CONVENTION ON BIOLOGICAL DIVERSITY

CONFERENCE OF THE PARTIES TO THE
    CONVENTION ON BIOLOGICAL DIVERSITY
Eighth meeting
Curitiba, Brazil, 20-31 March 2006
Item 23 of the provisional agenda*

MONITORING PROGRESS AND REPORTING PROCESSES, INCLUDING INTEGRATION OF TARGETS INTO THE THEMATIC PROGRAMMES OF WORK, NATIONAL REPORTING AND GLOBAL BIODIVERSITY OUTLOOK

Compilation of initiatives, processes and organizations that develop and consolidate indicators on the sustainable use of biodiversity

Note by the Executive Secretary

I.   INTRODUCTION

1.   In paragraph 4 of recommendation XI/13, on sustainable use, the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) took note of new initiatives and processes on the regional and international levels to further develop indicators on sustainable use applicable in different regions and sectors, and encourages those initiatives to consider the specific conditions and capacity constraints of developing countries when developing indicators. In paragraph 5 of the same recommendation, SBSTTA requested the Executive Secretary to take note of initiatives, processes and organizations and their efforts to further develop and consolidate indicators on the sustainable use of biodiversity, and to report thereon to the eighth meeting of the Conference of the Parties.

2.   In response to this request, the Secretariat, through Notification 2005-130 of 14 December 2005, invited Parties, Governments and relevant organizations to submit information on initiatives, processes and organizations at the regional and international levels that develop and consolidate indicators on sustainable use. The present note provides a compilation and synthesis of submissions received further to this invitation.

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    *   UNEP/CBD/COP/8/1.

II. COMPILATION OF INITIATIVES PROVIDED BY PARTIES, GOVERNMENTS, INDIGENOUS AND LOCAL COMMUNITES, INTERNATIONAL ORGANIZATIONS AND RELEVANT STAKEHOLDERS ON INDICATORS ON THE SUSTAINABLE USE OF BIODIVERSITY

A.   Governments

Canada

3.   Canada referred to the Montreal Process, which has established and is reporting on criteria and indicators for the sustainable management of temperate and boreal forests. The Montréal Process includes 12 non-European countries covering 90% of the world's temperate and boreal forests. 1/

4.   Canada also referred to the Canadian Criteria and Indicators Framework (CCIF) developed by the Canadian Council of Forest Ministers. CCIF is a science-based framework used to define and measure Canada's progress in sustainable forest management. The criteria represent forest values that Canadians want to enhance or sustain, while the indicators identify scientific factors to assess the state of the forests and measure progress over time. Canada underlined that the CCIF parallels the Montreal Process. 2/

5.   Canada also provided a case study as an example of how a company, Abitibi-Consolidated (Mackenzie), has voluntarily implemented the CCFM set of indicators to improve sustainable forest management practices, with the aim of becoming certified under the Canadian Standards Association standard for Sustainable Forest Management (CAN/CSA Z809-2002). 3/

6.   In addition, Canada referred to two sets of indicators on agriculture:

(a)   Under Environment Canada's State of the Environment Infobase, the indicators used for agricultural soils, though not explicitly linked to work at the international level, are broadly applicable in other regions; 4/

(b)   The "Availability of Wildlife Habitat on Farmland" was developed for the seven main ecozones in which agriculture is practised in Canada. 5/

China

7.   The People's Republic of China reported on recent implementation or amendments of laws and regulations related to the conservation and sustainable use of biodiversity, such as: Agricultural Law, Grassland Law, Fisheries Law, Law on the Protection of Wild Life, Regulations on Nature Reserves, and Regulations on Wild Plants Protection. The People's Republic of China explained further that the rapid advancement of its economy towards sustainable development would pave the way to new initiatives in the coming years.

8.   After many years of incubation in the Chinese society, the concepts of "Green Food" and of "Eco-tourism" are now widely acknowledged and led to changing consumption patterns to a certain extent. More mature practices, including taking advantage of indicators to conduct scientific management,

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1/   For more information: http://www.mpci.org/home_e.html (9 February 2006).

2/   For more information: http://www.ccfm.org/current/ccitf_e.php (9 February 2006).

