spawning and nursery areas.
- 175. Currently, most responding countries (88%) have declared and gazetted some marine and coastal protected areas. Slightly fewer of these countries having declared marine and coastal protected areas (80%) have management plans that have been developed with involvement of all stakeholders. More than half (60%) of the marine and coastal protected areas have effective management with enforcement and monitoring.
- 176. In accordance with the programme of work on marine and coastal biological diversity, national systems or networks of marine and coastal protected areas are also becoming more common. Seventy-six per cent of the responding countries have such a system or network under development, while 38% already have one in place. Of these existing national systems or networks, 48% include marine and coastal protected areas that are managed for sustainable use, while the same number (48%) include areas where extractive uses are excluded ("no-take" areas). In a minority of cases (36%), the national system or network is surrounded by sustainable management practices over the wider marine and coastal environment.
- 177. Programme element 4: Mariculture. Many countries are applying a variety of techniques aimed at minimizing adverse impacts of mariculture on marine and coastal biodiversity. Of the responding countries, 56% apply environmental impact assessments for mariculture developments; 48% use selective methods in commercial fishing to avoid or minimize by-catch; 44% have developed effective methods for effluent and waste control; 40% use native species and subspecies in mariculture; 40% use proper methods of breeding and proper places of releasing in order to protect genetic diversity; 36% have developed and are applying effective site selection methods in the framework of integrated marine and coastal area management; 32% have implemented effective measures to prevent the inadvertent release of mariculture species and fertile polypoids; 28% have minimized the use of antibiotics through better husbandry techniques; 28% have developed environmentally sound practices for spat collecting operations, including use of selective fishing gear to avoid by-catch, in cases where seed collection from nature cannot be avoided; 24% have developed appropriate genetic resource management plans at the hatchery level; 24% have developed controlled hatchery and genetically sound reproduction methods in order to avoid seed collection from nature; while 20% have considered traditional knowledge, where applicable, as a source to develop sustainable mariculture techniques.
- 178. Programme element 5: Invasive alien species. A number of responding countries have put in place mechanisms to control pathways of introduction of alien species in the marine and coastal

environment. However, some pathways appear better controlled than others. Fifty-two per cent of responding countries have put in place mechanisms to control potential invasions from aquaculture; 44% have put in place mechanisms to control ballast-water related invasions; 24% have put in place mechanisms to control potential invasions from accidental releases, such as aquarium releases; while only 8% of responding countries have put in place mechanisms to control potential invasions from hull fouling.

Obstacles encountered in implementation

- 179. The most common obstacle cited by Parties in respect to the programme of work on marine and coastal biodiversity relates to the nature of conflicts experienced in the coastal zone. These areas are under heavy development pressures and competing demands for land use, including for commercial and recreational purposes. At the same time, coastal areas, with their high nature values, provide the most popular places to live. This results in conflicts between conservation and development interests, and such conflicts are difficult to reconcile in management planning. In some areas stakeholder participation in integrated marine and coastal area management is limited, while in others the difficulty in reaching agreement between all stakeholders leads to impediments in implementation of a management plan. It is not surprising, therefore, that the amount of the marine and coastal environment protected is often too small to provide the desired benefits to biodiversity.
- Even though the national biodiversity strategies and action plans of 84% of responding countries include strategies for building capacity within the country for management of marine and coastal resources, the lack of capacity on all levels was cited as a problem, particularly by developing countries and countries with economies in transition. The capacity-related constraints have to do with financial resources to manage the marine and coastal environment, lack of human resources, and technical and technological capacity, and are particularly acute because of the broad scope of the programme of work on marine and coastal biodiversity. Difficulty in implementation also has to do with the lack of well developed institutional structures, weak intersectoral cooperation and inadequate laws and regulations. Countries felt that putting in place measures to deal with relatively new threats, such as the control of invasive alien species, was particularly challenging. However institutional and legal impediments were also cited as an impediment to applying integrated marine and coastal area management, including the establishment and management of marine and coastal protected areas. Additionally, the capacity-related obstacles include a lack of knowledge and basic studies about marine and coastal biodiversity, with research, in many cases, being only carried out on a minimal scale. All of these constraints, combined by lack of political support and heavy public pressure on coastal resources result in continued deterioration of marine and coastal biodiversity in many areas, as evidenced by the Millennium Ecosystem Assessment and other relevant assessments.
- 181. Finally, one country cited lack of public interest in the issue, while another indicated that Convention's work programmes are not practical for national implementation, though they do provide a policy framework.

