UNITED NATIONS ENVIRONMENT PROGRAMME
Programme des Nations Unies pour l'environnement Programa de las Naciones Unidas para el Medio Ambiente
Программа Организации Объединенных Наций по окружающей среде برنامج الأمم المتحدة للبيئة
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UNEP

Issue Management Group on the 2010 biodiversity target
8 April 2009
UNESCO Paris, France

EMG/IMG2010-1/09
3 June 2009
Distribution: EMG members, IMG focal points and observers

Report of the meeting

I. Introduction

1. The Issue Management Group on the 2010 biodiversity target was hosted by UNESCO and convened in the margins of the 7th negotiation session on Access and Benefit Sharing under the Convention on Biological Diversity (CBD) 2-8 April in Paris, France. The meeting was convened in accordance with a proposal by Mr. Achim Steiner, Executive Director of UNEP and Chair of the EMG in a letter to members of EMG of 12 March 2009. The proposal followed the recommendations from the 14th Senior Officials meeting of the EMG[1] and a Technical Meeting of the EMG[2] on the scope, modalities and deliverables of an EMG process on the 2010 biodiversity target and beyond. The meeting considered issues contained in the agenda (Annex I) based on a background note prepared by the secretariat of the CBD and EMG (see www.unemg.org). Eighteen member agencies attended the meeting. Representatives of the Bureau of the Convention of Biological Diversity CBD) and representatives of non-governmental organizations (i.e. IUCN and WWF) attended as observers. UNDP, UN-Habitat and WTO attended via teleconference. The list of participants is contained in Annex II.

2. Opening addresses was given by Mr. Walter Erdelen, Assistant Director-General for Natural Sciences, UNESCO, Mr. Carlos Martin Novella, representing the German Presidency of the Conference of Parties (COP) CBD, Mr. Misunu Masayoshi representing the incoming presidency of COP CBD, Mr. Ahmed Djoghlaf, and Executive Secretary of CBD. They stressed amongst others that the UN system is with its diversity of members representing different sectors and interests in society uniquely placed to contribute to the 2010 biodiversity target process[3]. The meeting was co-chaired Mr. Walter Erdelen, and Mr. Ivar Baste, Director of the EMG secretariat.

II. Considerations

3. Under agenda item 3 short presentations were given on the characteristics of, lessons learned from and challenges of the 2010 process by CBD, UNEP, UNEP-WCMC, IUCN and WWF. Additional information can be found, *inter alia*, on the biodiversity indicator partnership website (www.twentyten.net) and the TEMATEA website (www.**tematea**.org). The latter, a joint activity by UNEP and IUCN, is providing information on relevant decisions taken by multiple MEAs in thematic areas such as sustainable use, access and benefit sharing, inland waters, invasive alien species, biodiversity and climate change and protected areas. Written submissions were received from the World Bank, UN WTO and CMS. Presentations and submissions are available on http\\www.unemg.org.

[1] The 14th Senior Officials meeting of the Environment Management Group (EMG), held in the margins of the fourteenth meeting of the Conference of Parties of the United Nations Framework Convention on Climate Change (UNFCCC), on 10 December 2008 considered the possible contribution of EMG to the 2010 biodiversity target. The meeting welcomed the contribution by the German Presidency of the COP Bureau and the Executive Secretary of the CBD on a possible UN system-wide contribution to the International Year of Biodiversity and the UN General Assembly Special Session in 2010 and the formulation of the post-2010 biodiversity strategy and targets under or related to the CBD.

[2] The meeting held in the margins of the 25th session of UNEP Governing Council / Global Ministerial Environment Forum on 14 February at UNEP in Nairobi recommended the establishment of an issue management group on the 2010 biodiversity target

[3] In 2002, the Conference of the Parties (COP) to the Convention on Biological Diversity (CBD) adopted a Strategic Plan including the target of ***achieving by 2010 a significant reduction of the current rate of biodiversity loss at the global, regional and national level as a contribution to poverty alleviation and to the benefit of all life on Earth***. This target was subsequently endorsed by the World Summit on Sustainable Development and the United Nations General Assembly and incorporated into the Millennium Development Goals. In 2010, the year proclaimed by the General Assembly as the International Year of Biodiversity, the Convention on Biological Diversity will review progress made towards the achievement of the CBD strategic plan. The 2010 biodiversity target will be reviewed and agreement should be reached on future biodiversity target(s) and on a new Strategic Plan for the CBD. [Such work will also have implications for the existing/future strategies and targets of other UN agencies, including other biodiversity-related conventions.

4. In considering agenda item 4, participants exchanged views on the relevance of the 2010 biodiversity target process for the UN system. The meeting agreed that the UN is well placed to contribute to the 2010 process, in line with the ideal of a "One UN".

5. While considering the CBD framework for assessing the numerous achievements of the 2010 targets, the meeting also reflected on lessons learned and areas which could be improved in development of the post 2010 targets. These areas included: enhanced linkages to the MDGs and human wellbeing, strengthened outreach to the international community at large more clearly defined milestones, sub-targets and an agreed set of indicators to measure performance, an enhanced scientific baseline and policy uptake, and strengthened reporting and actions at the national level. It was felt that new targets can be divided into medium (2020) and long term (2050) targets, be quantifiable and informed by science and policy, with time-frame and milestones, address regional dimensions and be well-linked to the economics of biodiversity and ecosystem services. Short-term targets (post 2010-2012) could, for instance, focus on specific areas such as biodiversity and climate change targets as they relates to forests, costal and marine ecosystem.

6. The meeting acknowledged that responding to these concerns in the development of the new targets necessitates a well-structured process building on the current UN system-wide and other multi-stakeholders work leading up to the UNGA special session in September 2010 and the CBD COP 10 in October 2010 in Nagoya Japan. Participants felt the process could include and benefit from the inputs and guidance from the intergovernmental and multi-stakeholder forums including the Ninth Session of the UNCCD COP, (September 2009), the second intergovernmental multi-stakeholder meeting on IPBES in (October 2009), and the eleventh Special Session of UNEP GC/GMEF in Feb 2010), the Trondheim Conference, (February 2010), CITES CoP15 (March 2010) and CBD SBSTTA 14 and WGRI 3 (May 2010). Some participants felt that the organization of an additional Ministerial preparatory meeting on 2010 target would also be beneficial for the process.

7. The meeting confirmed the agreement reached at the EMG Technical Meeting in Nairobi in February that rather than embarking on a resource intensive stocktaking of current activities, the UN system should take a forward looking approach focusing on its contribution to the multilateral process for the formulation of the post 2010 target and sub-targets. Examples of such contributions included science, education, training, health, trade (including international trade in wild fauna and flora), agriculture, forestry and fisheries, protection of agricultural genetic resources, plant breeding, management of wetlands, and conservation of migratory species. There was a significant convergence of among the views expressed under agenda item 5 enabling the IMG to make useful conclusions about the characteristics of the EMG contribution to the 2010 biodiversity target process (see conclusions below).