3/   For more information: http://www.abitibiconsolidated.com/aciwebsitev3.nsf/site/en/forest/certification/on_Mackenzie.html (9 February 2006).

4/   For more information: http://www.ec.gc.ca/soer-ree/English/Indicator_series/new_issues.cfm?issue_id=10&tech_id=40#bio_pic (9 February 2006).

5/   A much more detailed description of the indicator, can be found on-line at: http://www.agr.gc.ca/env/naharp-pnarsa/index_e.php?s1=ind&page=hab.

has taken shape in some fields, but are mostly in their early days. China has not yet established a complete indicator system related to the sustainable use of biodiversity.

9.   China reported on initiatives such as the "Standard for Inspection of Excellent Tourism City of China" in which the "Green coverage rate of municipal area" is considered as an assessment indicator. Further, the "National Standard of Rating for Quality of Tourism Attractions" also sets demands for green coverage rate and for the protection of rare species. Within the National Standard for Classification, Investigation and Assessment of Tourism Resources (GB/T 18972-2003), the biological landscape, including trees, grassland, flowers and wildlife habitat is considered as part of tourism resources. Assessment factors for these tourism resources include that of "rare degree of biological landscape".

Czech Republic

10.   The Czech Republic reported on the work of its specialized working body, the Working Group on Sustainable Development Indicators. The group has been working on the development of an agreed set of sustainable development indicators designed for the Czech Republic in parallel with drafting and reviewing the national Sustainable Development Strategy.

11.   The Strategy encompasses two sets of indicators through which the progress in implementing the Strategy has been monitored. This working set of indicators is being further adjusted in order to ensure that, from the point of view of assessing the implementation of the Sustainable Development Strategy, the most relevant set of indicators is being used. Thirty-six such indicators were made available in the form of a summary assessment. These selected indicators characterize the status and basic trends of the six principal themes, or "pillars" of the Strategy: Economic; Environmental (environmental protection expenditures, material consumption, energy intensity of GDP, consumption of pesticides, share of organic farming, index of common species of free-living birds, index of alien species of plants, etc.); Social; Research and development, education; European and international context; Good governance.

Germany

12.   Germany submitted information on the following two initiatives:

International Standard for sustainable wild collection of medicinal and aromatic plants.

13.   The development of this standard is a joint initiative by the German Bundesamt für Naturschutz (BfN), WWF/TRAFFIC Germany, IUCN Canada and the IUCN Medicinal Plant Specialist Group (MPSG). The objective of this standard is to provide a framework of principles and criteria that can be applied to the management of medicinal and aromatic plant species and their ecosystems. It provides guidance for sustainable wild collection of medicinal and aromatic plants, and a basis for audit and certification.

14.   The draft standard will be applicable to the wide array of geographic, ecological, cultural, economic, and trade conditions in which medicinal and aromatic plants are found. It will address wild collection of medicinal and aromatic plant materials for commercial purposes, both from forest and non-forest habitats.

From monitoring to indicators – The German sustainability indicator for species diversity as an indicator for sustainable land use.

15.   As one out of 21 head indicators of the national sustainability strategy, the indicator provides information on the state and quality of nature and landscape in Germany resulting from sustainable land use, which is an essential precondition for the conservation of biodiversity. The indicator has three aggregation levels: (1) at the base, the population numbers of 51 representative bird species indicate the quality of habitats and ecosystems, (2) aggregated habitat indicators provide information on the main

habitat types (farmland, forests, settlements, water bodies, coast/sea and – in the future implementation – the Alps), (3) at the top level, a single highly aggregated indicator value is calculated.

16.   Monitoring data on changes of populations are an essential basis for the calculation of highly aggregated indicators. The population numbers of the 51 selected bird species are monitored within nationwide bird monitoring programmes since 1990 carried out especially by the Federation of German Avifaunists (Dachverband Deutscher Avifaunisten, DDA). Based on historical population trends, a target value for the population size in 2015 for each bird species was determined by an expert panel of 30 ornithologists using the Delphi technique. The target value is considered as an "optimistic-realistic estimation" of the total population size that should be reached by a certain indicator species in 2015 assuming that all existing guidelines of sustainable development and all existing nature conservation laws and regulations are rapidly put into action. Second level indicator values are calculated as mean values of the percentage shares of the actual values related to the target values for each species in one of the main habitat types. The top level indicator value is the mean of the second level indicator values weighted by the area proportion of the corresponding main habitat type in Germany. The temporal development of the highly aggregated indicator value from 1990 until 2002 shows a rather constant curve around 70% of the target value. The indicator is part of the first progress report 2004 of the German sustainability strategy.