3. Agricultural biodiversity

- 182. Strategies, programmes and plans for conservation and sustainable use of agricultural biodiversity. Seventy-seven per cent of reporting Parties have developed some, or comprehensive national strategies, programmes and plans that ensure the development and successful implementation of policies and actions that lead to the conservation and sustainable use of agrobiodiversity components; 16% report that these are under development whereas only 6% report no such development.
- 183. Ways and means to address impacts of genetic use restriction technologies (GURTs). Regarding identification of ways and means to address potential impacts of genetic use restriction technologies, 42% of reporting Parties have not done this, 26% have potential measures under review, 16% have identified some measures but only 7% have identified comprehensive measures.

- Programme element 1: Assessment. Sixty-eight per cent of reporting Parties have ongoing 184. assessments of components of agricultural biodiversity, 23% have completed these assessments, whereas 10% have not undertaken them. The assessments undertaken cover a wide range of subjects such as components of agricultural biodiversity (e.g., plant genetic resources), pollution (e.g., of groundwater resources) and the impacts of agriculture on non-agricultural biodiversity (e.g., adjacent vegetation, birds associated with cultivated areas). A number of Parties report having undertaken such assessments in order to contribute to ongoing assessments by FAO. Regarding assessments of the interactions between agricultural practices and the conservation and sustainable use of the components of biodiversity referred to in Annex I of the Convention, 26% of reporting Parties have undertaken no assessments, 45% have assessments under way, 21% have completed some assessments and 7% have completed comprehensive assessments. Assessments undertaken included for the biodiversity benefits of organic farming, those associated with the Millennium Ecosystem Assessment, wild relatives of crops, and environmental impact assessments for agriculture and on-farm conservation with communities. Assessments have been also carried out at individual project level and through more comprehensive national assessments. Forty-two per cent of reporting Parties have not carried out assessments of the knowledge, innovations and practices of farmers and indigenous and local communities in sustaining agricultural biodiversity and agroecosystem services for food production and food security; 52% have assessments underway but only 7% have completed them. However, the comments received do not help clarify the nature or details of the assessment - except that most appear to be the result of minor projects and the isolated work on non-governmental. Few Parties report more comprehensive approaches.
- 185. Thirty per cent of reporting Parties have not been monitoring the overall degradation, status quo or restoration/rehabilitation of agricultural biodiversity since 1993. However, 12 per cent report no changes were found, 24% report overall restoration/rehabilitation but a larger proportion (one third) report overall degradation. It is clear from some comments that reporting Parties have different understandings of "restoration/rehabilitation".
- 186. Programme element 2: Adaptive management. Management practices, technologies and policies that promote the positive, and mitigate the negative, impacts of agriculture on biodiversity, and enhance productivity and the capacity to sustain livelihoods have been identified comprehensively by only 10% of reporting Parties. However, more than half (58%) have identified at least some practices, 23% are identifying such practices and 10% have made no progress on this.
- 187. Programme element 3: Capacity-building. Reporting Parties indicate that they have increased the capacities of farmers, indigenous and local communities, and their organizations and other stakeholders, to manage sustainable agricultural biodiversity and to develop strategies and methodologies for in situ conservation, sustainable use and management of agricultural biodiversity in 73% of cases. This has been achieved through various means including public education and awareness, seminars, training, rural development plans and various other forms of agricultural extension services. Operational mechanisms for participation by a wide range of stakeholder groups to develop genuine partnerships contributing to the implementation of the programme of work have been put in place by 40% of responding Parties, are under development by 10%, and are being identified by 23%, whereas 27% have not done this. The policy environment, including benefit-sharing arrangements and incentive measures, to support local-level management of agricultural biodiversity, has been improved by 35% of reporting Parties, is being developed by 10%, being identified by 26% but not improved by 29%. Policies mentioned include national master plans and regional common agricultural policies.
- 188. Programme element 4: Mainstreaming. The mainstreaming or integration of national plans and strategies for the conservation and sustainable use of agricultural biodiversity in sectoral and cross-sectoral plans and programmes has been achieved into major sectoral plans by 17% of reporting Parties, achieved into some plans and programmes by 43%, mechanisms are being identified by 13%, are under review by 10% and has not been achieved by 17%. Regarding institutional framework and policy planning mechanisms for the mainstreaming of agricultural biodiversity in agricultural strategies and