III. Conclusions - structure, modalities and timeline of the IMG on the 2010 biodiversity target

8. After having considered the outcome of the EMG Technical meeting, other information contained in the background information document by the CBD and EMG secretariats and oral and written submissions by members, the IMG,

a) *Requested* the EMG secretariat to invite IMG members to ***provide information on milestones*** in the form of intergovernmental meetings and other events ***which could complement the roadmap*** leading up to the and the 2010 special session of UNGA and the CBD COP 10 and circulate such a roadmap to members;

b) *Called* on IMG members to use such milestones to ***inform their constituencies*** of the 2010 biodiversity target process and the EMG secretariat to assist members in ***internal and external communications and outreach for*** the EMG process;

c) Agreed to ***prepare a contribution in the form of a preliminary report*** from the UN system on the 2010 biodiversity target to the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA-14) and the Ad Hoc Open-ended Working Group on Review of Implementation of the Convention (WGRI-3) of the CBD and ***a final report*** to the 2010 special session of UNGA and the CBD COP 10;

d) *Also agreed* that ***the objective of the contribution*** in line with the report from the technical meeting of the EMG is to:

   i help ensure that the process for formulating the post 2010 biodiversity target is informed by ongoing and planned programmes, credible targets and indicators?, existing tools, lessons learned and best practices within the UN system ;

   ii promote coherence between the post-2010 biodiversity target and the future Strategic Plan of the CBD with the broader processes and activities in the UN system at large;

   iii facilitate the contribution by relevant organizations, agencies and programmes to the implementation of the post-2010 biodiversity target including for mainstreaming biodiversity considerations into broader development strategies, plans and programmes and providing coherent support to national implementation;

e) *Recalled* the observation from the EMG Technical Meeting in February 2009 that ***setting political targets is the prerogative of intergovernmental bodies, governments and local authorities*** and that the contribution from the UN system is to provide information on such biodiversity relevant targets as well as on relevant administrative ones;

f) *Resolved* to work through ***electronic and web-based communications and submissions*** by members, by establishing ***a writing team*** of IMG members and to convene ***one to two additional meetings*** of the IMG;

g) *Also resolved* ***to interact with stakeholders*** in the 2010 biodiversity target process, in particular members of the CBD COP bureau, in order to respond to the needs of the intergovernmental process for the post 2010 biodiversity targets;

h) *Agreed* that ***the report would have the following structure***:

i Section 1: A *UN-system wide perspective* on the post-2010 biodiversity process that takes into account the outcomes of the ongoing 2010 process, such as the High-level working group on the 2010 target and post-2010 target(s) (see summary report in Annex III) as well as the following considerations:

- The critical role of biodiversity and its ecosystem services in supporting human wellbeing;
- How the investments by relevant sectors in the conservation and sustainable use of biodiversity and the maintenance of its ecosystem services can contribute to the attainment of the MDGs including in the areas of food and energy security, alleviation of poverty, environmental sustainability and the building of a sustainable economy;
- The scientific and conceptual basis for understanding biodiversity change and trade-offs among ecosystem services and other factors determining human wellbeing;
- The added value of UN system-wide support to international and national efforts in address biodiversity change;
- How 2010 as the year of biodiversity can be seen as a continuation of 2009 as the year of climate change negotiations because of the intrinsic links between these two and other forms of environmental change;
- Requirements for setting clear, coherent, communicable and implementable targets including the use of baseline data and indicators;

ii Section 2: Presentation, in a manner which underpins the strategic and conceptual sound perspective outlined in section 1, of *information provided by individual members on the biodiversity aspects of their strategies, programmes, plans and initiatives* as outlined in Annex IV including on;

- Existing biodiversity relevant technical and internationally agreed targets and related indicators, baseline data, resource allocations and monitoring programmes and assessments;
- Selected lessons learned, best practices and tools from international, national and local level, including for mainstreaming biodiversity concerns into sectoral policies;
- Inter-linkages with other environmental issues, such as climate change and land degradation and complementarities with initiatives of other EMG members;

iii Section 3: Selected areas of current *collaborative programmes and initiatives* as well as identification of areas which may warrant further cooperation as indicated in Annex V;

i) *Requested* the ***EMG secretariat to provide members with a web-based facility*** for individual submissions by 15 May 2009;

j) *Called* on ***EMG members to provide a short and factual web-based submission of information as relevant to their mandate and programme*** based on existing policies, programmes, plans and evaluations, and in line with the optional fields in the template provided in Annex IV, as soon as possible but not later then 30 June 2009;

k) *Requested* the EMG secretariat to ***invite members to take part in the writing team*** and to initiate its work in July 2009 with the view of preparing a first draft report by the end of October 2009 for review by the wider IMG;

l) Adopted the timeline and schedule of IMG as follows:

i. IMG 1 to agree on guidance and work plan- expected agreement on schedule of work, draft outline of report, template for information gathering, guidance for submissions and structure of web-based workspace (April-May 2009);

ii. EMG members to provide input through a web-based, password-protected site on their accomplishments, in contributing to the implementation of the 2010 biodiversity target and proposals for sectoral objectives, targets and indicators (i.e. related to their respective mandates) by June 2009;

iii. EMG 15 to review progress, give guidance and report to the Chief Executives Board on Coordination (September 2009);

iv. One or two meetings of the writing team (November 2009);

v. Review of the draft report by the IMG and EMG members (January 2010);

vi IMG 2 possibly in the margins of UNEP GC to finalize the preliminary **report** to be submitted from the UN system on the 2010 biodiversity target to the SBSTTA-14 and the WGRI-3 of the CBD and agree on modalities for finalization of the report (February 2010); and

vii EMG Sign off on EMG report to CBD COP 10 and the 2010 special session of UNGA through a possible final meeting of IMG in the margins of the CBD subsidiary bodies meeting (May 2010).

Annex I

Provisional Agenda

1. Opening remarks by Mr. Walter Erdelen, Assistant Director-General for Natural Sciences, Mr. Carlos Martin Novella, representing the German Presidency of the Conference of Parties (COP) CBD, Mr. Misunu Masayoshi representing the incoming Japanese presidency of COP CBD, CBD and the Executive Secretary of the CBD, Mr. Ahmed Djoghlaf.

2. Adoption of the Agenda

3. The 2010 biodiversity targets and beyond: - introductory presentations by the CBD Secretariat, UNEP, UNEP-WCMC, IUCN

4. The 2010 process and its relevance for the UN system

5. Characteristics of the EMG contribution to the 2010 process

    a. Structure, modalities and timeline for the preparation of an interim report for submission to the CBD process

        i. A UN-system wide perspective on the post 2010 biodiversity challenges

        ii. Information provided by individual members on biodiversity aspects of their strategies programmes, plans and initiatives

        iii. Selected areas of collaborative programmes and initiatives

    b. Modalities and timeline for the preparation of report for submission the UNGA and CBD COP

6. Any other business

7. Closure of the meeting

Annex II
List of participants

Member agencies

1. **CBD**
   Mr. Ahmed Djoghlaf Mr. Robert Hoft
2. **CITES**
   Mr. Marceil Yeater
3. **CMS Secretariat**
   Ms. Melanie Virtue
   Ms. Véronique Herrenschmidt
4. **FAO**
   Mr. Dan Leskien
   Ms. Astrid Eikeland
5. **GEF**
   Mr. Jaime Cavelier
6. **IFAD**
   Ms. Sheila Mwanundu
7. **RAMSAR**
   Mr. Anada Tiega
8. **UN DESA**
   Mr. Keneti Faulalo
9. **UNDP**
   Ms. Linda Ghanime
   Mr. Noriko Moriwake
10. **UNECE**
    Mr. Kit Prins
11. **UNEP**
    Mr. Balakrishna Pisupati
12. **UNEP DEPI**
    Ms. Anantha Kumar Duraiappah
13. **UNEP-WCMC**
    Ms. Monika MacDevette
    Mr. Jerry Harrison
14. **UNESCO**
    Mr. Walter Erdelen Salvatore Arico
15. **UN-HABITAT**
    Ms. Cecilia Njenga. Ms. Karin Buhren
16. **UNITAR**
    Mr. Brook Boyer
17. **UNU-IAS**
    Ms. Suneetha Subramanian
18. **UNWTO**
    Mr. Luigi Cabrini Mr. Juergen Nauber
19. **WFP**
    Ms. Marina Catena Ms. Tamara Kummer
20. **WIPO**
    Ms. Sarah Theurich
    Ms. Begoña Venero
    Mr. Antony Taubman

