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UPDATED SYNTHESIS OF INFORMATION CONTAINED IN THIRD NATIONAL REPORT

Priorities, Challenges and Progress Towards Targets

Note by the Executive Secretary

INTRODUCTION

1. This addendum covers a synthesis of information from third national reports concerning priority-setting by Parties for implementation of the Convention, progress towards the 2010 Biodiversity Target and the targets in the Global Strategy for Plant Conservation, as well as an overall analysis of challenges encountered by Parties in implementation. It also includes a synthesis of information concerning the implementation of the Ecosystem Approach.

PRIORITISING IMPLEMENTATION

2. In the third national reports, Parties were requested to rank levels of priority accorded to the implementation of each article, provision and thematic work programme covered in the third national report. Priorities identified by countries differ according to national circumstances. However, there are a few articles and thematic work programmes to which a significant majority of Parties attach high priority in their implementation of the Convention. The article that enjoys highest priority by more than 80% of reporting Parties is Article 8 (*In-situ* Conservation). The second in ranking (over 70%) is Article 6 (General measures for conservation and sustainable use). Following Articles 8 and 6, is Article 5 (Cooperation). Details provided in many reports support the level of importance or priority given to these three articles.

3. Meanwhile it is also meaningful to look at low-priority setting. The lowest in ranking, on average, is Article 8(j) and related provisions. However, it is interesting to note that this provision

is also attached more or less equal levels of high, medium and low priority. Clearly, some countries rate Article 8j as high priority, but others consider it not relevant to them. This suggests that countries are focusing on the role of indigenous peoples (which are concentrated in a subset of countries) rather than local communities (which exist in all countries). Second to Article 8(j) is Article 11 (Incentive measures). Given that “lack of incentive measures” is also identified as a widespread obstacle to the implementation of the Convention (see an overall analysis of challenges for implementation below), this is perhaps surprising. However, it is also interesting to note that this article is accorded medium-level priority by a relatively high number of countries. The third lowest priority is given to Article 16 (Access to and transfer of technology) which is however also given medium-level priority by a high percentage of countries. This may partly relate to the fact that some developing countries consider this as primarily a responsibility of developed countries.

4. If we aggregate the data of high and medium priorities, most articles and provisions are included. In particular, we find that more than 95% of reporting countries accord high priority to Articles 5, 6 and 8. More than 80% of reporting countries attach a high or medium priority to Articles 10, 12, 13, 14, 17 and 18.

5. Among the thematic programmes of work forest biodiversity is ranked as a high priority by the largest number of countries. Close to 70% of reporting countries give a high priority to its implementation. The second and third in ranking are the programmes of work on marine and coastal and agricultural biodiversity. The programme of work on dry and subhumid lands biodiversity is accorded high priority by the lowest number of countries. If we combine the data of high and medium priorities, we find that almost all the work programmes are covered by most countries (over 90% for forest and agricultural biodiversity, more than 75% for marine and coastal and inland waters biodiversity and close to 75% for mountain ecosystems and dry and subhumid lands biodiversity).

An Overall Analysis of Challenges for Implementation

Introduction

6. In the third national report, Parties were asked to rank the level of challenges (extracted from the appendix to decision VI/26) for the implementation of articles and provisions of the Convention, as well as for some thematic programmes of work covered in the third national report.

7. The following is a brief, overall analysis of the rating of challenges listed in the appendix to decision VI/26. In each individual subsection, specific challenges will be summarized for implementation of particular articles, provisions and thematic work programmes. An analysis of the specific obstacles in implementing Article 6 of the Convention is provided in UNEP/CBD/WG-RI/2/2/Add.1

Challenges for the implementation of articles and provisions of the Convention

8. At the outset, it is important to note that very few challenges were rated as having been overcome, with the exception of 20% of reporting countries indicating that they had overcome lack of political will for implementation of most articles and provisions. A considerable number of reporting countries (ranging from 30% to 50% for different articles and provisions) also consider lack of political will as a low-level challenge for the implementation of almost all the articles and provisions, except Articles 8(j) and 11.

9. Another observation is that many reporting countries (ranging from 30% to 60% for different articles and provisions, with a few exceptions) rated many challenges as medium-level ones for implementation of almost all the articles and provisions. These challenges include:

- Limited public participation and stakeholder involvement;
- Lack of precautionary and proactive measures;
- Inadequate capacity to act, caused by institutional weakness;
- Lack of transfer of technology and expertise;
- Lack of adequate scientific research capacities to support all the objectives;
- Lack of accessible knowledge and information;
- Lack of public education and awareness at all levels;
- Existing scientific and traditional knowledge not fully utilized;
- Loss of biodiversity and the corresponding goods and services it provides not properly understood and documented;
- Lack of synergies at national and international levels;
- Lack of horizontal cooperation among stakeholders;
- Lack of effective partnerships;
- Lack of engagement of scientific community.

10. At the lower end of the scale, in addition to lack of political will, a few other challenges are ranked as low (ranging from 30% to 50%) by a considerable number of Parties for the implementation of many articles and provisions (with a few exceptions placed in parentheses below). They include:

- Lack of accessible knowledge and information (except Article 8(j));
- Lack of appropriate policies and laws (except Articles 8h, 8j, 15, 16 and 19);
- Lack of engagement of scientific community (except Article 8j).

11. At the higher end of the scale, a considerable number of Parties (ranging from 25% to 40%) ranked the following challenges as high-level ones for many articles and provisions (with a few noted exceptions):

- Limited public participation and stakeholder involvement (except for Articles 5, 6, 8 and 13);
- Lack of mainstreaming and integration of biodiversity issues into other sectors;
- Lack of financial, human and technical resources;
- Lack of economic incentive measures;
- Lack of benefit-sharing (except for Articles 13, 14 and 17).

12. Overall, we find a few key challenges when we combine data of high and medium-level challenges. These include:

- Lack of financial, human and technical resources;
- Lack of mainstreaming and integration of biodiversity issues into other sectors;
- Lack of economic incentive measures;
- Limited public participation and stakeholder involvement.

13. Exceptions always exist when making such a general analysis. One challenge may be rated by many countries as low or medium for the implementation of most articles or provisions, but as high for one or two particular articles or provisions. For example, many countries (close to 50%) identified population pressure as a high-level challenge for implementing Article 10 while this is identified by a much smaller number of Parties as a high-level challenge for implementing many other articles or provisions. Another example of this concerns limited public participation which is rated by many

countries as a medium or low challenge (in particular for Article 5), while at the same time is ranked as a high-level challenge by over 30% of reporting countries for implementation of Articles 8(h) and 11.

Challenges for the implementation of thematic programmes of work

14. As mentioned above, lack of political will is ranked by relatively few countries as having been overcome. A considerable number of Parties also identified this challenge as a low-level priority. In addition, the challenges rated by relatively more countries (30% to 40%) as low-level priorities include:

- Lack of engagement of scientific community;
- Lack of appropriate policies and laws.

15. Many countries (over 40%) identified most challenges as medium-level ones for implementing all programmes of work. Those challenges rated as medium by a relatively high percentage of countries (over 40% and higher than 60% in some cases) include:

- Lack of precautionary and proactive measures;
- Lack of horizontal cooperation among stakeholders;
- Lack of effective partnerships;
- Lack of adequate scientific research capacities to support all the objectives;
- Lack of public education and awareness at all levels;
- Lack of financial, human and technical resources;
- Lack of synergies at national and international levels;
- Lack of knowledge and practice of ecosystem-based approaches to management;
- Existing scientific and traditional knowledge not fully utilized.

16. There are a few challenges rated as high by a considerable number of countries (40%). They are:

- Loss of biodiversity and the corresponding goods and services it provides not properly understood and documented;
- Lack of financial, human and technical resources;
- Poverty;
- Population pressure;
- Weak law enforcement capacity, in particular for the programme of work on inland waters biodiversity.

17. Overall there are a few key challenges if we aggregate data of medium and high-level challenges. These include:

- Lack of mainstreaming and integration of biodiversity issues into other sectors;
- Loss of biodiversity and the corresponding goods and services it provides not properly understood and documented;
- Lack of financial, human and technical resources;
- Lack of benefit-sharing;
- Lack of knowledge and practice of ecosystem-based approaches to management;
- Weak law enforcement capacity.

Conclusion

18. Overall, lack of financial, human and technical resources and lack of mainstreaming and integration of biodiversity issues into other sectors are the two most important challenges for the implementation of the Convention. They are also identified as main challenges for the implementation of most articles, provisions and programmes of work.

Progress towards the 2010 Biodiversity Target

Introduction

19. While adopting the Strategic Plan of the Convention at its sixth meeting of the Conference of the Parties (decision VI/26), Parties committed themselves to a more effective and coherent implementation of the three objectives of the Convention and to achieve by 2010 a significant reduction of the current rate of loss of biodiversity at the global, regional and national levels. This target was endorsed at the World Summit on Sustainable Development held in Johannesburg, South Africa, in 2002. The Conference of the Parties followed this up at its seventh meeting by having developed and adopted a provisional framework of goals and targets for the 2010 Biodiversity Target, which is contained in the annex to decision VII/30. While adopting these goals and targets, the Conference of the Parties called upon Parties to develop national targets where appropriate and take measures or actions to achieve the 2010 Biodiversity Target.

20. In the third national report, Parties were asked to report on the development of national targets (or adoption of the global targets), integration of these targets into NBSAPs or other strategies and programmes as well as some thematic programmes of work. Parties were also asked to report on the status and trends of implementation, development of relevant indicators and challenges encountered in implementation.

21. The synthesis below considers progress toward each individual target, focusing on the development of national targets, integration of targets into NBSAPs and thematic work programmes. Status and trends of implementation, development of indicators and challenges will be summarized in an overall assessment of progress and challenges.

22. Since the submission of its third national report, Brazil has adopted and submitted a comprehensive set of national targets within the framework of the 2010 Biodiversity Target and the Global Strategy for Plant Conservation. This is provided in full in document UNEP/CBD/WG-RI/2/INF/7.

SYNTHESIS OF RESPONSES AND COMMENTS (BY GOALS AND TARGETS)

Goal 1. Promote the conservation of the biological diversity of ecosystems, habitats and biomes

Target 1.1 At least 10% of each of the world's ecological regions effectively conserved.

Establishment of national targets and integration of targets into relevant plans, programmes and strategies

23. Most countries (87%) reported that they had established national targets or endorsed the global target. However, many reporting countries did not set quantitative targets. Instead, most of them indicated that similar qualitative objectives and various targets had been incorporated into their National Biodiversity Strategy and Action Plans (NBSAPs) or related sectoral and cross-sectoral strategies and plans that they consider helpful for achieving this target.

24. However, a number of countries did set quantitative targets in this regard. While some countries have set targets higher than the global one, these are rarely specific to ecological regions. For example, Bhutan has aimed to protect 60% of its land areas. China has aimed to increase by 2010 its protected areas of various categories to 12% of its total land area. Malaysia reported that over 50% of its land area

would be forest-covered and protected by 2010. Many European countries, including countries with economies in transition, had adopted targets established for a regional network-NATURA 2000. It should be noted that some of these targets had been set before this global target was adopted.

25. Some countries reported that, despite no explicit national target in place, they had been making great efforts to increase the number and categories of protected areas. Some countries have expanded their existing protected areas to cover more species and ecosystems. Some countries have increased financial and technical support to improve the management and effectiveness of protected areas, though there is no obvious increase in the coverage and number of protected areas.

Integration of targets into implementation of programmes of work

26. More than 60% of reporting countries have incorporated this target into the implementation of the programmes of work on forest and inland waters biodiversity. Close to a half of reporting countries have incorporated this target into other thematic work programmes.