Poland

17.   Poland referred to the Improved Pan-European Indicators for sustainable Forest Management as adopted by the Expert Level Meeting further to the fourth Ministerial Conference on the Protection of Forests in Europe, held 28-30 April 2003 in Vienna, Austria. Poland pointed in particular to criterion C4 (Maintenance, Conservation and Appropriate Enhancement of Biological Diversity in Forest Ecosystem) where 9 indicators are listed: Tree species composition, regeneration, naturalness, introduced tree species, deadwood, genetic resources, landscape pattern, threatened forest species, protected forests.

18.   The Pan-European Indicators for Sustainable Forest Management (SFM) consists of a series of 35 quantitative indicators classified in 7 criteria categories: 1) Maintenance and Appropriate Enhancement of Forest Resources and their Contribution to Global Carbon Cycles; 2) Maintenance of Forest Ecosystem Health and Vitality; 3) Maintenance and Encouragement of Productive Functions of Forests (wood and Non-Wood); 4) Maintenance, Conservation and Appropriate Enhancement of Biological Diversity in Forest Ecosystems; 5) Maintenance and Appropriate Enhancement of Protective Functions in Forest Management (notably soil and water); 6) Maintenance of other socio-economic functions and conditions. It also consists in a series of qualitative indicators; A) Overall policies, institutions and instruments for sustainable forest management; and B) Policies, institutions and instruments by policy area.

B.   Organizations

Earthwatch Institute

19.   The Earthwatch Institute informed on its work on biodiversity conservation performance measures. These measures take account of the business risks associated with impacts on biodiversity as well as some associated business benefits. [6] This work acknowledges the growing awareness that conservation organizations need to become more accountable for their conservation outcomes to funding bodies, other stakeholders and society in general. In response to these developments, Earthwatch Institute and Rio Tinto established a project to identify and develop performance measures to evaluate the outcomes and impacts of conservation efforts for the sustainable management of biodiversity. The resulting report summarizes and reviews the key considerations in biodiversity conservation performance measurement, describes the principal systems that have been proposed, the advantages and disadvantages of these and identifies further actions that could be taken by businesses and conservation organizations to develop biodiversity conservation performance monitoring systems.

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[6]   The initiative is explained in the following report: "A Review of Biodiversity Conservation Performance Measures" (November 2005).

20.   The report focuses on direct and indirect measures of biodiversity status, and therefore does not review the extensive literature on the wider aspects of sustainability and environmental performance reporting. It also focuses on project related actions and therefore does not attempt to thoroughly review broader scale initiatives. The 2010 Biodiversity Target indicators under the Convention on Biological Diversity are briefly discussed.

Forest Peoples Programme

21.   Forest Peoples Programme reported on a research project on the implementation of Article 10(c) of the Convention on Biological Diversity in 2003-2004 in Venezuela, Guyana, Suriname, Cameroon and Thailand. The project is reported to be coming to a completion by the end of 2006. Data collected and analyzed from the field have contributed to the development of preliminary outcomes that were used to contribute initial input to the work on indicators under the Convention on Biological Diversity and in particular on economic, social and cultural indicators.

22.   Relevant indicators identified by Forest Peoples Programme include: (i) number of countries that have adopted policies and legislation to protect and encourage the customary use of biological resources in accordance with traditional cultural practices that are compatible with conservation or sustainable use requirements; (ii) number of indigenous and local communities that have benefited from policies and legislation designed to protect and encourage the customary use of biological resources in accordance with traditional cultural practices that are compatible with conservation or sustainable use requirements; (iii) number of sustainable management plans based on customary use and law; (iv) number of programmes and project for the maintenance or revitalization of traditional knowledge relevant to the sustainable use of biodiversity; (v) number of indigenous languages and speakers protected and supported; (vi) number of countries that have developed policies and legislation to protect, support an encourage the rights of local resource users, particularly indigenous and local communities, to be responsible and accountable for use of the resources concerned; (vii) number and quality of laws and policies that have been adopted or reformed to protect, support an encourage the rights of local resource users to be responsible and accountable for use of the resources concerned; (viii) number of indigenous and local communities that have benefited from policies and legislation designed to protect, support and encourage the rights of local resource users to be responsible and accountable for the use of the resources concerned; (ix) number of indigenous and local institutions and resource management systems relevant to the sustainable use of biodiversity being protected, supported and encouraged; (x) number of indigenous land titles that include a sustainable management plan been recognized and secured; (xi) number of community-based resource mapping being carried out. Further work is expected to be carried out on these indicators prior to and after the eighth meeting of the Conference of the Parties.