action plans, and its integration into wider strategies and action plans for biodiversity: 10% of reporting Parties have not done this, 24% have done so by supporting institutions in undertaking assessments, 19% have done so by developing policy and planning guidelines, 14% by developing training material, 16% by supporting capacity-building at policy, technical and local levels, and 16% by promoting synergy in the implementation of agreed plans of action and between ongoing assessment and intergovernmental processes. Twenty-four percent of reporting Parties are not promoting activities for the conservation, on farm, *in situ*, and *ex situ*, of the variability of genetic resources for food and agriculture, including their wild relatives as opposed to 66% that report that they are doing this. On farm, *in situ* and *ex situ* measures are detailed in the comments and include both animal and plant genetic resources. Limited actions are reported to have been undertaken specifically to implement the Plan of Action for the International Initiative for the Conservation and Sustainable Use of Pollinators. However, a number of Parties report that they are promoting the conservation and sustainable use of pollinators, through various means, but it is unclear if this refers to the plan of action.

4. Forest biodiversity

Implementation of the goals and/or objectives of the forest work programme

189. The majority of goals (12) and/or objectives (27) contained in the expanded programme of work on forest biodiversity have been implemented by the reporting Parties. Only 17% of the reporting Parties indicated that their country had not yet incorporated relevant goals and/or objectives of the forest work programme into their national biodiversity strategies and action plans, and national forest programmes. A few Parties indicated that their biodiversity plans and national forestry plans had been prepared prior to the adoption of the forest work programme in April 2002, but mentioned a high degree of commonality between the two.

Most implemented goals and/or objectives of the forest work programme

- 190. The undertaking of measures to protect, recover and restore forest biological diversity is the goal most commonly implemented by reporting Parties. Only one of the reporting Parties replied that they had failed to do so. Measures most frequently cited are reforestation programmes and protected area networks. Several Parties also indicated that their reforestation programmes favour the use of indigenous tree species.
- 191. Ninety three per cent of the Parties reported having undertaken measures to reduce the threats to, and mitigate their impacts on, forest biodiversity. Threats most frequently mentioned as having been addressed include forest fires and invasion by alien species. Overgrazing, slash and burn agriculture, and fuelwood harvesting were also noted as threats. In a couple of cases, the response to the latter threat was to plant village forests (woodlots).
- 192. Ninety per cent of the reporting Parties indicated that they were undertaking measures to promote the sustainable use of forest biological diversity. A variety of measures were cited, including management guidelines and regulations, national forest policies, financial incentives, inventories, monitoring, restoration programmes, protected area networks, legislation for sustainable forestry, public education, certification systems, awareness-raising and education, ecotourism, and the use of local customs to encourage conservation and community-based management.
- 193. Eighty seven per cent of the responding Parties indicated that they were undertaking measures to increase public education, and participation and awareness in relation to forest biological diversity by publishing and distributing educational materials, holding public events, airing radio and TV campaigns, organizing school programmes, and providing outdoor facilities and information centres; a few Parties are also funding courses for decision-makers and forest owners.
- 194. When asked whether any measures were undertaken to improve knowledge on, and methods for, the assessment of the status and trends of forest biological diversity, 79% of the reporting Parties replied

affirmatively. Several Parties also mentioned their participation in the development of criteria and indicators within regional forest processes, such as the Ministerial Conference on the Protection of Forests in Europe or the Mediterranean Commission for Sustainable Development. Others indicated their work on developing national indicators, monitoring and inventories.

- 195. The question as to whether measures to improve understanding of the role of forest biodiversity and ecosystem functioning were being undertaken yielded the same proportion of affirmative replies (79%) as above. Yet this question seemed to be misinterpreted by many Parties, who answered it in terms of public education and awareness rather than in terms of forest-related research.
- 196. Seventy-seven percent of the reporting Parties indicated that they were undertaking measures to enhance the institutional enabling environment for the conservation and sustainable use of forest biological diversity, including access and benefit-sharing, while 73% reported that they were undertaking measures to characterize forest ecosystems at various spatial scales in order to improve the assessment of the status and trends of forest biological diversity.