Observers:

21. **CBD Bureau**
    Mr. Joseph Ronald Toussaint
22. **CBD Bureau**
    Mr. Carlos Martin-Novella
23. **International Union for the Protection of New Varieties of Plants (UPOV)**
    Mr. Rolf Jördens
24. **WWF International**
    Mr. Rolf Hogan
25. **IUCN**
    Mr. Sebastian Winkler

Annex III

High-level working group on the future of global targets for biodiversity
9-10 March 2009 (Bonn, Germany)

A. Introduction
From the 9-10 March 2009 some 50 distinguished participants, at the invitation of the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety as the current Presidency of the Convention on Biological Diversity (CBD), gathered in Bonn to provide clear and bold direction for future international commitments on biodiversity.

The meeting provided a timely opportunity to discuss the framework for the post 2010 biodiversity target and to prepare the ground for the discussion and action on the global biodiversity agenda. The outcome of the rich discussions at this meeting is a set of suggestions to the UN for further discussions on the future biodiversity targets of the United Nations.

B. Main messages emanating from the meeting

1. State and importance of biological diversity

• ***Biodiversity and Ecosystems:*** *All life on Earth, including human society, depends upon a variety of services provided by nature, the values of which need wider recognition. Maintaining these services is vital, especially in a world facing massive environmental and economical pressures. This requires that any post 2010 framework ensures the conservation and sustainable use of healthy ecosystems and of the biodiversity upon which their continued functioning depends, as well as the fair and equitable sharing of the benefits arising out of the utilization of genetic resources.*

• ***Biodiversity, Ecosystem Services and Poverty Eradication:*** *The 2010 target provided a valuable framework for biodiversity actions, but missed the opportunity to mobilize significant public support and harness adequate political commitment. This could potentially have happened if the critical role of nature and its ecosystem services in supporting human wellbeing had been more clearly incorporated into the 2010 target. For instance, freshwaters, forests, and fisheries are forms of natural capital from which we draw ecosystem services such as clean water, fresh air, carbon storage, food, fiber, and fuel. Nature's services are valuable to the rich and they are irreplaceable and critical for the survival of the poor. Nature is the Treasury of all human beings, especially the Poor. There is no chance for success in poverty eradication and implementing the Millennium Development Goals without well functioning ecosystems at all levels.*

• ***Biodiversity and Climate Change:*** *Healthy ecosystems store carbon but if degraded or destroyed release this as carbon dioxide, one of the principal causes of climate change. Transforming industrial production, energy supply, heating of houses, traffic and transport in a sustainable climate-friendly way is already a tough challenge! Without reducing greenhouse gas emissions originating from the degradation and destruction of ecosystems the challenges of climate change will be hard to achieve. At the same time, climate change is an increasing threat to the maintenance of biodiversity, directly through its potential to accelerate species extinction and indirectly through potentially negative impacts of mitigation measures. Not using synergies between climate change and biodiversity policies would be a double failure - a lose-lose-situation!*

• ***Drivers of Biodiversity loss:*** *Land-use change, eutrophication, the unsustainable use of biological resources, overexploitation of marine ecosystems and invasive alien species continue to be the main drivers of biodiversity loss, but are increasingly exacerbated by climate change. All these drivers of biodiversity loss must be addressed within any post 2010 framework.*

• ***Guidance for a living planet:*** *Any post 2010 target should provide a sense of urgency and be ambitious, simple but meaningful, politically relevant, scientifically credible, inclusive, inspiring, user-friendly and implementable. The new target should consider the key drivers of biodiversity loss and comprise the three objectives of the CBD (conservation, sustainable use, access and benefit sharing)*

2. Leadership for biodiversity and ecosystems!
The global biodiversity target will not be reached by 2010! But there are a number of success stories at sectoral, regional, national and local level. Post 2010 targets should build upon the current 2010 target and the lessons learned from this process. For instance, the target has been useful in introducing biodiversity to

the international political agenda, raising political and public awareness, building partnerships among institutions and promoting integration of biodiversity in key political processes.

Both medium- and long-term target dates (i.e. 2020 and 2050) should be considered, taking into account existing and other relevant targets, such as those of the Millennium Development Goals. Establishing links between biodiversity and climate change agendas, and other multilateral environmental agreements, should be a priority for any post 2010 framework. In order to ensure measurability, monitoring and assessment of any post 2010 framework, the establishment of baselines, clear milestones and subtargets, and of an agreed set of indicators to measure performance, is important. Key policy makers of different sectors should be involved in the process of defining subtargets and special targets for the local, regional and national levels.

3. Using the crisis for a planet deal!
The world is facing an economic crisis that may offer opportunities for reforms favoring biodiversity. The valuation of ecosystem services can provide the trigger for change and can serve as a starting point for moving towards a green and sustainable economy. This process can include increased investment in biodiversity as a utility in ecological infrastructure such as bio-diverse, natural carbon sinks and water-purifying wetlands. In this respect, addressing current consumption and production patterns which have a negative impact on the status of biodiversity is also essential. Maintaining biodiversity and ecosystem services also through trade-related agreements could provide a key turning point for any post 2010 biodiversity agenda and for an overall global new deal for our planet.

In addition, the ongoing discussions on the post Kyoto climate regime provide a unique opportunity to further advance the post 2010 biodiversity agenda. At the same time the negotiation of an international regime on Access and Benefit Sharing is to be concluded by 2010 as a key element for any post 2010 target. This achievement should be considered in the development of the post 2010 target.

Finally, to achieve the necessary paradigm shift it will be essential that the biodiversity community speaks the language of other constituencies, in order to promote synergies among agendas. Building strategic partnerships, including between countries and across different sectors, will assist in enhancing these synergies.

4. Creating broad ownership for the planet deal!
The post 2010 biodiversity target as part of a global green new deal for our planet has to be adopted at the highest level – the Heads of Government and State - thus providing a mechanism for mainstreaming and policy integration, including horizontal cooperation between ministries. Achieving the target must be incorporated into the mandates of ministries responsible for key sectors – including finance, agriculture, fisheries and forests – with sub-targets specific to those sectors. Any future targets should be integrated into relevant national policy instruments such as national biodiversity action plans, national development plans, etc.

While Governments should be taking the lead support of stakeholders such as civil society, scientists, indigenous peoples, local communities, and the private sector is vital to obtain broad ownership of all stakeholders in the definition and implementation of any post 2010 target.

Defining and implementing future targets and related indicators should be a knowledge driven process informed by science. Instruments that allow for a stronger interface between science and policy, such as the International Platform for Biodiversity and Ecosystem Services (IPBES), should support the implementation of any post 2010 target. “Biodiversity” champions and the mass media are essential to engage present and future generations in order to ensure a broader involvement of society.

C. The roadmap for 2010

All relevant events in the run up to 2010 should be used to further develop the messages for 2010. The coming 18 months will provide several opportunities to carry forward the discussions around the post 2010 target within and outside biodiversity-related fora, including events such as those related to the climate change negotiations, the fifth replenishment of the Global Environment Facility and other high-level meetings such as the United Nations General Assembly, G8 and G20 meetings.