27. Over 70% of countries indicated that targets for forest biodiversity have been established. A number of examples were also found in detailed comments. For example, South Africa has aimed to increase its forest coverage by 15%. Viet Nam plans to expand its forest cover to 43% of its land area by 2010. India aims to increase its forest areas from 22% in 2005 to 33% in 2012. Ivory Coast also plans to increase its forest cover by 20%.

28. Little information was provided on specific targets integrated into other thematic work programmes. In the case of agricultural biodiversity, only a few European countries indicated that targets established in the NATURA 2000 should also cover agricultural ecosystems. In the case of inland water biodiversity, only a few countries reported that such a target is in place. For example, Thailand has aimed to conserve and restore 35% of its wetlands by 2010. A few countries have established some targets for marine protected areas. Only a few countries mentioned their efforts to protect mountain ecosystems, most of which are combined with efforts to establish national parks and wildlife reserves in mountainous areas.

Overall assessment of progress and challenges

29. Overall, many countries have made some obvious progress in establishing protected areas, with a considerable number of countries reporting that their protected area coverage had exceeded 10% of their land area, however it appears unclear whether all the eco-regions have been covered in these protected areas. Many countries have included similar objectives and targets in their NBSAPs and relevant sectoral or cross-sectoral strategies or plans. Particular progress is noted in protecting forest ecosystems. However, progress in protecting other ecosystems, such as dryland and mountain ecosystems biodiversity, appears slow. Development of indicators for measuring progress towards this target is still in the initial stage in many countries. A few countries such as Botswana, Estonia and India have developed some indicators in this regard.

30. Main challenges identified by many countries for achieving this target are:

- Pressures from land use, population growth, poverty, environmental pollution and economic development;
- Lack of financial, technical and human resources;
- Lack of coordination among related sectors;
- Limited awareness and capacities of local communities and limited public participation;

- Inadequate legislation and policies;
- Lack of proper incentives or benefit-sharing mechanisms;
- Management challenges with the increasing number of protected areas;
- Inadequate conservation facilities.

Target 1.2 Areas of particular importance to biodiversity protected

Establishment of national targets and integration of targets into relevant plans, programmes and strategies

31. Most countries (89%) stated that they have established one or more specific national targets or adopted this global target. However, few quantitative targets were mentioned. Only a few European countries mentioned their relevant targets established for the implementation of the EU Habitats Directive and the establishment of the network NATURA 2000. Australia reported that its highly protected marine parks had increased from 5% to 33% as a result of the implementation of a new zoning plan for the Great Barrier Reef. Many countries underlined that the implementation of similar objectives and targets included in relevant national strategies or plans could contribute to the achievement of this target. Nearly all reporting countries said that they had included similar objectives or targets in their NBSAPs and/or sectoral plans, such as national forest programmes, agricultural strategies, and integrated coastal zone management programmes. A few countries, notably from the African continent, underlined that they had included these targets into national action plans or programmes to address climate change and desertification, and strategies for poverty reduction.

Integration of targets into implementation of programmes of work

32. Over 60% of countries have integrated targets into the implementation of the programmes of work on forest, inland water and marine and coastal biodiversity. Almost half have done so for other work programmes (agricultural, mountain ecosystems and dryland biodiversity). Few specific targets were mentioned for all the thematic work programmes. Instead, many countries listed measures or activities undertaken for implementing these work programmes. Measures taken include: designation of sites with high biodiversity as protected areas; development of more adequate policies; identification of Ramsar sites; establishment of marine protected areas; implementation of specific projects aimed at protecting important species and ecosystems like mangroves and reefs; and actions related to land use, agricultural practices, and land degradation.

Overall assessment of progress and challenges

33. It appears that many countries have not set specific, quantitative targets in this regard. Instead, many countries have included similar qualitative objectives or targets in their NBSAPs or relevant sectoral strategies or plans. Many countries are undertaking specific measures and activities, including inventorying of fauna and flora, identifying important sites and/or establishment of new protected areas or sites, establishing management plans and developing relevant policy and legal frameworks.

34. Main challenges for achieving this target are:

- Difficulties linked to private land ownership and acquisition of key properties;
- Lack of institutional, financial, scientific, technical and human capacities;
- Increase of population, poverty and related pressures;
- Insufficient collaboration from relevant stakeholders;
- Lack of awareness;

- Difficulty in enforcing laws and managing protected areas;
- Insufficient information and research;
- Inadequate policies and laws (e.g., land use);
- Lack of economic incentives;
- Conflicts between economic development and ecological conservation.

Goal 2 Promote the conservation of species diversity

Target 2.1: Restore, maintain, or reduce the decline of populations of species of selected taxonomic groups

Establishment of national targets and integration of targets into relevant plans, programmes and strategies

35. Over 80% of reporting countries indicated that they had established national target(s) or endorsed this global target. However, only a few quantitative targets were mentioned. Sweden reported that its parliament had adopted an interim target of decreasing the number of species that are endangered by 30% by 2015.

36. Many countries listed specific activities undertaken to achieve this target. These activities include: conducting an indigenous species inventory and species assessments, establishing a national Red List, development of threat abatement or management plans, developing relevant legislations, restoration of selected habitats/ecosystems and specific priority species, providing mechanisms for the sustainable use of species, establishing *ex-situ* collections, and public education and outreach.

37. More than 50% of reporting countries have incorporated targets into the implementation of the thematic work programmes on agricultural, marine and coastal and forest biodiversity. For inland waters ecosystems, less than a half have done so, and even less have done so for mountain ecosystems and dry and subhumid biodiversity. Overall, targets are seldom clearly defined for implementing all the thematic work programmes and many countries listed measures currently in place rather than targets *per se*. In terms of agricultural biodiversity, the target or activity often mentioned by some countries relates to *ex-situ* conservation for plant genetic resources. Other targets relate to pollinator conservation, pesticide use reduction, and development and implementation of recovery plans. For inland waters, examples include keeping lakes and watercourses ecologically sustainable with habitats maintained and protected, promoting local participation in wetland management and fishery development, protecting aquatic species from toxic substances, and monitoring and control of invasive alien species. For marine and coastal biodiversity, the species most frequently mentioned by Parties for special conservation measures is the marine turtle. For forest biodiversity, measures mentioned include developing easy-to-use guidelines on rehabilitation and restoration of degraded ecosystems (Botswana), restoration of the seven most threatened woody species (Ethiopia), and promoting community participation in conservation in community forests (Nepal). Little information was provided concerning targets and measures for implementing the work programmes on biodiversity of dry and subhumid lands and mountain ecosystems.

Overall assessment of progress and challenges

38. Most countries have programmes, policies or legislation in place to at least protect some of the most endangered species, even if a national Red List has yet to be established. Species assessments, inventories and the creation of Red Lists are important activities undertaken by many countries.

39. Some Parties have developed a few indicators for measuring progress towards this target. They include the number of species with conservation measures in place, the protection level, relative abundance of threatened species, poaching reductions, hunting data and fisheries statistics, number of species reintroductions, number of breeding sites identified and protected, and the number of biodiversity monitoring centers established. The most common indicator is the number of species on the National Red List.

40. The two challenges that were most often mentioned for achieving this target are the lack of financial resources and the shortage of human resources and expertise. Other important challenges include lack of data, poor institutional infrastructure, demographic pressure, habitat degradation, poverty, lack of awareness and lack of political will.

Target 2.2: Status of threatened species improved

Establishment of national targets and integration of targets into relevant plans, programmes and strategies as well as thematic programmes of work

41. Most countries (87%) reported that they had established national target(s) in this regard or adopted this global target. 15 countries said that such a target had not been set.

42. Detailed comments provided by countries show that few countries set quantitative targets. Most targets given were qualitative. For example, China aims to protect wild species of particular importance to biodiversity. Kazakhstan also aims to monitor endangered species and populations, to enact legislative acts and develop programmes for conservation of these species, and facilitate conservation outside of protected areas.

43. Quantitative targets include decreasing the number of endangered species by 10% (Hungary), propagating all of the plant species represented by less than 50 known individuals (Mauritius), and decreasing the number of endangered species by 5% by 2008 (The Former Yugoslav Republic of Macedonia).

44. Most countries either listed legislative measures in place or described the protection and recovery measures being implemented. In fact, some countries listed conservation measures rather than targets, particularly when asked whether they had specific targets for the different thematic programmes of work, though more than a half of countries stated that targets had been incorporated into the thematic work programmes on forest, marine and coastal and inland waters biodiversity.

Overall assessment of progress and challenges

45. Many countries reported that they had put in place measures for the protection of some endangered or threatened species and their habitats, however, it appears unclear to what extent these measures have been implemented and contributed to the improvement of the status of these threatened species.

46. Most countries are using the number of species on the National Red List or the evolution of the status of species on the National Red List as an indicator for measuring progress towards this target. The other most common indicator is the number of species under special conservation programmes or the number of conservation programmes implemented.

47. The most common challenge for achieving this target is the lack of financial, human and technical resources. Other typical challenges include institutional weakness, difficulty in integrating recovery plans with other resource management activities, limited *ex-situ* conservation facilities, population pressure, lack of political will, lack of awareness, and lack of alternatives or incentive measures.

Goal 3. Promote the conservation of genetic diversity

Target 3.1 Genetic diversity of crops, livestock, and of harvested species of trees, fish and wildlife and other valuable species conserved, and associated indigenous and local knowledge maintained

Establishment of national targets and integration of targets into relevant plans, programmes and strategies

48. Over 80% of reporting countries indicated that such targets were established or adopted. However, very few countries had set quantitative targets. Most of the reporting countries indicated that various objectives and targets related to this target were incorporated into their NBSAPs or related sectoral and cross-sectoral strategies, plans and programmes. Activities most often mentioned by many countries to achieve this target are the establishment of gene/germplasm banks for genetic resources or development of databases or collections for preservation of native plant and animal genetic resources. For example, Cyprus conserves their germplasm at the National Genebank, which was founded in 1985. The collection consists of approximately 12,000 samples of mainly cereals, food and forage legumes, as well as wild relatives, endemic and rare plants. In Malawi, collection, storage and characterization of crops are on-going activities of the National Plant Genetic Resource Center. Currently, 200 accessions representing 50 crop species are being maintained by the center.

49. Some countries have set targets for the protection and conservation of traditional knowledge, practices and innovations related to this target. For example, Colombia's Environmental Management Plan 2002-2012 aims to identify and valorize at least 10 traditional sustainable production systems in indigenous and rural communities.

Integration of targets into implementation of programmes of work

50. More than 60% of the reporting countries have incorporated this target into the work programmes on agricultural and forest biodiversity. Around one-third have incorporated it into other thematic work programmes.

51. Overall, little information was available on targets for all thematic work programmes. Many countries listed programmes or activities undertaken to achieve this target and only a few countries provided specific targets. In the case of agricultural biodiversity, a few countries have set quantitative targets. For example, Israel plans to target 200 wild relatives of crop plants for *ex-situ* conservation. In Bangladesh, support has been given to several breeding programmes for several endemic species like Black Bengal goats, indigenous buffalo and Garole sheep to maintain the native genetic stocks. For forest biodiversity, examples included a reforestation program covering 17,105,760 ha being promoted by Ethiopia. For marine biodiversity, examples include several artificial reef projects implemented by Tunisia to encourage the aggregation of endemic flora and fauna in specific areas.

Overall assessment of progress and challenges

52. Many countries are investing in the establishment of gene/germplasm banks and collections and developing various programmes for conservation of genetic resources, in particular those endangered or economically important species. Some countries have put in place relevant legislation and policies for the protection of and access to genetic resources. However, progress towards this target in many countries, in particular developing countries, is limited due to limited capacities and other challenges listed below.