Least implemented goals and/or objectives of the forest work programme

- 197. The least implemented goal of the forest work programme is the application of the ecosystem approach to the management of forests. Only 45% of the reporting Parties reported that they were currently applying the ecosystem approach to sustainable forest management; a further 39% indicated that while they were not currently doing so, potential application measures were being identified. Most of those Parties having submitted positive responses referred to their national forest plan/act/policy.
- 198. Similarly, only 46% of the responding Parties indicated that they were undertaking measures to promote access and benefit-sharing of forest genetic resources. Sixty-two per cent of the responding Parties reported that they were addressing socio-economic failures and distortions that lead to decisions resulting in the loss of forest biological diversity. One Party referred to a law permitting free public access to public forests and the right to collect and use flowers, nuts, and fruits; two Parties referred to a community or social-based forestry programme. One country indicated that its rew community-based management policy would remedy such distortions. While two Parties described the creation of a compensation fund, or market incentives, to encourage sustainable practices in private forestry, others maintained that no such problem existed.
- 199. When asked whether any measures were undertaken at the national level to improve the infrastructure for data and information management for accurate assessment and monitoring of global forest biodiversity, 66% replied in the affirmative. These Parties mentioned databases and geographic-information-system-based tools. Some of those who also replied positively acknowledged that their efforts were in the nascent stage while those replying negatively cited a lack of financial and human capacity.

General questions on implementation

200. The forest section of the third national report also contained a set of general questions regarding tools and measures, involvement of indigenous and local communities, capacity-building, cooperation, and financial resources in the implementation of the forest work programme. Overall, respondent Parties noted the development of national forestry programmes/policies to guide sustainable forest management as one of the most important tools and/or measures to implement the forest work programme. Other tools and/or measures mentioned were legislation, community-based forest policies, capacity-building/training, forest certification, forest inventories, monitoring and evaluation tools, and indicators of sustainability. One party mentioned the use of efficient technologies and substitutes, while another mentioned the need for financial support for putting tools in place.

- 201. When asked to what extent the country has involved indigenous and local communities in implementing the forest work programme, many of the reporting Parties indicated that forest management, when being decentralized to some degree, used a "multi-stakeholder" or "participatory" approach that involved local and/or indigenous communities in the development of policies and plans. One Party mentioned community-based ecotourism projects and forest management schemes that make traditional leaders responsible for maintaining forests, while another cited the role of its community forestry programme in the establishment of woodlots.
- 202. Regarding efforts Parties have made towards capacity-building for the implementation of the forest work programme, these included educational programs for forestry employees, schoolchildren and youth; enhanced forestry training opportunities at colleges; on-the-job training; development of economic opportunities for rural women; and establishment of environmental units within government ministries and at the local level to increase awareness.
- 203. Only a few Parties commented on how the country has cooperated with other Governments or organizations in implementing the forest work programme. Of those who responded, mention was made of North-North regional initiatives in Europe and the Baltic; others mentioned South-South regional initiatives in Southern Africa, Central Africa and West Africa, while another mentioned Central America; several North-South initiatives on technical and financial support were also indicated. Few constraints and/or needs were identified; one country noted that projects or methods do not always correspond with the realities of the country, and another two mentioned limited investment.
- 204. Fifty per cent of the respondent Parties considered that the forest work programme was contributing to positive outcomes and impacts at the national level. Benefits noted include decreasing deforestation and bushfires; increasing reforestation efforts; growth of protected area networks, awareness and knowledge; improved legislation; and the development of management plans and community-forestry programmes.
- 205. Nevertheless, more than half of those responding cited financial and/or technical constraints in implementation. The need for technology, incentives and dialogue to improve the efficiency of private, wood-based industries was mentioned, while the long-term nature of most forestry activities was also cited as a constraint. One Party noted the limited opportunities to introduce traditional, nature-friendly timbering in the face of modern technology and limited labour power. Other Parties reported land-tenure problems, the high demand for fuelwood, and the need to set priorities due to limited resources.
 - 5. Biological diversity of dry and sub-humid lands