Global Reporting Initiative

23.   The Global Reporting Initiative (GRI) developed a series of biodiversity indicators for the tourism sector, part of the Global Reporting Initiative's "2002 Sustainability Reporting Guidelines"[7]. The GRI is a multi-stakeholder process and independent institution whose mission is to develop and disseminate globally applicable Sustainability Reporting Guidelines. These Guidelines are for voluntary use by organizations for reporting on the economic, environmental, and social dimensions of their activities, products, and services. The GRI incorporates the active participation of representatives from business, accountancy, investment, environmental, human rights, research and labour organizations from around the world. Started in 1997, GRI became independent in 2002, and is an official collaborating centre of the United Nations Environment Programme (UNEP) and works in cooperation with the United Nations Global Compact. The Guidelines represent the foundation upon which all other GRI reporting documents are based. The Guidelines include the following indicators relating to biodiversity in its Part C, Environmental Performance Indicators:

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[7]/   The document is available at http://www.globalreporting.org

- EN6. Location and size of land owned, leased, or managed in biodiversity-rich habitats.
- EN23. Total amount of land owned, leased, or managed for production activities or extractive use.
- EN24. Amount of impermeable surface as a percentage of land purchased or leased.
- EN7. Description of the major impacts on biodiversity associated with activities and/or products and services in terrestrial, freshwater, and marine environments.
- EN25. Impacts of activities and operations on protected and sensitive areas (e.g. IUCN protected area categories 1-4, world heritage sites, and biosphere reserves).
- EN26. Changes to natural habitats resulting from activities and operations and percentage of habitat protected or restored.
- EN27. Objectives, programmes, and targets for protecting and restoring native ecosystems and species in degraded areas.
- EN28. Number of IUCN Red List species with habitats in areas affected by operations.
- EN29. Business units currently operating or planning operations in or around protected or sensitive areas.

IUCN - The World Conservation Union

24.   IUCN – The World Conservation Union referred to the development of the IUCN Red List Index (RLI) for showing trends in the status of internationally traded species. The RLI has already been discussed as an indicator for trends in the status of threatened species through the process under the Convention on Biological Diversity. The initial focus is on birds (with trends from 1988-2004), and it is anticipated that an index should be available for amphibians, mammals, cycads and conifers by 2010. IUCN also plans to extend it from internationally traded species to all utilized species, both of which will be relevant in the context of sustainable use indicators. The IUCN currently has support from the CITES secretariat to develop the bird dataset and to test possible approaches. [8]

25.   The IUCN referred further to the proposed Biodiversity Indicators Partnership (2010 BIP) initiative would be funded by the Global Environmental Facility (GEF). The initiative was further developed at the "Indicators of Sustainable Use" workshop held in Cambridge, United-Kingdom, on 16 and 17 January 2006. [9] The workshop was convened to review the status of efforts to develop sustainable use indicators and advise the UNEP-World Conservation Monitoring Centre (WCMC) on indicator requirements that should be addressed under the proposed 2010 BIP initiative.

26.   The 2010 BIP initiative shall provide a mechanism to foster collaboration among institutions engaged in developing biodiversity-related indicators. It was reported that the aim of the BIP project is to facilitate development and testing of the 2010 indicators to assess trends in the status of biodiversity at the global level.

27.   Criteria to assess the efficacy of prospective indictors were identified during the workshop: the should be (i) scientifically defensible; (ii) readily available; (iii) resonate with the public; (iv) policy relevant; (v) scalable to the extent practicable between global; vi) regional and national levels; vii) easily applied; viii) cost effective to apply. Moreover, participants to the workshop acknowledged that new indicators should assist Parties to the Convention on Biological Diversity and not place an additional reporting burden on these Parties.