53. Main challenges identified by many countries for achieving this target include:

- Destruction of habitats;
- Lack of financial, human and technical resources;
- Lack of a national genetic database, and/or poor maintenance of such;
- Inadequate legislation and weak law enforcement;
- Lack of monitoring;
- Lack of awareness and public participation;
- Loss of traditional knowledge;
- Inadequate conservation facilities;
- Lack of coordination and cooperation among all relevant stakeholders;
- Lack of proper management techniques.

Goal 4 Promote sustainable use and consumption***Target 4.1 Biodiversity-based products derived from sources that are sustainably managed, and production areas managed consistent with the conservation of biodiversity****Establishment of national targets and integration of targets into relevant plans, programmes and strategies*

54. Most Parties (80%) stated that they have established one or more specific national targets or adopted the global target. 20 countries have not developed any target.

55. Most countries have incorporated the global or national target into their NBSAPs or related sectoral plans and strategies, such as forest management plan, fishery development plan and rural development plan; and some have even incorporated it into both. Forestry is the sector that is most often mentioned in terms of sectoral integration of biodiversity concerns. Some countries also indicated that this target was integrated into broader strategies or plans such as strategies for poverty reduction and sustainable development.

56. Very few specific quantitative targets were mentioned by Parties. Instead many countries listed some measures taken for achieving this target. These measures include: promotion of organic farming; conducting environmental impact assessments, development of a certification process and eco-labelling, quotas for fisheries; establishment and sustainable management of protected areas; reduction of bush fires; reducing the use of large nets; strengthening of scientific and technical capacities; promotion of conservation and sustainable use of high-value herbs and crops; and promoting sustainable tourism.

Integration of targets into implementation of programmes of work

57. Over 50% of Parties indicated that they had established national targets for some programmes of work of the Convention, in particular on forest, agricultural, marine and coastal biodiversity. However, little information was provided on specific targets. Some countries listed some measures taken to achieve this target. Examples of measures taken include: establishment of marine protected areas; sustainable management of coastal resources; adopting sustainable land use practices; sustainable forest management; sustainable harvesting of specific agricultural species; hunting limits; establishment of fisheries regulations and quotas for specific species; food security programmes; measures to conserve herbal and medicinal plants species on mountains; establishment of logging limits; implementation of national action plans to combat desertification; and development of action plans on the conservation and sustainable use of wetlands.

Overall assessment of progress and challenges

58. Many countries mention that progress towards this target is slow, for several reasons, many of which are identified below. However, some Parties noted positive trends. Many countries have taken or are taking some specific measures to achieve this target.

59. Challenges most often reported include:

- Lack of financial, human and technical resources and limited capacities;
- Lack of sectoral involvement and of inter-sectoral coordination;
- Lack of awareness;
- Population pressure (demographic, related to poverty, etc.);
- Lack of scientific data;
- Inadequate legislative and policy frameworks and weak enforcement;
- Lack of incentive measures;
- Sustainable use of biodiversity being a low priority;
- Competing land uses;
- Lack of support from relevant stakeholders.

Target 4.2 Unsustainable consumption, of biological resources, or that impacts upon biodiversity, reduced*Establishment of national targets and incorporation of targets into relevant plans, programmes and strategies*

60. Most countries reported that national targets had been established or this global target adopted. 28 countries said that such a target has not been set. Very few quantitative targets were mentioned. Many countries listed some measures taken to achieve this target. Among them, some countries put moratoria or bans on use or harvesting of some species, in particular wild and endangered species. Some countries developed laws, policies and rules requiring sustainable use or management of natural resources, in particular those species under threat. Some countries require that environmental impact assessments be conducted for those programmes and projects that have impacts on biodiversity. Many countries have included some similar objectives in their NBSAPs and relevant sectoral strategies and plans. Some countries have established protected areas in environmentally or ecologically sensitive areas to ensure that biological resources in these areas are sustainably used.

Integration of targets into thematic programmes of work

61. Less than a half of reporting countries (even less than that for biodiversity of dry and subhumid and mountain ecosystems) have integrated relevant targets into the implementation of all thematic work programmes. Very few specific targets were mentioned. Instead some general objectives and specific measures and programmes were listed.

Overall assessment of progress and challenges

62. Overall, many countries have put in place some policies, regulations and programmes for preventing unsustainable consumption of biological resources or those programmes or projects or activities that have impacts on biodiversity. However, it is unclear to what extent the implementation of these policies, regulations or programmes have been implemented and mitigated pressures or threats to those threatened species and ecosystems.

63. Main challenges identified for achieving this target include:

- Pressures from population growth, poverty and development on sustainable use of biological resources;
- Inadequate policy and legal frameworks to address unsustainable consumption;
- Lack of public awareness and education;
- Illegal activities in using natural resources;
- Lack of financial, human and technical resources;
- Inadequate cross-sectoral coordination;
- Inadequate information, monitoring and valuation;
- Lack of local capacities and participation of local communities.

Target 4.3 No species of wild flora or fauna endangered by international trade*Establishment of national targets and incorporation of targets into relevant plans, programmes and strategies as well as thematic programmes of work*

64. Most countries (over 80%) reported that they had established national target(s) or endorsed this global target or incorporated relevant targets into NBSAPs and other relevant strategies, plans and programmes. However, many countries (over 60%) have not integrated relevant targets into all thematic programmes of work. In detailed comments, most countries mentioned the implementation of the CITES which regulates international trade in endangered species. Meanwhile, some countries have developed national legal and policy frameworks that regulate trade in wildlife and wildlife products. A number of countries have put in place licensing or permit systems for trade in species of wild flora or fauna.

Overall assessment of progress and challenges

65. Many countries cited the implementation of the CITES as a mechanism to control international trade in endangered species. In addition, some countries have also developed national policies and laws that regulate trade in wildlife and wildlife products.

66. Main challenges identified by many countries include:

- Lack of sectoral and cross-sectoral coordination;
- Limited capacities;

- Organized, illegal activities;
- Lack of financial, human and technical resources;
- Inadequate legal and policy frameworks and weak law enforcement;
- Inadequate regional and subregional cooperation;
- Lack of monitoring.

Goal 5. Pressures from habitat loss, land use change and degradation, and unsustainable water use, reduced.

Target 5.1 Rate of loss and degradation of natural habitats decreased

Establishment of national targets and integration of targets into relevant plans, programmes and strategies

67. Most countries (85%) have established one or more specific national targets or adopted this global target. In fact, only a few countries mentioned some specific, quantitative targets. In Colombia, for example, one of its national targets is to create 20 Water Councils at the community level. The Czech Republic has set several targets including: to minimize habitat fragmentation and to maximally protect natural territories when proposing new transport structures.

68. Most countries indicated that various objectives and targets concerning this goal were incorporated into their NBSAPs or related sectoral and cross-sectoral strategies, plans and programmes. In Botswana, this target was incorporated into several of its NBSAP objectives, which include institutionalising the guidelines of the Ecosystem Approach into resource management and sustainable use strategies; evaluating the impact of different land management policies on biodiversity conservation; developing land use best practice guidelines and considering creation of incentives for appropriate land uses.

Integration of targets into implementation of programmes of work

69. More than half of the reporting countries have incorporated this target into almost all the work programmes except for slightly less than half for the work programme on dry and subhumid lands biodiversity. Around 70% did this for the work programme on forest biodiversity.

70. Overall, little information was provided on targets for all thematic programme areas. Many countries provided general objectives included in NBSAPs or relevant sectoral strategies and plans or measures or activities undertaken to implement these work programmes. Meanwhile, a few countries did set specific targets for implementing some thematic work programmes. In the case of forest biodiversity, Estonia's Nature Conservation Development Plan includes the following targets: to maintain at least 40% of forest area as state forest; to maintain at least one-third of all forests more than 100 years old; to protect all sites of rare (indigenous) forest communities; and to ensure that at least 5,000 ha of key biotopes in private forests are protected by contract. In its National Forest Development Plan, Estonia also sets the following targets: to increase the area of protected forests from the present 7.2% to at least 10% of the total area of forests by 2010; and to ensure that the optimal annual yield in the next ten years is 12 million cubic meters per year. In the case of agricultural biodiversity, the National Sustainability Strategy of Germany includes targets of reducing the nitrogen surplus in the agricultural sector to 80kg/ha by 2010, and of increasing organic farming to 20% of its total farmland by 2010.

Overall assessment of progress and challenges

71. In general, most of the reporting countries have mentioned that progress is slow or difficult to assess as they face many economic, social and political challenges to achieve this target. Many countries described in detail the threats of urbanization and population pressures to their biodiversity. It should be noted that most reporting countries have implemented or are implementing some measures, projects and programs. Several countries have also developed and enacted legislations and policies concerning this target.

72. Main challenges identified by many countries to achieve this target include:

- Inadequate financial, human and technical resources;
- Inadequate legislations and policies and weak enforcement;
- Lack of monitoring;
- Institutional weakness and limited capacities;
- Lack of awareness and public participation;
- Population pressures;
- Overexploitation of biological resources;
- Lack of baseline data;
- Lack of inter-sectoral co-ordination;
- Conflicts from competing land uses/pressures from development (e.g., tourism, agriculture, housing etc.).

*Goal 6 Control threats from invasive alien species**Target 6.1 Pathways for major potential alien invasive species controlled**Establishment of national target and integration of target into relevant programmes, policies and strategies*

73. Many countries (67%) reported that they have either established national target (s) or adopted this global target. In fact, only a few countries mentioned similar national targets they have established. Some countries reported that their NBSAPs included goals and objectives that address the issue of invasive alien species (IAS). Some countries have also developed legislations or strategies particularly to address the introduction, mitigation and elimination of IAS. Some countries have adopted a Quarantine Act or Plant Quarantine Act or biosafety laws, which include specific measures to control the introduction of alien species. Some countries mentioned a few specific measures in this regard, including border control, plant importation restrictions, ballast water checks, soil checks, monitoring imported plants and animals. Some countries have included some measures in this regard in their sectoral plans or strategies related to forestry, agriculture, fishery, tourism and trade. A few countries mentioned the regional or subregional mechanisms established for effective control of pathways of alien species.

Incorporation of targets into implementation of specific programmes of work

74. More than a half of reporting countries indicated that such a target had not yet been integrated into the thematic work programmes, in particular those on biodiversity of dry and subhumid lands and mountain ecosystems. Most of these targets, if any, mentioned by some countries are primarily general goals or objectives included in NBSAPs and related sectoral and cross-sectoral strategies and policies, such as Strategy for Rural Development and sustainable forest management plan. Some countries are

also taking some measures to address the impacts of invasive alien species on agricultural and forest biodiversity, such as quarantine and monitoring of introduced plants and controlling those alien species that have proven to be threats to biodiversity. Very little detailed information is provided on the actions taken for other programmes of work, except that a few Parties are taking measures to control and check the ballast water for protection of marine and coastal biological diversity and control the introduction of alien species for mitigating desertification.

Overall assessment of progress and challenges

75. It appears that many countries have not established or integrated this target at national level, though most of them have put in place some measures to address the issues of IAS, which were not systematic in many countries. Some countries have identified the status of invasive alien species, including their pathways of introduction, and developed specific measures to control their introduction. Some countries indicated that they were highly aware of the importance of this issue and had included relevant goals and objectives as well as specific measures in NBSAPs or other related strategies, policies and laws. Notably, a few countries have developed specialized laws and plans to address the issues of IAS. However, it should also be noted that many countries have not put in place adequate mechanisms for the prevention, control and eradication of invasive alien species. Many countries, in particular developing countries and island states, need additional resources to track and identify alien species and their pathways and develop effective policy frameworks and mechanisms to address relevant issues. It is also clear that the development of relevant indicators is in a very early stage in nearly all countries. Only a few countries have developed or included a few relevant indicators in their impact assessments.