Assessment

- 206. Approximately half of the responding Parties have undertaken some assessment of the status and trends of dryland biological diversity and the pressures on it, disseminated existing knowledge and best practices, and filled knowledge gaps.
- 207. National reports include findings of national biodiversity assessments, project-level assessments, and protected areas assessments. Some of that information may apply to dry and sub-humid land biological diversity, but is not identified as such.
- 208. Approximately half of the responding Parties have not undertaken assessments of the status and trends of drylands biological diversity, thus explaining the scarcity of information available to assess status and trends of drylands biological diversity at the global and regional level.
- 209. Available reports contain no information concerning the implementation of activity 2 (Identification of areas of particular value and/or under threat), activity 3 (Identification of indicators),

activity 5 (Compilation of benefits derived from biological diversity), and activity 6 (Compilation of best management practices), thereby suggesting very limited implementation of these activities.

Targeted actions

- 210. Approximately half of responding parties have taken some measures to promote the conservation and sustainable use of the biodiversity of dry and sub-humid lands and the fair and equitable sharing of the benefits arising out of the utilization of its genetic resources.
- 211. Available reports indicate that the following activities were the most implemented: activity 7(a) (Establishment and management of protected areas), activity 7(b) (Rehabilitation and/or restoration of degraded lands), activity 7(e) (Water resources), activity 7 (i) (Implementation of training, education and public-awareness programmes), activity 7(m) (Cooperation with relevant conventions), and activity 8 (e) (Establishment and strengthening of policies and instruments). In addition, many countries cited efforts to combat poverty as contributing to the activities of the programme of work on dry and sub-humid lands biological diversity.
- 212. Available reports contain no information concerning the implementation of activity 7 (c) (Management of invasive alien species), activity 7(f) (*In situ* and *ex situ* conservation), activity 7(h) (Sustainable use of plant and animal biomass), activity 7(j) (Improvement of availability of information on sustainable use), activity 7(l) (Cooperation for integrated catchment management and endangered species), activity 8(a) (Local institutional structure and indigenous and local techniques), activity 8(b) (Decentralization of management), activity 8(c) (Institutions for land tenure and conflict resolution), activity 8(d) (Transboundary issues), activity 9(a) (Income diversification), activity 9(b) (Sustainable harvesting), activity 9(c) (Innovations for local income generation), activity 9(d) (Market development) and activity 9(e) (Fair and equitable sharing of benefits). This suggests very limited implementation of the above activities.

Synergy

213. Approximately two-thirds of respondents have undertaken measures to ensure synergistic implementation of the programme of work with the national process under the United Nations Convention to Combat Desertification and other processes under related environmental conventions. Most dryland countries and countries that support biodiversity conservation efforts in drylands, have acknowledged efforts to combat desertification. A small number of specific initiatives illustrating the synergies between CBD and CCD were reported.

Obstacles

214. The most important obstacles identified for the implementation of the programme of work on dry and sub-humid lands biodiversity are lack of financial, technical and human resources, poverty, institutional weakness, lack of transfer of technology, and the absence of economic incentives.

6. *Mountain biodiversity*

Programme element 1. Direct actions for conservation, sustainable use and benefit sharing

- 215. Measures taken to prevent and mitigate negative impacts of threats. Approximately two thirds of the responding countries have taken measures to prevent and mitigate the negative impacts of key threats to mountain biodiversity. Amongst key threats listed are: climate change, mining activities and/or mining speculation, deforestation and soil erosion, air pollution, tourism development, agricultural expansion and migration.
- 216. Measures taken to prevent and mitigate those threats. Measures reported establishment of protected areas, anti-erosion measures, reforestation, prevention systems against forest fire, sustainable

management of natural resources in buffer zones around protected areas, climate change mitigation and adaptation measures, spatial planning, and legal frameworks.