2010 as the UN ‘International Year for Biodiversity’ will be a crucial year for biodiversity in many respects. A sequence of high level conferences allow for an inclusive roadmap leading to a new biodiversity target: in February the global biodiversity community will convene in Trondheim, Norway, to discuss further the elements for a post 2010 target; in February UNEP’s Governing Council and Global Ministerial Environment Forum will reconvene; and in May the subsidiary bodies of the CBD (SBSTTA and WGRI)

will take stock and advance the post 2010 negotiations, which will feed into the Heads of State Summit that will gather at the United Nations General Assembly (UNGA) in September for a special session devoted to biodiversity; finally, in October the 10th Conference of the Parties to the CBD will meet in Nagoya, Japan. Strong commitments of participants in all these meetings are needed. There is a need to make the difference!

Annex IV

Draft elements for web-based template/questionnaire for individual submissions

Fields are optional. White fields require description while grey fields require response as per pre-identified categories.

EMG member:	**Bio-diversity-related mandate(s):**

Target(s) adopted by the institution / support to formulation or implementation of existing targets (i.e. at national level)		**Monitoring of achievements** (see http://www.twentyten.net/)			**Lessons learned, tools and best practices** (summary and web-link to published reports)	**Budget (USD)**				**Inter-linkages**[1]			**Elements of existing international frameworks such as the MDGs** (see Appendix I), **CBD Strategic Plan and Strategic Plan framework** (see Appendix II) **and commitments under international biodiversity related agreements** (see http://www.tematea.org/)	**Focus in relation to conceptual challenges** (See Appendix III and IV)						**Other information**
		Indicators	baseline data	Monitoring, assessments and evaluation		**2010** (Anticipated)		**2011** (Estimated need)		- environmental issues	- institutions	- geographic		Indirect drivers of change[2]	Direct drivers of change[3]	State/change of biodiversity[4]	Ecosystem services[5]	Human wellbeing[6]	Response[7]	
						grant	loan	grant	loan											
Global																				
Regional																				
Region 1																				
…n																				
Support to national targets																				
Country 1																				
…n																				

[1] Environmental issues [UNEP priorities?]: Climate change; Desertification [Ecosystem management?]; Environmental governance; Resource efficiency; Harmful Substances; and [Environmental aspects of] disasters and conflicts. Institutions: all EMG members. [the approach we are taking to 'interlinkages' indicates that we will not be looking at major groups as well but only at UN agencies]

[2] Efforts to address indirect drivers of change: General; Demographic; Economic; Sociopolitical (including institutional and distribution patterns); Science and technology (innovation); and Cultural and religious.

[3] Efforts to address direct drivers of change: General; Climate Change; External inputs (including Nutrient loading, irrigation, chemicals); Land use change; Modifications and movements of organisms (including species introduction); Resource Extraction (including overexploitation); and Natural processes (outer space processes such as solar radiation, geological processes, evolution).

[4] Efforts to reduce or halt change of: Biodiversity in general; Genetic resources; Agricultural species and agro-ecosystems; Endangered species; Migrating species; Tropical forests; Temperate forests; Coastal waters; Oceans and deep seas; Lakes, rivers and estuaries; Wetlands; Dry-lands; and Grasslands and savannas.

[5] Efforts to enhance or protect ecosystem services: General; Provisioning services (goods) (food, fibre fuel, genetic resources, biochemical's, freshwater); Cultural services (Spiritual and religious values, knowledge systems, education and inspiration, recreation and aesthetical values); Regulating services (Invasion resistance, herbivory, pollination, seed dispersal, climate regulation, pest regulation, disease regulation, natural hazard protection, erosion regulation, water purification); and Supporting services (primary production, provision of habitat, nutrient cycling, soil formation and restoration, production of atmospheric oxygen, water cycling).

[6] Efforts to expand Human Well-being (development) and thereby reduce poverty and human vulnerability to environmental change by investing in ecosystem services to enhance peoples freedom of choice and action to achieve: Basic material needs; Good health; Security; and Good social relations.

[7] Formal and informal measures for altering human activity and development patterns for: Conservation of biodiversity (mitigation of ecosystem change including protection and restoration); Sustainable use of biodiversity; Fair and equitable sharing of benefits arising out of utilisation of genetic resources; and Adaptation to ecosystem change. Such measures include investments in: Science and technology (including assessments); Policy; Law; and Institutions (including economic instruments).

Appendix I

Millennium Development Goals

The Millennium Development Goals are an ambitious agenda for reducing poverty and improving lives that world leaders agreed on at the Millennium Summit in September 2000. For each goal one or more targets have been set, most for 2015, using 1990 as a benchmark:

1. Eradicate extreme poverty and hunger
Target for 2015: Halve the proportion of people living on less than a dollar a day and those who suffer from hunger.

More than a billion people still live on less than US$1 a day: sub-Saharan Africa, Latin America and the Caribbean, and parts of Europe and Central Asia are falling short of the poverty target.

2. Achieve universal primary education
Target for 2015: Ensure that all boys and girls complete primary school.

As many as 113 million children do not attend school, but the target is within reach. India, for example, should have 95 percent of its children in school by 2005.

3. Promote gender equality and empower women
Targets for 2005 and 2015: Eliminate gender disparities in primary and secondary education preferably by 2005, and at all levels by 2015.

Two-thirds of illiterates are women, and the rate of employment among women is two-thirds that of men. The proportion of seats in parliaments held by women is increasing, reaching about one third in Argentina, Mozambique and South Africa.

4. Reduce child mortality
Target for 2015: Reduce by two thirds the mortality rate among children under five

Every year nearly 11 million young children die before their fifth birthday, mainly from preventable illnesses, but that number is down from 15 million in 1980.

5. Improve maternal health
Target for 2015: Reduce by three-quarters the ratio of women dying in childbirth.

In the developing world, the risk of dying in childbirth is one in 48, but virtually all countries now have safe motherhood programmes.

6. Combat HIV/AIDS, malaria and other diseases
Target for 2015: Halt and begin to reverse the spread of HIV/AIDS and the incidence of malaria and other major diseases.

Forty million people are living with HIV, including five million newly infected in 2001. Countries like Brazil, Senegal, Thailand and Uganda have shown that the spread of HIV can be stemmed.

7. Ensure environmental sustainability
Targets:
• Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources.
• By 2015, reduce by half the proportion of people without access to safe drinking water.
• By 2020 achieve significant improvement in the lives of at least 100 million slum dwellers.

More than one billion people lack access to safe drinking water and more than two billion lack sanitation. During the 1990s, however, nearly one billion people gained access to safe water and the same number to sanitation.

8. Develop a global partnership for development
Targets:
• Develop further an open trading and financial system that includes a commitment to good governance, development and poverty reduction – nationally and internationally
• Address the least developed countries' special needs, and the special needs of landlocked and small island developing States

• *Deal comprehensively with developing countries' debt problems*
• *Develop decent and productive work for youth*
• *In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries*
• *In cooperation with the private sector, make available the benefits of new technologies – especially information and communications technologies.*

Many developing countries spend more on debt service than on social services. New aid commitments made in the first half of 2002 could mean an additional $12 billion per year by 2006.