76. Main challenges identified by many countries include:

- Low awareness of relevant issues and lack of precautionary measures;
- Lack of financial, technical and human resources to address relevant issues;
- Lack of inter-sectoral coordination and cooperation;
- Lack of research on relevant issues and monitoring of invasive alien species;
- Inadequate legislations, policies, strategies and programmes to address relevant issues;
- Lack of or inadequate techniques or technologies or facilities for risk assessment, quarantine, testing, monitoring, early warning, control and eradication;
- Lack of an updated, comprehensive inventory or database of IAS and information exchange;
- Lack of economic incentives.

Target 6.2 Management plans in place for major alien species that threaten ecosystems, habitats or species

Establishment of national target and incorporation of targets into relevant plans, programmes and strategies as well as implementation of thematic programmes of work

77. Less than a half of reporting countries have established or adopted a target in this regard. Fewer Parties (ranging from 15% to 40% for different work programmes) have established such a target for implementing the specific thematic programmes of work. Very little information was provided. Only a few countries reported that they have developed management plans to address some specific alien species that have been identified as threats to ecosystems, habitats or species. Some countries indicated that their NBSAPs, plant protection strategies, biosafety regulations and some sectoral plans or strategies for agriculture, forestry, tourism, trade and transportation include goals and objectives to address the threats from alien species. A few countries indicated that they were drafting a plan or strategy particularly to fight invasive alien species. Though there is no such strategy in place, some countries reported that they

had developed some programmes to address threats from alien species. For thematic work programmes, only a few countries mentioned some specific measures undertaken for the implementation of the programmes of work on agricultural and forest biodiversity.

Overall assessment of progress and challenges

78. It would appear that most countries have not established a target in this regard and many countries have not integrated this target into relevant strategies, plans or programmes. Only a few countries have developed management plans or mechanisms for effective prevention, control and eradication of alien species. A few countries have developed or are drafting specialized legislations or programmes in this regard. Many countries are handling alien species on a case-by-case basis. Meanwhile, some countries indicated that their NBSAPs and relevant sectoral strategies and plans included similar goals and objectives. Many countries, in particular developing countries and island states, indicated that their capacities need to be strengthened for identifying and tracking alien species and assessing their impacts on biodiversity, as well as for developing effective measures to address threats from alien species, including effective management plans.

79. Main challenges identified by many countries include:

- Lack of relevant information and research;
- Lack of inter-sectoral coordination and multi-stakeholder participation;
- Lack of financial, human and technical resources;
- Inadequate policies and legislations;
- Lack of effective techniques and technologies for monitoring, control and eradication of alien species.

Goal 7 Address challenges to biodiversity from climate change, and pollution.

Target 7.1 Maintain and enhance resilience of the components of biodiversity to adapt to climate change

Establishment of national targets and integration of target into relevant plans, programmes and strategies as well as implementation of specific programmes of work

80. Slightly over a half of reporting countries indicated that they have established national targets in this regard or endorsed the global target. However, the detailed information provided by Parties does not provide support for this claim. Only a few countries have developed action plans or adaptation programmes to address climate change, which include measures or options to address impacts of climate change on biodiversity or natural resources. For example, Australia has developed a National Biodiversity and Climate Change Action Plan, which sets seven specific objectives to help Australia's biodiversity adapt to the impacts of climate change, and specifies necessary actions to reach these objectives. Some countries reported that they have undertaken or are undertaking research and monitoring activities to assess climate change impacts on biodiversity, and will develop some measures or programmes to address these impacts on the basis of the results of these activities. Some countries have included objectives that address climate change and biodiversity in their NBSAPs or relevant sectoral strategies and plans. The integration of this target into the implementation of specific programmes of work at national level seems to be far from being a reality, though about 20% to 35% of countries indicated that such integration has occurred. The detailed information provided suggests that more actions have been taken with regard to the implementation of programmes of work on agricultural and forest biodiversity. For example, a number of countries have developed programmes for genetic or

crop adaptation to address impacts of climate change on agriculture or agricultural biodiversity. A few countries have been trying to increase the adaptation potential of forests to cope with climate change through diversification in tree species, age and genetic types. A few countries introduced species tolerant of drought to minimise climate change impacts on deserts.

Overall assessment of progress and challenges

81. It appears that few countries have addressed the issue of biodiversity and climate change systematically. Only a few countries have developed an action plan or programme to address climate change impacts on biodiversity. Some countries indicated that their NBSAPs or relevant sectoral plans or strategies include objectives or measures aiming to address climate change and biodiversity, however, it seems that most objectives or goals are general in nature. Though there is no specific target in place, some countries have undertaken or are undertaking research and monitoring activities to assess climate change impacts on biodiversity and identify ways and means to address them. The development of indicators is still in an early stage in many countries. Only a few countries indicated that they have developed a few indicators to assess the impacts of climate change.

82. Main challenges identified by many countries include:

- Lack of monitoring, research and information on interaction between climate change and biodiversity;
- Lack of technical, human and financial resources;
- Lack of adaptation measures or techniques;
- Limited capacities to address relevant issues;
- Lack of technology transfer;
- Inadequate institutional, policy and infrastructural frameworks.

Target 7.2 Reduce pollution and its impacts on biodiversity

Establishment of national targets and integration of target into relevant plans, programmes and strategies as well as implementation of specific programmes of work

83. Most countries (75%) have developed targets or policy objectives in their environmental policies, plans and laws or relevant sectoral and cross-sectoral plans and programmes that aim to reduce the environmental pollution of various categories and mitigate their impacts on the environment and biodiversity. Some countries indicated that some of these objectives and related measures to achieve these targets are intended to minimize the impacts of environmental pollution on biodiversity. For example, Belgium's efforts to improve water quality aim to create better habitats for aquatic species. A number of countries reported that their requirements for environmental impact assessment would prevent or minimize environmental pollution impacts on biodiversity. A number of European countries indicated that measures have been taken to implement relevant EU directives (e.g., the EU Water Directive) as well as some regional agreements with a view to reducing pollution and its impacts on biodiversity. However, many countries with specific environmental targets in place did not clearly elaborate on whether achievement of these targets will generate any benefits to biodiversity.

84. More than a half of countries indicated that they have integrated this target into the implementation of programmes of work on agricultural, inland water, marine and coastal biodiversity and forest biodiversity. However, little information was provided on specific targets. Instead, many Parties did provide some information concerning specific measures taken for the implementation of some thematic programmes. For example, for agricultural biodiversity, measures taken include: integrated pest

management, reducing pollution from agricultural chemicals, use of organic fertilizers, promoting good agricultural practices, monitoring of hydrological change, conservation of pastoral systems, reducing persistent organic pollutants and nitrogen surplus, promoting organic agriculture. A number of countries have included objectives and measures to achieve this target in their NBSAPs, agricultural development strategy, national sustainability strategy, national environmental plans and code of good agricultural practice. To protect inland waters ecosystems, some countries are taking measures, such as a ban on disposal of pollutants in water bodies, ban of poisonous substances in fishing, reducing agricultural run-offs, recycling plastics and other wastes in water bodies, minimizing use of pesticides and other chemicals, reducing eutrophication of water bodies, and chemical control of waterweed. For conservation of marine and coastal biodiversity, some countries are zoning new industries, establishing sewage treatment plants in coastal cities, reducing sea disposal of pollutants, reducing land-based pollution sources, preventing oil spill and pollution from oil exploration, reducing pollution from aquatic culturing. Measures for forest conservation include reducing pollution load on forests, employment of economic instruments such as green taxes, cessation of slash and burn in all forests, preserving optimal forest structure and reducing non-point pollution.

Overall assessment of progress and challenges

85. It seems clear that many countries have identified or are studying environmental problems and their impacts on biodiversity. Nearly all countries have taken or are taking various measures to prevent and control environmental pollutants of various kinds, though some of them are not designed to directly address environmental pollution impacts on biodiversity. Many countries indicated that this target has been integrated into various policies, regulations, strategies and programmes, including some national action plans or programmes to implement international environmental agreements such as UNCCD, UNFCCC, POPs Convention and the Montreal Protocol on Substances that Deplete the Ozone Layer. However, implementation of these strategies, policies, regulations, programmes and measures, and the extent that they have contributed to mitigating environmental pollution impacts on biodiversity, are unclear. The development and use of indicators in this regard are relatively advanced in some countries.

86. Challenges identified by many countries include:

- Low level of environmental awareness;
- Lack of financial, technical and human resources;
- Inadequate capacities, technologies and techniques to address environmental problems identified;
- Lack of monitoring of and research on pollution impacts on biodiversity;
- Inadequate legislative and policy frameworks and ineffective law enforcement;
- Lack of coordination to address transboundary pollution;
- Inadequate coordination among relevant sectors.

Goal 8 Maintain capacity of ecosystems to deliver goods and services and support livelihoods.

Target 8.1 Capacity of ecosystems to deliver goods and services maintained.

Establishment of target and incorporation of target into relevant plans, programmes and strategies as well as implementation of specific programmes of work

87. Most countries (75%) responded that they have either adopted the global target or established the national target(s), however, the detailed information provided by Parties does not match these responses. Many countries indicated that their national biodiversity strategies and action plans and/or relevant

sectoral and cross-sectoral strategies and plans included objectives and actions that are designed to achieve this target. Some countries reported that their environmental and sustainable development strategies and plans and relevant environmental laws consider maintaining ecosystems' capacities to deliver goods and services as key objectives to achieving this target. For example, in accordance with the report of the European Community, maintaining the capacity of agriculture and marine ecosystems to deliver goods and services to support livelihoods of farmers, fishermen, rural communities and consumers is the key objective of the EU Common Agriculture Policy, its Rural Development Policy and the EU's Common Fisheries Policy. Germany's Federal Nature Conservation Act aims to safeguard on a long-term basis the functional capacity of the natural environment and the regeneration and sustainable use capacity of natural resources. Some countries have developed some programmes and measures for achieving this target. These include adoption of the Ecosystem Approach for natural resources management, preventing over-exploitation of natural resources, establishment of environmental centers for educational purposes, joint or sustainable forest management, reducing local communities' dependence on natural resources through development of alternatives for natural products, protection, restoration and rehabilitation of damaged or overexploited natural resources, promotion of best practices for sustainable use of natural resources, and the establishment of protected areas of various categories.

88. Though more than a half of responding Parties indicated that this target has been incorporated into most of the programmes of work (except for biodiversity of dry and subhumid lands and mountain ecosystems), little information was available about specific targets. Some Parties have included similar goals, objectives and measures in their NBSAPs, relevant sectoral plans and programmes and relevant sectoral and environmental laws and codes. Many countries listed a few measures taken for implementation of specific programmes of work. For example, for agricultural biodiversity, measures taken include conservation of land productivity, implementation of good agricultural practice, restricting use of agricultural chemicals, maintaining multifunction of agricultural ecosystems, providing training to local communities for natural resources management, discouraging land clearance, encouraging environmentally- friendly farming, and agricultural ecological zoning. For inland water ecosystems, measures taken include sustainable fishery, enhancing wetland management, improving preventive flood control, river restoration, catchments management and irrigation regulation. For dry and subhumid lands, measures taken include reducing overgrazing, rehabilitation of degraded ecosystems, rangeland conservation, reseedling of degraded land to reduce further soil loss, and economical use of water. For forest biodiversity, measures in this regard include restricting new developments in forested areas, enriching natural forests, rehabilitation of degraded forest ecosystems, expanding forest reserves and sustainable forest management.