- 217. Measures taken to protect, recover and restore mountain biodiversity. A large majority of responding countries have taken measures to protect recover and restore mountain biodiversity. Measures taken include: reforestation, establishment of protected areas, treatment of small watersheds, *ex situ* conservation, restoration activities, sustainable management plans, reintroduction of species, and prohibition of illegal hunting.
- 218. Measures taken to promote sustainable use of mountain biological resources and to maintain genetic diversity in mountain ecosystems. Over half of responding countries have taken measures to promote the sustainable use of mountain biological resources and to maintain genetic diversity in mountain ecosystems. Measures taken include: range management schemes, promotion of indigenous species, re-introduction of species, and establishment of a genetic bank.
- 219. Measures taken for benefit sharing and maintenance of traditional knowledge. Less than half of responding countries have taken measures for benefit sharing from the utilization of mountain genetic resources, including preservation and maintenance of traditional knowledge. Measures taken include: traditional medicine surveys and studies, *ex situ* conservation, traditional knowledge inventory, policy and legal frameworks, incentives for organic farming.

Programme element 2: Means of implementation for conservation, sustainable use and benefit-sharing

- 220. Legal, policy and institutional framework. Approximately half of responding countries have developed legal, policy and institutional frameworks for the conservation and sustainable use of mountain biodiversity and for implementing this programme of work. However, a minority of responding countries have laws specific to mountainous areas. Rather, they include mountainous areas in broader policy frameworks such as national biodiversity strategies and action plans, water, forest, soil conservation, as well as grazing and range management policy frameworks.
- 221. Regional/transboundary cooperative agreements. Less than half of responding countries have been involved in regional and/or transboundary cooperative agreements on mountain ecosystems for conservation and sustainable use of mountain biodiversity.

Programme element 3. Supporting actions for conservation, sustainable use and benefit-sharing

- 222. Measures taken to identify, monitor and assess mountain biodiversity. Slightly over half of responding countries have taken measures to identify, monitor and assess mountain biodiversity. Reported efforts are often part of broader initiatives to assess and monitor biodiversity at a national scale. Location-specific assessments were also reported. No countries have reported a programme specifically targeting mountains.
- 223. Measures taken to improve research, technical and scientific cooperation and capacity-building. Over half of responding countries have taken measures to improve research, technical and scientific cooperation and capacity-building. A few Parties mentioned North-South collaboration.
- 224. *Measures taken to develop, promote, validate and transfer technology.* Approximately two thirds of the responding Parties have not taken any measures to develop, promote, validate and transfer appropriate technologies for the conservation of mountain ecosystems.

Obstacles to implementation

225. In question 147 of the third national report, countries are asked to rate different challenges for each of the Convention's programmes of work. With regard to mountain biodiversity, the challenges rating highest are: lack of financial, human and technical resources, lack of economic incentives,

unsustainable consumption and production patterns, lack off capacities for bcal communities lack of knowledge and practice of ecosystem-based approaches to management, population pressure and lack of mainstreaming and integration of biodiversity issues into other sectors.

226. Amongst obstacles reported in comments are: a loss of traditional knowledge, insufficient financial means, need for capacity support on all levels, technical capacity constraints, insufficient scientific knowledge, lack of training and properly qualified staff, low valuation of biological resources, as well as limited participation and interest of the public and local interest groups.

Annex

PARTIES THAT HAD SUBMITTED THEIR THIRD NATIONAL REPORTS AS OF THE END OF NOVEMBER 2005

1.	Algeria	28.	Israel
2.	Australia	29.	Japan
3.	Austria	30.	Latvia
4.	Bahamas	31.	Lesotho
5.	Bangladesh	32.	Lithuania
	•	33.	
6. 7.	Belgium Roggie and Harragavina	33. 34.	Malaysia
	Bosnia and Herzegovina		Malaysia
8.	Botswana	35.	Mali
9.	Brazil	36.	Mauritania
10.	Cameroon	37.	Morocco
11.	Canada	38.	Myanmar
12.	Chile	39.	Namibia
13.	China	40.	Netherlands
14.	Comoros	41.	Niger
15.	Cuba	42.	Niue
16.	Cyprus	43.	Norway
17.	Czech Republic	44.	Poland
18.	Democratic Republic of the Congo	45.	Republic of Korea
19.	Denmark	46.	Romania
20.	Egypt	47.	Senegal
21.	Estonia	48.	Slovenia
22.	Finland	49.	Sweden
23.	Germany	50.	Thailand
24.	Ghana	51.	The former Yugoslav Republic of Macedonia
25.	Hungary	52.	Togo
26.	India	53.	United Arab Emirates
27.	Indonesia	54.	United Kingdom
21.	indonesia	55.	Zimbabwe
		JJ.	Zimodowe