Appendix II

THE CURRENT (2010) TARGETS AND INDICATORS AND THE PROCESS FOR THE DEVELOPMENT OF THE FUTURE (POST 2010) BIODIVERSITY TARGET AND CBD STRATEGY

1. The 2010 biodiversity target is to **achieve by 2010 a significant reduction of the current rate of biodiversity loss at the global, regional and national level as a contribution to poverty alleviation and to the benefit of all life on Earth**. The Conference of the Parties (COP) of the Convention on Biological Diversity (CBD) in its decision VIII/15 addressed the framework for monitoring implementation of the Convention and achievement of the 2010 target. It consists of four goals and 19 objectives of the Strategic Plan adopted by the COP in decision VI/26 and a limited number of indicators (see Table 1). The framework also includes a provisional framework consisting of seven focal areas, 11 goals and 21 targets with indicators presented in Table 2.

2. The COP in its decision IX/9 requested the Working Group on the Review of Implementation, at its third meeting, undertake an in-depth review of progress towards goals 1 and 4 of the current Strategic Plan. It also requested the group to prepare, for consideration and adoption by the Conference of the Parties at its tenth meeting, a revised and updated Strategic Plan including a revised biodiversity target, drawing upon further submissions from Parties and observers. ***The COP also recognised*** that the revised and updated Strategic Plan should:

a. Cover the three objectives of the Convention in a balanced manner;

b. Build upon the existing Strategic Plan (adopted in decision VI/26) and associated framework of goals, targets and indicators (decision VIII/15), and avoid unnecessary changes;

c. Be short, focused and action-oriented to facilitate enhanced implementation of the Convention;

d. Include ambitious but realistic, and measurable short term targets or milestones and a long term target or vision, developed on the basis of robust scientific evidence;

e. Provide a framework for the establishment of national, and, where possible, quantitative, targets, that Parties can implement according to their own priorities;

f. Highlight the importance of biodiversity for poverty eradication and the achievement of the Millennium Development Goals, taking into account that conservation and sustainable use of biodiversity should contribute to poverty eradication at local level and not harm the livelihoods of the poor;

g. Address the drivers of biodiversity loss and integrate biodiversity considerations into relevant sectoral and cross-sectoral policies, programmes and strategies and planning processes;

h. Draw upon, as appropriate, the framework and findings of the Millennium Ecosystem Assessment;

i. Address challenges to implementation of the Convention, including the need for new and additional financial resources in accordance with Article 20 of the Convention;

j. Address capacity-building and resource mobilization;

k. Provide for effective national monitoring and reporting; and

l. Encourage universal membership of the Convention;

3. ***The COP furthermore requested*** the Executive Secretary amongst others:

a. To invite Parties and observers to submit views;

b. To prepare a synthesis/analysis of issues relevant to the revision and updating of the Strategic Plan, drawing upon the note by the Executive Secretary on the subject (UNEP/CBD/COP/9/14/Add.1), submissions of Parties and observers, the fourth national reports, the results of the in-depth reviews of the Convention's programmes of work, the Millennium Ecosystem Assessment, and other material gathered for the preparation of the third edition of the Global Biodiversity Outlook;

c. To submit a draft revised and updated Strategic Plan for peer review and the revised version to the Working Group for Review of Implementation of the Convention at its third meeting;

Table 1: PROVISIONAL INDICATORS FOR ASSESSING PROGRESS IN IMPLEMENTING THE GOALS AND OBJECTIVES OF THE CBD STRATEGIC PLAN

Strategic goals and objectives	Possible indicators
Goal 1: The Convention is fulfilling its leadership role in international biodiversity issues.	
1.1 The Convention is setting the global biodiversity agenda.	CBD provisions, COP decisions and 2010 target reflected in workplans of major international forums
1.2 The Convention is promoting cooperation between all relevant international instruments and processes to enhance policy coherence.	
1.3 Other international processes are actively supporting implementation of the Convention, in a manner consistent with their respective frameworks.	
1.4 The Cartagena Protocol on Biosafety is widely implemented.	
1.5 Biodiversity concerns are being integrated into relevant sectoral or cross-sectoral plans, programmes and policies at the regional and global levels.	*Possible indicator to be developed:* *Number of regional/global plans, programmes and policies which specifically address the integration of biodiversity concerns into relevant sectoral or cross-sectoral plans, programmes and policies* *Application of planning tools such as strategic environmental assessment to assess the degree to which biodiversity concerns are being integrated* *Biodiversity integrated into the criteria of multilateral donors and regional development banks*
1.6 Parties are collaborating at the regional and subregional levels to implement the Convention.	*Possible indicator to be developed:* *Number of Parties that are part of (sub-) regional biodiversity-related agreements*
Goal 2: Parties have improved financial, human, scientific, technical, and technological capacity to implement the Convention.	
2.1 All Parties have adequate capacity for implementation of priority actions in national biodiversity strategy and action plans.	
2.2 Developing country Parties, in particular the least developed and the small island developing States amongst them, and other Parties with economies in transition, have sufficient resources available to implement the three objectives of the Convention.	Official development assistance provided in support of the Convention (OECD-DAC Statistics Committee)
2.3 Developing country Parties, in particular the least developed and the small island developing States amongst them, and other Parties with economies in transition, have increased resources and technology transfer available to implement the Cartagena Protocol on Biosafety.	
2.4 All Parties have adequate capacity to implement the Cartagena Protocol on Biosafety.	
2.5 Technical and scientific cooperation is making a significant contribution to building capacity.	*Indicator to be developed consistent with VII/30*
Goal 3: National biodiversity strategies and action plans and the integration of biodiversity concerns into relevant sectors serve as an effective framework for the implementation of the objectives of the Convention.	
3.1 Every Party has effective national strategies, plans and programmes in place to provide a national framework for implementing the three objectives of the Convention and to set clear national priorities.	Number of Parties with national biodiversity strategies
3.2 Every Party to the Cartagena Protocol on Biosafety has a regulatory framework in place and	

functioning to implement the Protocol.	
3.3 Biodiversity concerns are being integrated into relevant national sectoral and cross-sectoral plans, programmes and policies.	*To be developed* *Percentage of Parties with relevant national sectoral and cross-sectoral plans, programmes and policies in which biodiversity concerns are integrated*
3.4 The priorities in national biodiversity strategies and action plans are being actively implemented, as a means to achieve national implementation of the Convention, and as a significant contribution towards the global biodiversity agenda.	*To be developed* *Number of national biodiversity strategies and action plans that are being actively implemented*
Goal 4: There is a better understanding of the importance of biodiversity and of the Convention, and this has led to broader engagement across society in implementation.	
4.1 All Parties are implementing a communication, education, and public awareness strategy and promoting public participation in support of the Convention.	*Possible indicator to be developed:* *Number of Parties implementing a communication, education and public awareness strategy and promoting public participation* *Percentage of public awareness programmes/projects about the importance of biodiversity* *Percentage of Parties with biodiversity on their public school curricula*
4.2 Every Party to the Cartagena Protocol on Biosafety is promoting and facilitating public awareness, education and participation in support of the Protocol.	
4.3 Indigenous and local communities are effectively involved in implementation and in the processes of the Convention, at national, regional and international levels.	*To be developed by the Ad Hoc Open-ended Working Group on Article 8(j)*
4.4 Key actors and stakeholders, including the private sector, are engaged in partnership to implement the Convention and are integrating biodiversity concerns into their relevant sectoral and cross-sectoral plans, programmes and policies.	*To be developed* *Indicator targeting private sector engagement,* *e.g. Voluntary type 2 partnerships in support of the implementation of the Convention*