Overall assessment of progress and challenges

89. Many countries have recognized the overexploitation of natural resources, in particular forest, marine and agricultural ecosystems, and put in place legislations, strategies, policies, plans and programmes to address various kinds of problems they face. Some of them have developed and implemented specific measures and/or mechanisms to address these problems, such as joint management of natural resources involving local communities (South Africa and Uganda). Some countries admitted that maintaining ecosystems' capacity to deliver goods and services was not given the priority it deserves and that effective measures have not been taken to prevent and mitigate negative impacts of various activities on ecosystems. Development of indicators in this regard is in the early stage in many countries.

90. Main challenges identified by many countries include:

- Inadequate legal and policy frameworks and ineffective law enforcement;
- Lack of inter-sectoral coordination, including inadequate international synergies;

- Lack of adequate financial, technical and human resources;
- Inadequate capacities for ecosystem management;
- Low-level awareness and inadequate education and communication;
- Lack of information, research and monitoring of ecosystem services and consequently difficulties posed to policy-making in this regard;
- Difficulty in balancing various goals and objectives, such as development, poverty reduction and ecosystem management;
- Inadequate techniques, technologies and tools to address problems identified.

Target 8.2 Biological resources that support livelihoods, local food security and health care, especially of poor people maintained.

Establishment of target and integration of target into implementation of specific programmes of work

91. Many countries (over 60%) indicated that they have adopted this target or established a national target, primarily in their NBSAPs and relevant sectoral policies, strategies and programmes. Meanwhile, some countries have included similar objectives in other related strategies and programmes, such as strategies for poverty reduction, programmes of action to combat desertification, national programmes to address climate change, national agricultural policy and national environmental policy. A few countries have developed legislations in this regard to regulate the use of natural resources.

92. Among six programmes of work, integration of this target into two of them (agricultural and forest biodiversity) was confirmed by more than half of respondents, but the rest (inland waters ecosystems, marine and coastal, dry and subhumid land and mountain ecosystems) by less than half of respondents. However, little additional information was provided to support these responses. Only a few countries listed strategies, policies and programmes they considered helpful for achieving this target, including NBSAPs, agricultural sustainable development plan or agricultural ecology program, pastoral conservation programme, coastal zone management plan, fishery management plan, sustainable forest development plan, and strategy for development of mountainous areas. Some countries listed some measures taken for implementation of some programmes of work. For example, for agricultural biodiversity, these measures include the establishment of environmentally-sensitive areas, and providing traditional and improved seed varieties to smallholders and other farmers.

Integration of target into relevant strategies, plans and programmes

93. Over 70% of responding Parties indicated that this target has been incorporated into their NBSAPs or relevant sectoral and cross-sectoral strategies, plans and programmes, including integrated ecosystem management plan, poverty reduction strategy, national programme for mountain development, strategy for protection of traditional knowledge, agricultural or rural development plan. Meanwhile, a few countries also provided a list of measures to implement these strategies, plans and programmes.

Overall assessment of progress and challenges

94. It appears that many countries have included similar objectives (very few quantitative targets) in their NBSAPs and relevant sectoral and cross-sectoral strategies, plans and programmes that are considered helpful for achieving this target. Most of these countries have recognized the impacts of various human activities on natural resources or ecosystems, and therefore undertaken various measures to address problems they face. Some countries have taken into account support to local livelihood while taking measures to maintain ecosystems' capacities to provide goods and services for human well-being.

For example, while licensing fishery and use of wild plants and animals, they have also found alternatives for those communities and people affected by these measures. Indicator development to measure progress towards this target is still in the early stage in many countries.

95. Main challenges identified by many Parties include:

- Balancing between poverty reduction, development and maintaining ecological integrity;
- Low level of awareness;
- Inadequate natural resources management and weak enforcement of relevant laws and policies;
- Lack of sectoral and cross-sectoral coordination or mainstreaming;
- Restraints in financial, human and technical resources;
- Shortage of incentive measures;
- Lack of clarity in ownership of natural resources and responsibilities for resource management;
- Inadequate knowledge and research of value of natural resources;
- Lack of preventive measures for overexploitation.

Goal 9. Maintain socio-cultural diversity of indigenous and local communities

Target 9.1 Protect traditional knowledge, innovations and practices

Establishment of target and integration of target into relevant plans, programmes and strategies as well as implementation of specific programmes of work

96. Though over a half of reporting Parties said that they had adopted the global target or established one or more specific national targets, the detailed information available does not seem to support this. Most Parties indicated that their NBSAPs and relevant sectoral and cross-sectoral plans and programmes contain similar objectives for preservation of traditional knowledge, practices and innovations. Some relevant plans and programmes include national indigenous forest strategy, national programme for traditional medicine, national forest programme, tourism development plan, programme for indigenous people. Some countries have developed some legislation, such as those on the environment, rural development, property rights, patent and access to genetic resources, which protect the traditional knowledge, practices and innovations of local and indigenous communities. For example, the Philippines adopted the Indigenous Peoples Right Law that protects the right of the indigenous people to exclude others in exploiting natural resources within their ancestral domain. India's Biodiversity Act and Plant Variety Protection and Farmers Rights Act contain legislative measures that provide a basis for incorporating this target into all relevant plans, programmes and strategies. Some countries also put in place some programmes that encourage local and indigenous communities to protect and use their traditional knowledge, practices and innovations. A few developed countries reported that their international development cooperation programmes provide support to the efforts of local and indigenous communities in those aid-receiving countries to preserve their traditional knowledge, practices and innovations. A considerable number of countries also indicated that this target is not their priority and very few measures are in place to achieve it.

97. More than a half (two-thirds in some cases) of reporting Parties indicated that this target has not been integrated into the implementation of all programmes of work. This was also echoed by very little detailed information provided. A few countries provided some examples of measures taken for the implementation of specific programmes of work. For example, for agricultural biodiversity, a few countries have developed an inventory of traditional knowledge and practices for biodiversity

conservation and sustainable use, promoted *in-situ* conservation of traditional crops and livestock and established mechanisms to protect farmers' rights.

Overall assessment of achievements and challenges

98. It appears that many countries have included similar objectives in their NBSAPs and relevant sectoral or cross-sectoral strategies, plans and programmes that aim to protect traditional knowledge, practices and innovations of local and indigenous communities. It is also clear that very few countries have established specific targets in this regard. However, some countries have put in place some programmes and measures that help local and indigenous communities protect and use traditional knowledge for biodiversity conservation and sustainable use. Some countries have established some mechanisms such as a multisectoral task force established by Lebanon, which allows local and indigenous communities to protect their traditional knowledge, practices and innovations. A few countries have developed relevant legislations that provide protection to the use of traditional knowledge held by local and indigenous communities. Meanwhile many countries admit that there are no policy frameworks or mechanisms in place for protection of traditional knowledge of local and indigenous communities. Development or use of indicators in this regard has not been initiated in many countries.

99. Main challenges identified by many countries include:

- Lack of policy and legal frameworks for protection of local and indigenous knowledge;
- Uncoordinated approach to document traditional knowledge that hampers protection efforts;
- Lack of human, technical and financial resources;
- Lack of mechanisms for participation of local and indigenous people and benefit-sharing;
- Lack of information collection and exchange;
- Valuation of traditional knowledge, practices and innovations;
- Lack of coordination among relevant departments and sectors;
- Limited public awareness.

Target 9.2 Protect the rights of indigenous and local communities over their traditional knowledge, innovations and practices, including their rights to benefit-sharing.

Establishment of target and integration of target into implementation of specific programmes of work

100. Less than 50% of responding Parties have either adopted the global target or established national target(s). Detailed responses provided were more or less similar to what was provided in response to Target 9.1. Some countries, in their NBSAPs or relevant sectoral or cross-sectoral plans, have included similar objectives for protection of the rights of local and indigenous communities, including farmers' rights. Some countries have included provisions in relevant legislations such as those on intellectual property rights, patents, and protection of traditional medicine, biodiversity and access to genetic resources and benefit-sharing, which provide protection for the rights of local and communities over their traditional knowledge, innovations and practices, in particular benefit-sharing from the use of genetic resources owned by them. A few countries have established some mechanisms to allow local and indigenous communities to participate in the making of decisions that affect their rights. For example, Colombia guarantees the protection of the rights of indigenous people, through information exchange, providing technical support to strengthen their capacities, and involving them in related international processes. A few countries mentioned their support to and implementation of the International Labor Organization Convention 169 (Indigenous and Tribal People Convention).

101. Less than one-fourth of responding countries have integrated this target into the implementation of all programmes of work. Very little detailed information was provided. A few countries briefly mentioned some measures they have taken. For agricultural biodiversity, relevant measures taken include protection of plant breeders' rights, encouraging the use of traditional varieties/breeds of livestock and crops for special use, promoting indigenous farming systems, and promoting participation of local communities in plant breeding, variety selection and gene bank establishment.

Overall assessment of achievements and challenges

102. Some countries have included similar objectives in their NBSAPs and/or relevant sectoral strategies, plans and programmes. Some countries have developed relevant legislations that contain measures for protection of the rights of local and indigenous communities over their traditional knowledge, innovations and practices. Some countries are implementing some programmes that are designed to increase their capacities for participating in decision-making related to their rights over traditional knowledge, and using traditional knowledge for biodiversity conservation and sustainable use. A considerable number of countries admit that protection of traditional knowledge is low and there are no adequate policy or legal frameworks in this regard. Most countries have not incorporated this target into implementation of specific programmes of work. Little is done in many countries on the development or use of indicators for measuring progress towards this target. Only a few countries have developed some indicators in this regard.

103. Main challenges identified by many Parties include:

- Lack of policy and legal frameworks for protection of traditional knowledge;
- Low awareness of local and indigenous communities and lack of information;
- Lack of adequate mechanisms for benefit-sharing;
- Institutional weakness for protection and lack of inter-sectoral coordination;
- Limited capacities for protection;
- Lack of financial, human and technical resources;
- Effects of globalization.

Goal 10. Ensure the fair and equitable sharing of benefits arising out of the use of genetic resources.

Target 10.1 All transfers of genetic resources are in line with the Convention on Biological Diversity, the International Treaty on Plant Genetic Resources for Food and Agriculture and other applicable agreements

Establishment of target and integration of target into relevant plans, programmes and strategies as well as implementation of specific programmes of work

104. Around a half of reporting countries have adopted this target or established the corresponding national target. Some countries have included similar objectives in their NBSAPs or relevant sectoral and cross-sectoral policies and strategies, including biosafety frameworks. Some countries have developed or are considering some legislations or national policies to regulate access to genetic resources and benefit-sharing consistent with the Convention on Biological Diversity and the International Treaty on Plant Genetic Resources (ITPGR). Some countries have put in place some mechanisms for material transfer agreements and prior informed consent.

105. Most Parties have not yet incorporated this target into the implementation of all programmes of work. Therefore there is very little detailed information available in this regard. Relatively it seems more countries are taking some measures or implementing some programmes to achieve this target in the implementation of the programme of work on agricultural biodiversity. These measures include issuing permits for access to agricultural genetic resources, developing and implementing biosafety frameworks, new plant varieties laws and regulations on access to genetic resources and benefit-sharing.