28.   Four global-scale datasets were identified that would be relevant to development, testing and application of indicators of sustainable use: (i) IUCN/SSC Red List Database; (ii) CITES (e.g. trade data, Significant Trade Review assessments, non-detriment findings, government reports); (iii) WCMC (e.g. protected areas data); (iv) FAO datasets (e.g. fisheries, fish stocks, forest inventories).

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[8]   The IUCN Red List Index is available from: http://www.redlist.org.
[9]   The 2010 Biodiversity Indicators website provides information on indicators for tracking progress towards the 2010 target: http://www.twentyten.net.

The Nature Conservancy

29.   The Nature Conservancy has developed a framework for measuring the status of the effective conservation of biodiversity within ecoregions. Based on the state-pressure-response model, the framework includes indicators on the viability of ecosystems, natural communities and species, on the degree of threat to these biodiversity elements, and on the extent of conservation management of these elements. The latter set of indicators is of relevance in the context of indicators for sustainable use. Conservation management includes the coverage of IUCN I-VI protected areas, the management effectiveness of those areas, as well as the extent of 'other conserved areas,' or places with some form of long-term conservation management. These may include areas with long-term agricultural agreements, responsible forestry-management practices, and development easements, for example.

30.   As part of the research and development of this framework, The Nature Conservancy contracted with the Gund Institute for Ecological Economics to investigate other conserved areas within the United States, and with Equilibrium Consultants to investigate the range of such areas internationally. 10/ The Nature Conservancy is in the process of tracking the status of other conserved areas across South America, and expects to continue this process across Central America and parts of Asia Pacific within the next few years.

United Nations Environment Programme, Regional Office for Europe (UNEP-ROE)

31.   The UNEP-ROE reported that the European Union Council, in June 2004, and the Pan-European Biological and Landscape Diversity Strategy (PEBLDS) Council, in 2005, adopted a framework of 15 headline indicators, including indicators on sustainable use of biodiversity, to follow progress towards the pan European commitment to halt the loss of biodiversity by 2010.The headline indicators to be identified and developed include: trends in abundance and distribution of selected species; change in status of threatened and/or protected species; trends in extent of selected biomes, ecosystems and habitats; connectivity/fragmentation of ecosystems; trends in genetic diversity of domesticated animals, cultivated plants, and fish species of major socioeconomic importance; coverage of protected areas; nitrogen deposition; number and costs of invasive alien species; impact of climate change on biodiversity; marine trophic index; water quality in aquatic ecosystems; area of forest, agricultural, fishery and aquaculture ecosystems under sustainable management; percentage of European patent applications for inventions based on genetic resources and/or traditional knowledge that disclose the source of these resources and knowledge; funding to biodiversity; and public awareness and participation. Later, a headline indicator called 'ecological footprint' was added to this list.

32.   The Streamlining European 2010 Biodiversity Indicators (SEBI2010) was launched in January 2005 to develop consistency as far as possible across global, regional, European Union and national indicators. It is funded by the European Community, Switzerland and Norway (through the UNEP Regional Office for Europe) and is coordinated by a team consisting of representatives of the European Environment Agency (EEA), European Centre for Nature Conservation (ECNC), UNEP-World Conservation Monitoring Centre (UNEP-WCMC), DG Environment, PEBLDS Joint Secretariat and the chairs and coordinators of six expert groups.

33.   Over 120 experts from 28 countries, 8 international organizations and 12 non-governmental organizations have been nominated to participate in SEBI2010 and most participate directly in the meetings of SEBI2010 expert groups (others participate indirectly by commenting on the proposals and results from the expert groups and the coordination team). These experts come from: national administrations and technical organizations involved in biodiversity monitoring, indicators and policy, non-governmental organizations active in the field and developing multi-national indicators, and

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        10/   Both reports are available at www.conserveonline.org/workspaces/ecoregional_status_measures/ersm/conservation_management_status/conserved_areas/ .

international and multinational organizations responsible for policy-making and follow-up of international commitments or for data-gathering and indicator production.