Table 2: INDICATORS RELEVANT TO THE CBD PROVISIONAL FRAMEWORK OF GOALS AND TARGETS

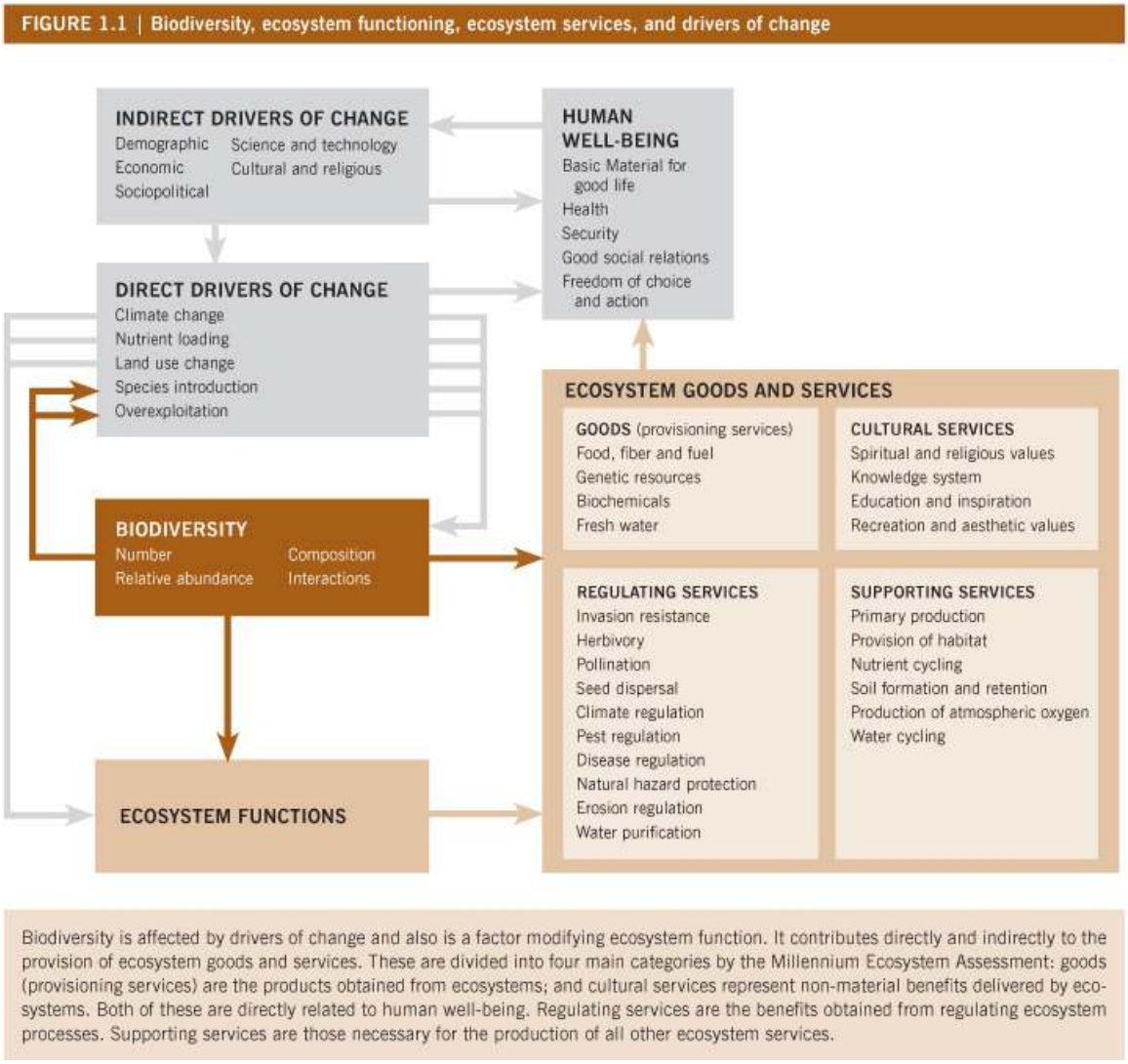
Goals and targets	Relevant indicators
Protect the components of biodiversity	
Goal 1. Promote the conservation of the biological diversity of ecosystems, habitats and biomes	
Target 1.1: At least 10% of each of the world's ecological regions effectively conserved.	• Coverage of protected areas • Trends in extent of selected biomes, ecosystems and habitats • Trends in abundance and distribution of selected species
Target 1.2: Areas of particular importance to biodiversity protected	• Trends in extent of selected biomes, ecosystems and habitats • Trends in abundance and distribution of selected species • Coverage of protected areas
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.	• Trends in abundance and distribution of selected species • Change in status of threatened species
Target 2.2: Status of threatened species improved.	• Change in status of threatened species • Trends in abundance and distribution of selected species • Coverage of protected areas
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.	• Trends in genetic diversity of domesticated animals, cultivated plants, and fish species of major socio-economic importance • *Biodiversity used in food and medicine(indicator under development)* • Trends in abundance and distribution of selected species
Promote sustainable use	
Goal 4. Promote sustainable use and consumption.	
Target 4.1: Biodiversity-based products derived from sources that are sustainably managed, and production areas managed consistent with the conservation of biodiversity.	• Area of forest, agricultural and aquaculture ecosystems under sustainable management • *Proportion of products derived from sustainable sources (indicator under development)* • Trends in abundance and distribution of selected species • Marine trophic index • Nitrogen deposition • Water quality in aquatic ecosystems
Target 4.2. Unsustainable consumption, of biological resources, or that impacts upon biodiversity, reduced.	• Ecological footprint and related concepts
Target 4.3: No species of wild flora or fauna endangered by international trade.	• Change in status of threatened species
Address threats to biodiversity	
Goal 5. Pressures from habitat loss, land use change and degradation, and unsustainable water use, reduced.	
Target 5.1. Rate of loss and degradation of natural habitats decreased.	• Trends in extent of selected biomes, ecosystems and habitats • Trends in abundance and distribution of selected

	species • Marine trophic index
Goal 6. Control threats from invasive alien species	
Target 6.1. Pathways for major potential alien invasive species controlled.	• Trends in invasive alien species
Target 6. 2. Management plans in place for major alien species that threaten ecosystems, habitats or species.	• Trends in invasive 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.	• Connectivity/fragmentation of ecosystems
Target 7.2. Reduce pollution and its impacts on biodiversity.	• Nitrogen deposition • Water quality in aquatic ecosystems
Maintain goods and services from biodiversity to support human well-being	
Goal 8. Maintain capacity of ecosystems to deliver goods and services and support livelihoods	
Target 8.1. Capacity of ecosystems to deliver goods and services maintained.	• *Biodiversity used in food and medicine (indicator under development)* • Water quality in aquatic ecosystems • Marine trophic index • Incidence of Human-induced ecosystem failure
Target 8.2. Biological resources that support sustainable livelihoods, local food security and health care, especially of poor people maintained.	• Health and well-being of communities who depend directly on local ecosystem goods and services • *Biodiversity used in food and medicine*
Protect traditional knowledge, innovations and practices	
Goal 9 Maintain socio-cultural diversity of indigenous and local communities	
Target 9.1. Protect traditional knowledge, innovations and practices.	• Status and trends of linguistic diversity and numbers of speakers of indigenous languages • *Additional indicators to be developed*
Target 9.2. Protect the rights of indigenous and local communities over their traditional knowledge, innovations and practices, including their rights to benefit-sharing.	*Indicator to be developed*
Ensure the fair and equitable sharing of benefits arising out of the use of genetic resources	
Goal 10. Ensure the fair and equitable sharing of benefits arising out of the use of genetic resources	
Target 10.1. All access to genetic resources is in line with the Convention on Biological Diversity and its relevant provisions.	*Indicator to be developed*
Target 10.2. Benefits arising from the commercial and other utilization of genetic resources shared in a fair and equitable way with the countries providing such resources in line with the Convention on Biological Diversity and its relevant provisions	*Indicator to be developed*
Ensure provision of adequate resources	
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.	• Official development assistance provided in support of the Convention
Target 11.2. Technology is transferred to developing country Parties, to allow for the	*Indicator to be developed*

effective implementation of their commitments under the Convention, in accordance with its Article 20, paragraph 4.	