Overall assessment of achievements and challenges

106. Some countries have included similar objectives in their NBSAPs, however, it appears few countries elaborate the extent to which these objectives have been implemented. Some countries have integrated this target or similar objectives into relevant sectoral strategies, plans and programmes, primarily agriculture, forest, protection of traditional knowledge of local and indigenous communities. A number of countries have also adopted or are considering developing relevant legislations to ensure that access to genetic resources and benefit-sharing will follow the required procedures and mechanisms. A few countries have put in place some procedures such as material transfer agreements and prior informed consent to facilitate access to genetic resources and benefit-sharing arrangements with providers of genetic resources. It should be noted that many countries admit that no policy or legal frameworks or mechanisms have been put in place for access to genetic resources and benefit-sharing, and very few countries have incorporated this target into the implementation of all the thematic work programmes. Capacity-building activities, in particular information collection and exchange and awareness-raising, are particularly needed. Development or use of indicators for measuring progress toward this target is still in the very early stage.

107. Main challenges identified by many Parties include:

- Lack of monitoring or registration of collection and transfer of genetic resources;
- Lack of inter-sectoral coordination;
- Low awareness of relevant issues;
- Inadequate capacities, including capacities to negotiate terms for access to genetic resources and benefit-sharing arrangements;
- Lack of policy or legal or institutional frameworks or practical mechanisms;
- Lack of financial, human and technical resources;
- Lack of regional or international coordination.

Target 10.2 Benefits arising from the commercial and other utilization of genetic resources shared with the countries providing such resources.

Establishment of target at national level and integration of target into relevant plans, programmes and strategies as well as, implementation of specific programmes of work

108. Many countries have not adopted or established such a target at national level. For those that have adopted or established a target, a few of them have included similar objectives or targets in their NBSAPs. A few countries such as India and the Philippines have developed regulations on access to genetic resources and benefit-sharing that require certain mechanisms or procedures such as prior informed consent and material transfer agreements for access and benefit-sharing arrangements including monetary and non-monetary benefits. Australia requires, in its commercial law, compliance with contractual agreements which could include provisions to achieve this target. The EC's Biodiversity Strategy has included one objective that is to support countries of origin of genetic resources to develop

national strategies on bioprospecting and access. A few countries report that they are developing regulations on access to genetic resources and benefit-sharing. A few countries indicated that they had ratified the International Treaty on Plant Genetic Resources for Food and Agriculture and are implementing relevant provisions. Japan listed a number of ways by which it shared benefits with countries providing genetic resources, including exchange of evaluation data, cooperation in training, transfer of knowledge and technology that make use of genetic resources.

109. Very few countries have incorporated this target into the implementation of all the programmes of work. Accordingly, there is very little information provided in this regard. A few countries listed measures taken for implementing the programme of work on agricultural biodiversity. These include training, exchange of experience, joint publication of scientific achievements, collection of genetic resources for food according to the Convention on Biological Diversity and the FAO Seed Treaty (ITPGRFA), documentation of biodiversity of land races, folk varieties, cultivars, domesticable stocks and breeds of animals, establishment of gene banks, royalty payment and in-kinds such as technology transfer, capacity-building and collaborative research projects. A few countries are implementing relevant laws in this regard, such as Biodiversity and Traditional Knowledge Protection Act, New Plant Variety Act, Biosafety Act and Biodiversity Act.

Overall assessment of achievements and challenges

110. It seems clear that this target has not been adopted or corresponding national target established in most countries, with the exception that a few countries have included similar objectives in relevant strategies, plans and programmes, primarily NBSAPs. A number of countries have developed or are developing regulations on access to genetic resources and benefit-sharing. Most countries do not have systematic mechanisms to handle access to genetic resources and benefit-sharing. A few countries have put in place mechanisms or procedures that require material transfer agreement and prior informed consent for access to genetic resources and specify terms for benefit-sharing. At this stage, many countries are focusing more on awareness-raising and capacity-building. Indicators for measuring progress towards this target are very few.

111. Main challenges identified by many countries include:

- Lack of policy, legal and institutional frameworks;
- Inadequate coordination among sectors and stakeholders concerned;
- Low awareness of relevant issues;
- Inadequate capacities, in particular capacities of negotiation and enforcement;
- Lack of financial, technical and human resources;
- Lack of information and knowledge of genetic resources and their values and importance;
- Lack of international or regional cooperation or coordination.

Goal 11. Parties have improved financial, human, scientific, technical and technological capacity to implement the Convention

Target 11.1 New and additional financial resources are transferred to developing country Parties, to allow for the effective implementation of their commitments under the Convention, in accordance with Article 20

Adoption or establishment of target and integration of target into relevant plans, programmes and strategies as well as implementation of specific programmes of work

112. Considering that this target is mainly related to developed countries, most developing countries did not respond or provide detailed information, except for a few that listed some projects or programmes that had been implemented through funds received bilaterally from developed countries or multilaterally from the Global Environment Facility or other funding agencies. It seems that many developed countries have not established any target for providing financial support to assist developing countries achieve the objectives of the Convention. Most developed countries provide such support through international development cooperation and/or official development assistance. Some of them provide funds through contributions to the United Nations Environment Programme and the Global Environment Facility. A few developed countries also provide direct financial support to developing countries through bilateral cooperation programmes or projects in the field of the environment and biodiversity, some of which are designed to strengthen capacities of developing countries in the implementation of the Convention, including developing proper policy, legal and institutional frameworks.

113. Clearly, very few countries have integrated this target into implementation of all the programmes of work. Therefore, almost no detailed information in this regard was provided. Only a few developed countries indicated that the financial support provided to developing countries aims to support the implementation of some elements or activities identified in these programmes of work.

Overall assessment of achievements and challenges

114. Some developed countries have included the environment and biodiversity as priority areas for their international development cooperation and official development assistance. This has also been reflected in their relevant policies and strategies. For example, the EC's Communication on "Policy Coherence for Development-Accelerating Progress towards the Millennium Development Goals (MDGs)" stated that the EU should enhance funding earmarked for biodiversity and strengthen measures to mainstream biodiversity in development assistance. It appears that very few developed countries have established specific targets for providing funds to developing countries to assist them in the implementation of the Convention, though they have or are providing funds through various channels to biodiversity projects and programmes in developing countries. A few developing countries reported that, while making good use of funds received from various funds, they have been allocating financial resources from domestic budgets to the implementation of the Convention. Indicators for measuring progress towards this target are very few in both developed and developing countries.

115. The main challenges identified by some countries (mostly developed countries) are two-fold. Many developing countries have not identified biodiversity as one of the key priorities for international funding which creates a problem in regard to the allocation of funds for biodiversity projects or programmes. On the other hand, developed countries need to improve international development cooperation policy objectives (aiming to integrate biodiversity into development) and strengthen commitment and support to biodiversity.

Target 11.2 Technology is transferred to developing country Parties, to allow for the effective implementation of their commitments under the Convention, in accordance with its Article 20, paragraph 4.

Adoption or establishment of target and integration of target into relevant plans, programmes and strategies as well as implementation of specific programmes of work

116. Most responding developed countries clearly indicate that no specific target has been adopted or established. However, most of them support technology transfer and cooperation through various means. One of the objectives in the EC's Biodiversity Strategy is to facilitate technology transfer to developing countries for biodiversity conservation and sustainable use. Germany indicated that technology transfer is one of the principal objectives of German technical cooperation and will continue to be accorded high-level priority. Ways and means of technology transfer and cooperation include support to research activities in developing countries, provision of fellowships for candidates from developing countries, earmarking funds for research by international institutions working in developing countries, strengthening institutions in developing countries and provision of training courses. One developing country from Africa mentioned a South-South cooperation program undertaken by SADC countries. Almost no additional information was provided on the incorporation of this target into all programmes of work.

Overall assessment of achievements and challenges

117. Some developed countries have included promotion of technology transfer and cooperation as one of the objectives for their international development cooperation or technical cooperation or official development assistance, though no specific target in this regard has been adopted or established. Most developed countries have undertaken or are undertaking various programmes to provide technical support, including facilitating technology transfer, to developing countries for their implementation activities. A few countries like Australia have updated their clearing-house mechanism (CHM) to serve as an interactive instrument to facilitate access to related information. A few developing countries like China and Namibia are providing some technical support to other developing countries through their South-South cooperation programmes. It appears that support for technology transfer and cooperation is still very limited at this stage. Indicators for measuring progress toward this target are also very few.

118. The main challenges identified by a few developed countries include governance, capacity, resource, logistical issues, collection and integration of biodiversity information and data, lengthy process for technology transfer and cooperation, as well as inadequate use of the expertise of trainees due to their relocation after training is provided.

Implementation of the Global Strategy for Plant Conservation

Introduction

119. The Global Strategy for Plant Conservation (GSPC) was adopted in 2002 to halt the current and continuing loss of plant diversity. The Strategy consists of 16 targets to be met by 2010 contained in the annex to decision VI/9.

120. In the third national report, Parties were asked to report on progress towards each target of the GSPC by elaborating the adoption or establishment of targets, measures taken to achieve targets, indicators developed to measure progress as well as constraints encountered in implementation.

121. A detailed review of the implementation of the Global Strategy for Plant Conservation has been prepared for the SBSTTA 12 (see UNEP/CBD/SBSTTA/12/3). The following synthesis is extracted from this review, with some statistical updates provided.

Synthesis of responses and comments

Target 1. A widely accessible working list of known plant species, as a step towards a complete world flora

122. Over 60% of reporting countries indicated that corresponding national target had been established and such a target incorporated into relevant plans, programmes and strategies. Many Parties have linked this target with the implementation of the Global Taxonomy Initiative (GTI). At national level, there are various examples, such as the Chinese Virtual Herbarium, which is a major botanical resource linking botanical institutions of China to provide on-line access to the wealth of data associated with two million plant specimens maintained in Chinese herbaria¹. There are also various large regional flora projects that provide useful baselines and, through large botanical institutes with a regional or global outlook, have become an important mechanism for stimulating the production of regional checklists, such as the African Plants Initiative which brings together over 50 institutions

123. While various measures have been taken to achieve the target including capacity building in China, Ghana and India, seeking new funding in Nepal, employing new taxonomists in St. Lucia, reviewing policies in Uganda and setting national targets in the UK, the main constraints continue to be lack of funds, limited investment in taxonomy, lack of institutional capacity, lack of legislative framework, lack of taxonomists/experts and poorly maintained collections.

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

124. Over 60% of countries indicated that similar national targets had been established and even more countries that such a target had been incorporated in relevant plans, programmes and strategies. A considerable number of countries indicated having completed national Red Lists though over 75% of these lists were completed prior to the establishment of the Strategy. Some national Red Lists were developed as part of national targets in the NBSAP or in an effort to assess the status of biodiversity in relation to international trade. Others developed their lists in response to national and or regional regulations, linked to the national implementation of the EU Habitats Directive. Major constraints cited include lack of funding for field work and to support assessment activities leading to *inter alia* insufficient research and data; lack of experts (taxonomists/plant experts); limited collaboration; incomplete taxonomic knowledge of some families; limited herbaria and *ex-situ* facilities; and lack of an active global or regional assessment initiative for vascular plants.