Appendix III

THE MA CONCEPTUAL FRAMEWORK



Biodiversity is affected by drivers of change and also is a factor modifying ecosystem function. It contributes directly and indirectly to the provision of ecosystem goods and services. These are divided into four main categories by the Millennium Ecosystem Assessment: goods (provisioning services) are the products obtained from ecosystems; and cultural services represent non-material benefits delivered by ecosystems. Both of these are directly related to human well-being. Regulating services are the benefits obtained from regulating ecosystem processes. Supporting services are those necessary for the production of all other ecosystem services.

THE GEO-4 CONCEPTUAL FRAMEWORK

1. The *GEO-4* conceptual framework could assist in the development of post-2010 biodiversity objectives targets and indicators. It is based on the drivers-pressures-state-impacts-responses (DPSIR) concept. It draws on different types of assessments that have taken place over the years, including previous GEO reports, the Intergovernmental Panel on Climate Change (IPCC) and the Millennium Ecosystems Assessment (MA), especially with regard to the concepts of human well-being and ecosystem services. The framework reflects the key components of the complex chain of cause- and effect, taking place in space and time that characterizes the interactions between society and environment. Environmental changes are induced by drivers and caused by pressures, but they do also affect each other. These changes interact with demographic, social and material factors in determining human well-being. Responses include measures by society for mitigating and adapting to environmental changes. These processes take place at all spatial scales, from the global to the local.

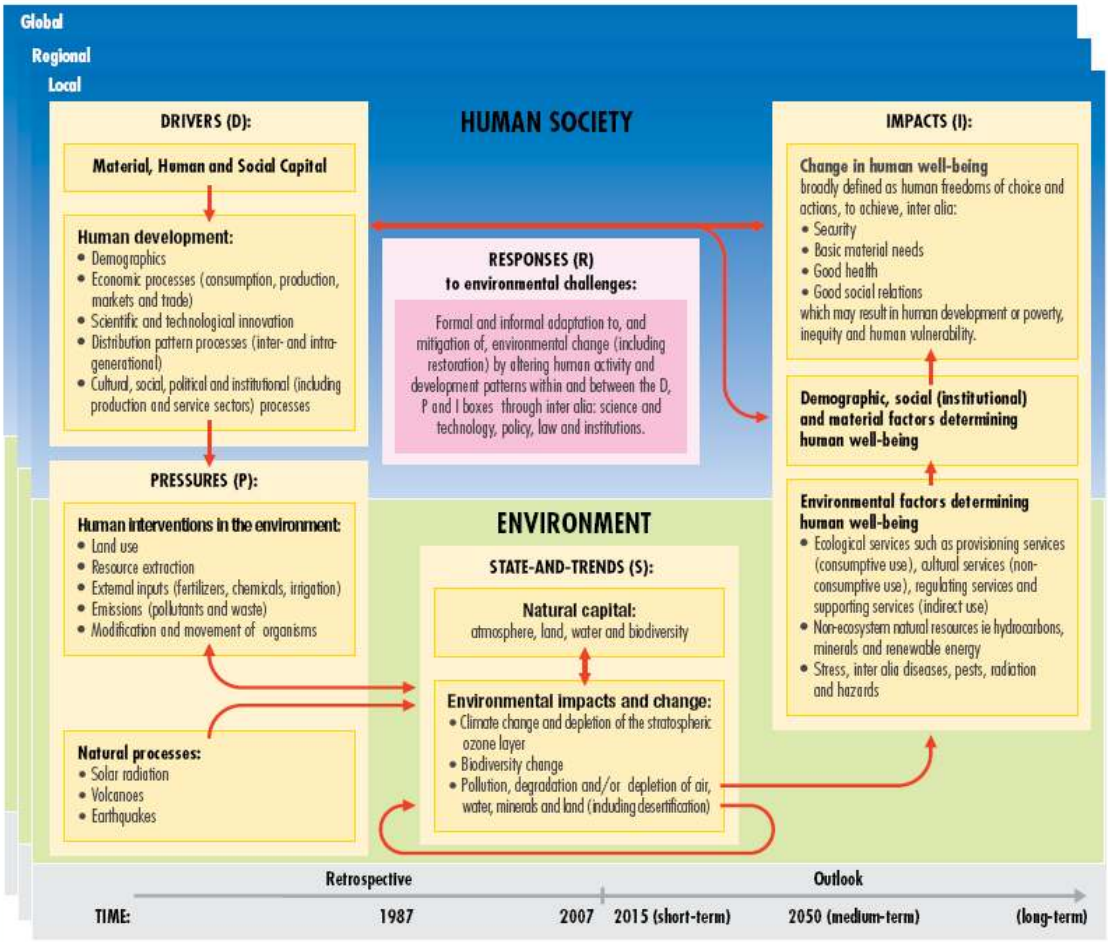
2. The conceptual framework (Figure 1), contributes to society's enhanced understanding of the links between the environment and development, human wellbeing and vulnerability to environmental change. The framework places,

together with the environment, the social issues and economic sectors in the 'impacts' category rather than just exclusively in the 'drivers' or 'pressures' categories. The characteristics of the components of the *GEO-4* analytical framework are explained below.

Drivers

3. Drivers are sometimes referred to as indirect or underlying drivers or driving forces. They refer to fundamental processes in society, which drive activities with a direct impact on the environment. Key drivers include: demographics; consumption and production patterns; scientific and technological innovation; economic demand, markets and trade; distribution patterns; institutional and social-political frameworks and value systems. The characteristics and importance of each driver differ substantially from one region to another, within regions and within and between nations. For example, in the area of population dynamics, most developing countries are still facing population growth while developed countries are faced with a stagnant and ageing population. The resource demand of people influence environmental change.

Figure 1 *GEO-4* conceptual framework



Pressures

4. Key pressures include: emissions of substances which may take the form of pollutants or waste; external inputs such as fertilizers, chemicals and irrigation; land use; resource extraction; and modification and movement of organisms. Human interventions may be directed towards causing a desired environmental change such as land use, or they may be intentional or unintentional by-products of other human activities, for example, pollution. The characteristics and importance of each pressure may vary from one region to another, but is often a combination of pressures that lead to environmental change. For example, climate change is a result of emissions of different greenhouse gases, deforestation and land-use practices. Furthermore, the ability to create and transfer environmental pressures onto the environment of other societies varies from one region to another. Affluent societies with high levels

of production, consumption and trade tend to contribute more towards global and transboundary environmental pressures than the less affluent societies which interact in more direct fashion with the environment in which they live.