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

125. Only 40% of reporting countries said that such a target had been established at national level and incorporated into relevant plans, programmes and strategies. In providing detailed comments, some countries mentioned some protocols, tools and technologies linked to the achievement of the Strategy targets. Examples include tools and technologies for in vitro propagation (Algeria), recovery planning and threat abatement (Austria and Australia), translocation of threatened species (Australia), greening

¹ <http://www.cvh.org.cn>

using native seed (Australia), propagation and harvesting protocols (Chile), implementation of the Ecosystem Approach (Germany), and species action plans taking into consideration various national and international legislations and conventions (Hungary), Important Plant Area (IPA) designation (Belgium, Romania and Slovenia), ex situ and in situ conservation (Colombia, Chile, China, India, Indonesia and Iran), forest tree breeding (Japan), GIS-based conservation models and permanent ecological plots (Malawi), sustainable forest management models (Malaysia), and sustainable use models in community forest and pro-poor leasehold forests (Nepal). Other tools and protocols include primordial botanic gardens and grand forest parks (Indonesia), wild relatives projects and integrated management of cedar forests (Lebanon), medicinal and useful plants (Nepal), conservation of threatened species (Philippines), propagation and cultivation of South African threatened species (South Africa), special use forests (Viet Nam), and economic valuation of forests (Malaysia).

126. Many international agencies also have developed various tools and protocols related to various targets such as Biodiversity International for targets 1, 2, 8, 9, 13, 14 and 15; Botanic Gardens Conservation International for targets 1,2,7 8, 9, 10, 13 and 14; the Food and Agricultural Organization for targets 6, 8, 9, 12, 13, 14 and 15; the Global Invasive Species Programme for target 10; IUCN-The World Conservation Union for targets 2, 4, 5, 7, 10, 11, 16, and PlantLife International for targets 5, and 15.

127. However, the main gap is access to, and dissemination of, information, on the existing tools and protocols in appropriate formats.

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

128. Two-thirds of reporting countries indicated that corresponding national target(s) had been established and such a target incorporated into relevant plans, programmes and strategies. However, only a few specific quantitative targets were mentioned. While most countries have not set specific national targets, there are efforts for mainstreaming this target into the Protected Areas Network and NBSAPs. However, regional processes such as Natura 2000, the EU Habitats Directive and the Emerald Network provide good frameworks for implementing this target at national level in Europe. Some countries have set national targets, e.g., Canada and Thailand, while Ireland and Netherlands indicated having already achieved this target at national level. Many constraints were cited hampering the achievement of this target, including conflict between conservation and land use needs; conflict between economic development and conservation; lack of a nationally agreed ecosystem/ecological region classification; lack of indicators for monitoring; the cost/ or required effort for effective conservation; lack of adequate compensation mechanisms; and conflicts between local communities and protected area managers over land and land use rights. Many areas set aside for plant conservation are small in size (1,000-10,000 ha) often representing remaining fragments which, although valuable, may be inadequate for maintaining large-scale processes. There are also evident gaps in coverage of existing protected area networks.

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

129. 42% of reporting countries indicated that such a target had been established at national level and 51% had incorporated such a target into relevant plans, programmes and strategies. Various designations for most important areas for plant diversity have been used at national level including using Natura 2000 sites (e.g., Belgium), bio-regions (Australia), endemic and refuge areas (Bosnia and Herzegovina), the EU Habitats Directive (e.g., Denmark and Germany), as well as Globally Significant Biodiversity Areas (Ghana).

130. Sixty-seven countries around the world have participated in Important Plant Area (IPA) initiatives focusing on target 5 since the adoption of the Strategy in 2002. Over 50% of these countries have taken steps to identify IPAs and 26% reported having ongoing programmes that are addressing conservation issues as well as documenting sites. Many of these national projects have been initiated as a result of regional workshops, including those held in Central and East Europe, the Mediterranean, the Himalayas, the Caribbean, Arabia, South East Asia and southern Africa.

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

131. Only 32% of reporting countries said that such a target had been established at national level and 52% had incorporated such a target into relevant plans, programmes and strategies. Measures taken at the national level to implement this target include use of good agriculture practices, good forestry practices and national certification schemes. Efforts made at national level to reach this target are reported to be challenging. Apparently, a better understanding of plant conservation needs implanted in the agriculture and forestry sectors is a prerequisite for achieving this target. However, involving national focal points and reporting mechanisms of existing processes in forestry and agricultural sectors for any further reviews will help provide a better assessment of the progress in the implementation of this target.

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

132. Only 44% of reporting countries stated that they had established corresponding national target. However, 62% of countries had incorporated such a target into relevant plans, programmes and strategies. Various national initiatives have been developed in response to this target and some countries have designed protected areas specifically for the conservation of threatened or endemic plants. For example, Brazil has set a national target to have a 100% of threatened species effectively conserved in protected areas.

133. However, the lack of national Red Lists has hampered progress in the implementation of this target. Other constraints include lack of data, lack of national targets, conflicts in land use and access, as well as institutional, technical, social, financial and legislative limitations.

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

134. Over 75% of reporting countries had not established such a target at national level. 43% of countries had incorporated relevant targets into their relevant plans, programmes and strategies. Though no specific targets were set in this regard, substantial efforts in support of this target are being made by a wide range of National Plant Genetic Resource Centres, Tree Seed Centers, Botanical Gardens and threatened plants programmes in many countries. There have also been various initiatives taken by individual countries to set up ex-situ collection of their threatened plants. For example, Malaysia and China have established important collections of rare bamboos and an International Coconut Genebank for Latin America was initiated in Brazil in 2006. There are also various regional initiatives such as the RBG Kew Millennium Seed Bank projects in Africa, the Americas, and Australia and the European Network of Seed Collections Project.

135. However, several Parties have raised concerns over the limited physical, technical and financial resources to achieve this target.

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

136. 69% of reporting countries had not set such a national target. But over 50% of countries indicated that they had incorporated similar targets or objectives into relevant plans, programmes and strategies. Target 9 has been addressed by many countries through their national response to the FAO Global Plan of Action for the Conservation and Sustainable Use of Plant Genetic Resources for Food and Agriculture. The target has been linked to national agricultural and forestry strategies and sectoral policies such as in Cote d'Ivoire and Cameroon. Various countries are seeking to broaden the mandates of their national plant genetic resource centres to include documentation of indigenous knowledge and practices such as Ethiopia, China, Ireland, Mexico, Nepal and Armenia amongst others.

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

137. Over 60% of the Parties have linked this target to their national implementation of Article 8(h) of the Convention. However, less than 20% have set a national target and only 34% incorporated such target into relevant plans, programmes and strategies.

Target 11: No species of wild flora endangered by international trade

138. Over 60% of reporting countries had established such a target at national level and incorporated it into relevant plans, programmes and strategies. Many countries have indicated ongoing activities on target 11 linking to the national implementation of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and have adopted the global target.

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

139. Over 70% of reporting countries had not established corresponding national target and around 60% had not incorporated this target into relevant plans, programmes and strategies. However, in accordance with detailed comments provided, various national initiatives are being developed. For example, the German Federal Agency for Nature Conservation has supported the development of the "International Standard for Sustainable Wild Collection of Medicinal and Aromatic Plants", which also addresses Target 6, 12, and 13. In Uganda, the BioTrade Initiative of the United Nations Conference on Trade and Development², which provides a useful model for refining and transforming Medicinal and Aromatic Plants products, has focused on promoting trade and investment in products and services derived from native or indigenous biodiversity. There are a number of important sustainable production initiatives that are being developed by the private sector and an exchange of experiences and identification of lessons learnt to provide a framework for development of good practices, tools and estimation procedures would be extremely beneficial.

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

140. Only 35% of reporting countries had set such a target at national level and 50% had incorporated this target into relevant plans, programmes and strategies. Parties, especially developing country Parties, have developed national responses to this target in a variety of ways. Examples include enacting the

² <http://www.biotrade.org/Intro/bti.html>

Traditional and Alternative Medicine Act (Philippines); developing a checklist of archived material and ethnographic records covering traditional practices with reference to plant material (Thailand); supporting various community-based initiatives and reducing barriers to improve food security and promoting utilization of plant products for health care (Nepal); ensuring sustainable development of traditional Chinese medicine (China) and implementing a Project on Conservation of Medicinal and Herbal Plants (Ethiopia and Jordan). While in Tunisia the focus is on food security, in Indonesia it is community-based management where the Ministry of Health has increased cultivation of medicinal plants.

141. To support the implementation of this target, the Belgium Development Cooperation is funding programmes to support indigenous communities in selected developing countries, including the recovery and the promotion of traditional knowledge and practices, most of which are implemented through third parties by NGOs, universities or multilateral organizations. The Netherlands has supported compilation and publication of the Plant Resources of South East Asia and Plant Resources of Tropical Africa

Target 14: The importance of plant diversity and the need for its conservation incorporated into communication, educational and public-awareness programmes

142. 62% of reporting countries had established corresponding national target and even more countries (75%) had incorporated this target into relevant plans, programmes and strategies. Nearly all reporting Parties indicated active programmes on education and public awareness mainly linked to NBSAPs, national environmental education programmes and policies, and the CEPA activities. However, it was apparent that a lot of these activities are undertaken by the conservation, environmental and development NGOs.

Target 15: The number of trained people working with appropriate facilities in plant conservation increased.

143. 56% of reporting countries had not established such a target at national level, but 55% of countries had incorporated this target into relevant plans, programmes and strategies. In providing detailed information in this regard, many Parties reported on capacity-building initiatives linked to the academic sector but gaps and challenges were also highlighted. In addition, various networks have supported this target, including the ASEAN Centre for Biodiversity, the Biodiversity Collections Access Service for Europe (BIOCASE), the Southern African Botanical Network (SABONET), Planta Europa, Plant Resources for Tropical Africa (PROTA), the SADC Biodiversity Support Programme, South East Asian Botanical Collection Information Network (SEABCIN), the Latin American Botanical Network and others.

Target 16: Networks for plant conservation activities established or strengthened at national, regional and international levels.

144. Less than 50% of reporting countries had established national targets and 55% had incorporated this target into relevant plans, programmes and strategies. Overall, the Strategy has provided a common and focused framework for multiple stakeholders and actors at different levels and scales. It has stimulated the establishment of national, regional and international programmes and networks, such as the Philippines Plant Conservation Committee, the German National Strategy Project and the Global Partnership for Plant Conservation, which have helped bring together a wide range of stakeholders. The Strategy has also provided a focus for the Australian Network for Plant Conservation, the Irish Network for Plant Conservation, the Indonesian National Biodiversity Information Network and the Swedish Species Information Centre among others, in addition to the various regional and international networks

for botanic gardens, plant genetic resources, protected areas, and plant conservation with which Parties or their stakeholders are affiliated

Overall assessment of achievements and challenges

145. For most targets in the Strategy, many countries (more than 50% in most cases) had not set national targets, baselines, or milestones. Relatively more countries indicated that they had set national targets for achieving Targets 1, 2, 4, 11 and 14. Efforts are being made by many countries to facilitate national implementation of the Global Strategy including through the development of national strategies and programmes, and/or the integration of the Global Strategy targets into national plans, programmes and strategies including the national biodiversity strategies and action plans. Currently, only less than 10% of the Parties have developed national strategies in particular for implementing this Strategy.

146. Most Parties mentioned activities being undertaken at national level that were of relevance to the targets of the Strategy but did not provide a precise indication of the status of implementation of those activities in terms of specific indicators and milestones. Also, a large number of responses were of qualitative in nature rather than providing quantitative indications.

147. Although the time since the adoption of Global Strategy Plant Conservation in 2002 is not sufficiently long to allow significant achievement of the targets, there has been some progress in achieving targets 1, 5, 8, 9, 11, 14, 15, and 16. However, limited progress was made with respect to the targets 2, 4, 6, 10, and 12.

148. There are some gaps in achieving target 3 especially in relation to development of tools and protocols for the targets of the Strategy whose progress is limited. Efforts to achieve target 7 have been constrained by limited progress in achieving target 2, as target 7 is dependant on the base line data generated under target 2.

149. Constraints to the national implementation of the Global Strategy include limited institutional integration, lack of mainstreaming, and inadequate policies and legal frameworks at the planning stage; and at the operational level, lack of data, tools and technologies, limited sectoral collaboration and coordination, limited financial and human resources.

Implementation of the Ecosystem Approach

Introduction

150. The Conference of the Parties, in the annex to decision V/6, endorsed the SBSTTA recommendation V/10, which contained a description of the Ecosystem Approach, a set of twelve guiding principles in its application and five points of operational guidance, and recommended application of the principles as reflecting the present level of common understanding. It also encouraged further conceptual elaboration and practical verification. Based on the SBSTTA recommendation IX/6, the seventh meeting of the Conference of the Parties agreed in decision VII/11 that the priority at this time should be on facilitating the implementation of the Ecosystem Approach as the primary framework for addressing the three objectives of the Convention in a balanced way, and that a potential revision of the principles of the Ecosystem Approach should take place only at a later stage.

151. In the third national report, Parties were asked to provide information on the application of the Ecosystem Approach, including creating an enabling environment, promoting regional cooperation, and developing practical expressions of the Ecosystem Approach for national policies and legislation for

implementation activities. A detailed review of the implementation of the Ecosystem Approach has been prepared for SBSTTA 12 (see UNEP/CBD/SBSTTA/12/2). The synthesis below is extracted primarily from the review, with some statistical updates provided.

Synthesis of responses and comments

152. *Application of the Ecosystem Approach:* Most Parties (73%) respond that some aspects of the Ecosystem Approach are being applied, with 10% more indicating that the Ecosystem Approach is being substantially applied. 11 countries indicate that they are considering application and nine countries that the Ecosystem Approach is not being applied.

153. *Development of practical expressions of the Ecosystem Approach for national policies and legislation and for implementation activities:* Many Parties (60%) have developed practical expressions of the Ecosystem Approach whereas around 10% more countries indicate that expressions have been developed for applying most principles. Around 23% of countries note that this is under consideration and 8 Parties have not developed any practical expressions.

154. *Strengthening capacities for the application of the Ecosystem Approach:* Some Parties (about 30%) are not strengthening their capacities for the application of the Ecosystem Approach. 62% report that they have strengthened capacity within their own country. 9 Parties had provided technical and financial support to other Parties while strengthening their own capacities.

Promotion of regional cooperation in applying the Ecosystem Approach across national borders

155. Most countries (over 80%) are undertaking various forms of cooperation, formal and informal, for applying the Ecosystem Approach. Around 20% of countries have not yet initiated cooperation in this regard.

156. Amongst these, 40 Parties promoted regional cooperation in applying the Ecosystem Approach through the management of trans-frontier terrestrial areas, whether it being protected areas (official IUCN protected areas, Man and the Biosphere reserves or others) or regions where sustainable development programmes are implemented.

157. The co-management between Parties is also often done to develop wildlife corridors between countries. For instance the governments of the Region of the Bío-Bío of Chile and the Province of Neuquén in Argentina work to make a corridor between both territories for the “Huemul” (red deer common to both countries) and tourism development of the zone. Sometimes collaboration occurs through organizations such as the “Commission en charge des Forêts d’Afrique Centrale” (COMIFAC). Under the framework of the COMIFAC, the management of the protected area “La Tri Nationale de la Sangha” is shared between Cameroon, Central African Republic and the Congo. In Europe, the network of protected areas called the “Natura 2000 Network” promotes the Ecosystem Approach.

158. Regional cooperation in applying the Ecosystem Approach through the management of trans-frontier wetland is reported by over 30 Parties. This cooperation between Parties is often undertaken around river basins, for example, the Nile Basin Initiative or the basins of the Amnok and Tumen between China and Russia. Canada launched the Ecosystem Initiatives which is a co-operative effort between the United States and Canada to address pollution in the (North American) Great Lakes. The Water Framework Directive is mentioned as a regional application of the Ecosystem Approach by the European Community.

159. Around 20 Parties illustrate cooperation in applying the Ecosystem Approach in marine areas/programmes/projects. The project “Grand Ecosystèmes Marin du Golfe de Guinée” is mentioned by the Ivory Coast, Ghana and Cameroon. The Helsinki Commission (HELCOM) and the Ospar Commission are also two important governing bodies which promote regional cooperation and apply the Ecosystem Approach.

160. Cooperation is mentioned but not linked to a particular area by 38 Parties, which could be through non-governmental organizations, funding agencies, scientific institutes or governmental bodies. Also, such cooperation can relate to programmes, plans/strategies or joint activities. For instance, cooperation related to forests takes place within the Ministerial Conference on the Protection of Forests in Europe (MCPFE) as well as with the Pan-European Biological and Landscape Diversity Strategy (PEBLDS).

Facilitating exchange of experiences, capacity-building, technology transfer and awareness raising to assist with the implementation of the EA

161. Over 60% of reporting Parties are implementing some programmes to facilitate information exchange, capacity-building and awareness-raising. 15 countries indicate that such programmes are under development while 27 countries report that no such programmes are in place.

162. Around 20 Parties facilitated the exchange of information through networks, forums or training activities. For instance, St Lucia used the Caribbean Forum (Cariforum) to facilitate information exchange and Mexico has given diverse courses focused on the conservation and management of ecosystems through the Program for Qualification and Collaborative Learning.

163. Thirteen Parties reported specific partnerships with regional programmes, international cooperation programmes, or institutes that helped the exchange of information/experience and capacity-building. Examples are Australia’s partnership with the South Pacific Regional Environment Programme (SPREP), to further strengthen the application of the Ecosystem Approach as a policy approach and framework for action across national terrestrial and marine borders in the Pacific, and the partnership between universities and local communities with the Humboldt Institute in Columbia.

164. Ten Parties developed information material/documents to facilitate exchanges related to the Ecosystem Approach, such as handbooks (Canada), reports, case studies (Nepal, Viet Nam, Uzbekistan) or a newsletter (Morocco). France mentioned its Forestry Charter, the “Charte Forestière de Territoire”, as a planning tool to frame consultations. Tunisia uses master and Ph.D. researchers working through its main library to facilitate exchange of information on the Ecosystem Approach.

165. Projects/programmes are mentioned by 23 Parties, including park management and support to international organizations (UNEP, CBD, IUCN etc.), as a means to facilitate exchange of experience and capacity-building.

166. A few Parties have established working groups or monitoring/research projects to facilitate exchange regarding the Ecosystem Approach. For example, the European Platform for Biodiversity Research Strategy (EPBRS) convened a working group in 2003 to identify European research priorities concerning the implementation of the Ecosystem Approach. A number of countries also facilitated exchange of information and capacity-building through organizing awareness-raising activities and regional and subregional workshops.

Creating an enabling environment for the implementation of the EA

167. Over half of the Parties report that some policies and programmes are in place, whereas about 5% report comprehensive policies and programmes are in place. Relevant policies and programmes are under development by about 24% of Parties whilst about 14% have no policies and programmes in place.

168. Nineteen Parties mention governmental bodies, structures or initiatives as contributing to the creation of an enabling environment for the implementation of the Ecosystem Approach. For example, the “Ministère de l’Aménagement du Territoire et de l’Environnement” in Algeria is in charge of the implementation of the Ecosystem Approach and is doing this with the establishment of structures related to different ecosystems such as the structure in charge of littoral and wetland areas or the structure in charge of the mountains, steppes and Sahara ecosystems. Government initiatives included conferences (e.g., The 4th Ministerial Conference on the Protection of Forests in Europe) and workshops.

169. Nineteen Parties referred to specific legislation to enable the application of the Ecosystem Approach. Australia’s major piece of environmental legislation, the Environment Protection and Biodiversity Conservation Act, in which the Ecosystem Approach is used as the foundation for existing natural resource management programmes, wetland management for the promotion of the wise use of wetlands and native forest management. Five Parties mention legislation related to forest management, such as Slovenia (Slovenia’s Forest Act).

170. Eleven Parties mentioned policies to enable the implementation of the Ecosystem Approach. For example, the National Environmental Policy of Malawi has provisions for the Ecosystem Approach to natural resource management, particularly in water management.

171. Enabling environments for the implementation of the Ecosystem Approach through projects or management plans or programmes were created by 23 Parties. Thirteen Parties referred to the management plans of protected areas or national parks, 3 to a forestry management programme and 2 to fisheries. China and Columbia have pilot projects aiming at the management of biodiversity oriented towards the welfare of the population living in pilot project areas. Latvia, Lebanon and Lithuania mentioned that the principles of the Ecosystem Approach have been implemented in the environmental impact assessments.

172. Eight Parties mention associations or NGOs that are enabling the implementation of the Ecosystem Approach. In Jordan, for example, Friends of the Earth Middle East has prepared a concept document and organized an international workshop on “Crossing the Jordan”, to map out a strategy to rehabilitate the Jordan River. Namibia mentioned the establishment of catchments/basin management committees and Land Boards. A noteworthy example in which local communities are well represented is found in Nepal where the production forests in the Terai and along the foothill of Siwaliks are now being managed under the Collaborative Forest Management Programme, where the local communities are taken as one of the key partners in forest management.

173. Three Parties mentioned the implementation of related Conventions or treaties: the Aarhus Convention in Germany; the Convention on the Conservation of Antarctic Marine Living Resources in Australia; and intergovernmental agreements and treaties on environmental protection and biodiversity in Kazakhstan.

174. Six Parties have promoted an enabling environment for the implementation of the Ecosystem Approach through other initiatives that could not be classified in the above (forest certification, Belarus); NBSAP (Japan, Philippines); and support to the IUCN and CBD (Netherlands).

Overall assessment of achievements and challenges

175. Information available from the third national reports suggests, at least at the superficial level, that the Ecosystem Approach is being applied relatively broadly. Although a high proportion of Parties (usually around 20%) report little progress, this is offset by a relatively high proportion (usually around 50%) of Parties that have some programmes implemented and usually around 20% having relevant programmes under development. Only a small proportion (5-12%) of Parties reports a more full application of the approach. However, it is unclear at what level and to what extent this approach is being applied. Nor is it clear which of the 12 principles of the Ecosystem Approach are being applied.

176. A high proportion of Parties (+80%) report formal or informal regional cooperation in applying the Ecosystem Approach. Not surprisingly, these cooperative arrangements largely involve trans-boundary protected/managed areas and in particular trans-boundary water resources issues. However, it is difficult to ascertain the extent to which such cooperation reflects the Ecosystem Approach since the approach is not defined by the existence of cooperation alone.

177. A significant difficulty in assessing reports relates to the extent of application of the approach in an economic context (e.g., Principle 4 of the Ecosystem Approach): reports shed little light on whether Parties are incorporating the Ecosystem Approach into national economic planning. From the details that are reported it is possible that, largely, the Ecosystem Approach is still too widely regarded more as a “conservation” tool rather than a tool for sustainable development. There is no clear evidence that the approach is driven by economic interests.

178. However, it is encouraging to note the high proportion of Parties (+70%) that have created, or have plans to create, a better enabling environment including through the development of appropriate institutional frameworks. Considering the importance of enabling environments and institutional arrangements to the effective application of the Ecosystem Approach – this effort is encouraging, even if it is not possible to ascertain its practical impact.

179. Main challenges identified by Parties include:

- Ineffective stakeholder participation in planning and management;
- Limited understanding of what the Ecosystem Approach seeks to achieve;
- Lack of capacity for decentralised and integrated management;
- Insufficient institutional cooperation and capacity;
- Lack of dedicated organisations able to support delivery of the Ecosystem Approach;
- Overriding influence of perverse incentives, and
- Conflicting political priorities, including those that arise when a more holistic approach to planning is adopted.