State-and-trends

5. Environmental state also includes trends, which often refers to environmental change. This change may be natural, human-induced or both. Examples of natural processes include solar radiation, extreme natural events, pollination, and erosion. Key forms of human induced environmental change include climate change, desertification and land degradation, biodiversity loss, and air and water pollution, for example. Different forms of natural or human-induced changes interact. One form of change, for example, climate change, will inevitably lead to ecosystem change, which may result in desertification and/or biodiversity loss. Different forms of environmental change can reinforce or neutralize each other. For example, a temperature increase due to climate change can, in Europe, partly be offset by changes in ocean currents triggered by climate change. The complexity of the physical, chemical and biological systems constituting the environment makes it hard to predict environmental change, especially when it is subject to multiple pressures. The state of the environment and its resilience to change varies greatly within and among regions due to different climatic and ecological conditions.

Impacts

6. The environment is directly or indirectly affected by the social and economic sectors, contributing to change (either negative or positive) in human well-being and in the capacity/ability to cope with environmental changes. Impacts, be they on human well-being, the social and economic sectors or environmental services, are highly dependent on the characteristics of the drivers and, therefore, vary markedly between developing and developed regions.

Responses

7. Responses address issues of vulnerability of both people and the environment, and provide opportunities for reducing human vulnerability and enhancing human well-being. Responses take place at various levels: for example, environmental laws and institutions at the national level, and multilateral environmental agreements and institutions at the regional and global levels. The capacity to mitigate and/or adapt to environmental change differs among and within regions, and capacity building is, therefore, a major and overarching component of the response components.

Appendix IV

THE BIODIVERSITY CHALLENGE

1. The fourth Global Environment Outlook (GEO-4) report concluded that Biodiversity provides the basis for ecosystems and the services they provide, upon which all people fundamentally depend. Chapter 5 of the report identified the following main messages:

2. **People rely on biodiversity in their daily lives, often without realizing it.** Biodiversity contributes to many aspects of people's livelihoods and well-being, providing products, such as food and fibres, whose values are widely recognized. However, biodiversity underpins a much wider range of services, many of which are currently undervalued. The bacteria and microbes that transform waste into usable products, insects that pollinate crops and flowers, coral reefs and mangroves that protect coastlines, and the biologically-rich landscapes and seascapes that provide enjoyment are only a few. Although much more remains to be understood about the relationships between biodiversity and ecosystem services, it is well established that if the products and services that are provided by biodiversity are not managed effectively, future options will become ever more restricted, for rich and poor people alike. However, poor people tend to be the most directly affected by the deterioration or loss of ecosystem services, as they are the most dependent on local ecosystems, and often live in places most vulnerable to ecosystem change.

3. **Current losses of biodiversity are restricting future development options.** Ecosystems are being transformed, and, in some cases, irreversibly degraded, a large number of species have gone extinct in recent history or are threatened with extinction, reductions in populations are widespread and genetic diversity is widely considered to be in decline. It is well established that changes to biodiversity currently underway on land and in the world's fresh and marine waters are more rapid than at any time in human history, and have led to degradation in many of the world's ecosystem services.

4. **Reducing the rate of loss of biodiversity, and ensuring that decisions made incorporate the full values of goods-and-services provided by biodiversity will contribute substantially towards achieving sustainable development as described in the report of the World Commission on Environment and Development (Brundtland Commission report).**

(a) Biodiversity plays a critical role in providing livelihood security for people. It is particularly important for the livelihoods of the rural poor, and for regulating local environmental conditions. Functioning ecosystems are crucial as buffers against extreme climate events, as carbon sinks, and as filters for waterborne and airborne pollutants.

(b) From the use of genetic resources to harnessing other ecosystem services, agriculture throughout the world is dependent on biodiversity. Agriculture is also the largest driver of genetic erosion, species loss and conversion of natural habitats. Meeting increasing global food needs will require one or both of two approaches: intensification and extensification. Intensification is based on higher or more efficient use of inputs, such as more efficient breeds and crops, agrochemicals, energy and water. Extensification requires converting increasing additional areas of land to cultivation. Both approaches have the potential to dramatically and negatively affect biodiversity. In addition, the loss of diversity in agricultural ecosystems may undermine the ecosystem services necessary to sustain agriculture, such as pollination and soil nutrient cycling.

(c) Many of the factors leading to the accelerating loss of biodiversity are linked to the increasing use of energy by society. Dependence on and growing requirements for energy are resulting in significant changes in species and ecosystems, as a result of the search for energy sources and of current energy use patterns. The consequences can be seen at all levels: locally, where the availability of traditional biomass energy is under threat, nationally, where energy prices affect government policies, and globally, where climate change driven by fossil-fuel use is changing species ranges and behaviour. The latter is likely to have very significant consequences for livelihoods, including changing patterns of human infectious disease distribution, and increased opportunities for invasive alien species.

(d) Human health is affected by changes in biodiversity and ecosystem services. Changes to the environment have altered disease patterns and human exposure to disease outbreaks. In addition, current patterns of farming, based on high resource inputs (such as water and fertilizers) and agricultural intensification, are putting great strains on ecosystems, contributing to nutritional imbalances and reduced access to wild foods.

(e) Human societies everywhere have depended on biodiversity for cultural identity, spirituality, inspiration, aesthetic enjoyment and recreation. Culture can also play a key role in the conservation and sustainable use of biodiversity. Loss of biodiversity affects both material and non-material human well-

being. Both the continued loss of biodiversity and the disruption of cultural integrity represent obstacles towards the attainment of the Millennium Development Goals (MDGs).

6. Biodiversity loss continues because current policies and economic systems do not incorporate the values of biodiversity effectively in either the political or the market systems, and many current policies are not fully implemented. Although many losses of biodiversity, including the degradation of ecosystems, are slow or gradual, they can lead to sudden and dramatic declines in the capacity of biodiversity to contribute to human wellbeing. Modern societies can continue to develop without further loss of biodiversity only if market and policy failures are rectified. These failures include perverse production subsidies, undervaluation of biological resources, failure to internalize environmental costs into prices and failure to appreciate global values at the local level. Reducing the rate of biodiversity loss by 2010 or beyond will require multiple and mutually supportive policies of conservation, sustainable use and the effective recognition of value for the benefits derived from the wide variety of life on Earth. Some such policies are already in place at local, national and international scales, but their full implementation remains elusive.

Annex V

INDICATIVE AREAS OF COLLABORATION ON BIODIVERSITY-RELATED ISSUES OF EMG MEMBERS

The Convention on Biological Diversity depends on a wide range of partners, including in particular members of the EMG, to effectively implement its Strategic Plan and the 2010 biodiversity target. This is manifest through numerous Joint Work Plans (e.g. with FAO and its Commission on Plant Genetic Resources for Food and Agriculture as well as IPPC, UNCCD, UNEP, UNEP-WCMC, UNESCO, UNFF, UNDP) and Memoranda of Cooperation (e.g. CITES, CMS, ICAO, IPPC, UNCTAD, UNIDO, UNITAR, WIPO). Further information on partnerships and agreements is accessible from http://www.cbd.int/cooperation/partners.shtml and http://www.cbd.int/agreements/.

More specifically with regard to monitoring of the achievement of the 2010 biodiversity target, a number of EMG members already participate in the 2010 Biodiversity Indicators Partnership coordinated by UNEP-WCMC (see http://www.twentyten.net/Partnership/tabid/73/language/en-GB/Default.aspx).

At the same time there are other EMG members whose mandate may not be centrally linked to biodiversity itself, but which contribute significantly to enabling human societies to minimize biodiversity loss and to face its consequences and from whose active participation the EMG process would benefit. Examples of these would include ILO, UN-Habitat, UNHCR, WFP, WHO, WMO.