

Environment in the UN system

Note by the Executive Director

DRAFT

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LIST OF ACRONYMS

ADB	Asian Development Bank
AEWA	African-Eurasian Migratory Waterbird Agreement
AU	African Union
CBD	Convention on Biological Diversity
CTBTO	Comprehensive Nuclear-Test-Ban Treaty Organization
CCAD	Central American Commission for Environment and Development
CEB	United Nations System Chief Executives Board
CIFOR	Centre for International Forestry Research
CITES	Secretariat of the Convention on International Trade in Endangered Species of Wild Fauna and Flora
CLI	CropLife International
CMP	Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol
CMS	Secretariat of the Convention on Migratory Species
CoMI	Census of Marine Life
ECA	Economic and Social Commission for Africa
ECE	United Nations Economic Commission for Europe
ECETOC	European Centre for Ecotoxicology and Toxicology of Chemicals
ECLAC	Economic and Social Commission for Latin America and the Caribbean
EMEP	Geneva Protocol on Long-term Financing of the Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe
EMG	Environment Management Group
ESCAP	Economic and Social Commission for Asia and the Pacific
ESCWA	Economic and Social Commission for Western Asia
FAO	Food and Agriculture Organisation
GA	General Assembly
GBA	Global Biodiversity Assessment
GBO	Global Biodiversity Outlook
GEF	Global Environment Facility
GEMS	Global Environment Monitoring System
GEO	Global Environment Outlook
GEO	Group on Earth Observations
GEOSS	Global Earth Observation System of Systems
GIWA	Global International Waters Assessment
HDNO	Head Department of Navigation and Oceanography
HLCM	High Level Committee on Management
HLCP	High Level Committee on Programme
IEG	International Environmental Governance
IAEA	International Atomic Energy Agency

IASG	Inter-agency Support Group on Indigenous Issues
ICAO	International Civil Aviation Organisation
ICRAF	World Agroforestry Centre
IFAD	International Fund for Agricultural Development
ILO	International Labour Organisation
IMG	Issue Management Group
IMO	International Maritime Organisation
INSTRAW	International Research and Training Institute for the Advancement of Women
IPCC	Intergovernmental Panel on Climate Change
IOC-UNESCO	Intergovernmental Oceanographic Commission of UNESCO
IOCC	Inter-Organization Coordinating Committee
IOMC	Inter-Organization Programme for the Sound Management of Chemicals
ISA	International Seabed Authority
ISDR	United Nations International Strategy for Disaster Reduction secretariat
ITTO	International Tropical Timber Organization
ITC	International Trade Centre
ITU	International Telecommunications Union
IUCN	World Conservation Union
IUFRO	International Union of Forestry Research Organization
LDC	Least Developed Country
MA	Millennium Ecosystem Assessment
MEA	Multilateral Environmental Agreement
NATO	The North Atlantic Treaty Organization
NEPAD	New Partnership for Africa's Development
NOAA	National Oceanic and Atmospheric Administration
OCHA	Office for the Coordination of Humanitarian Affairs
OHCHR	Office of the High Commissioner for Human Rights
OPCW	Organisation for the Prohibition of Chemical Weapons
OSCE	Organization for Security and Cooperation in Europe
PAHO	Pan American Health Organization
PAN-Africa	Pesticide Action Network
PREDAS	Regional Programme to Promote Household and Alternative Energies in the Sahel
RAMSAR	Ramsar Convention on Wetlands Secretariat
REC	Regional Environment Center for Central and Eastern Europe
SAICM	Strategic Approach to International Chemicals Management
SBC	Secretariat of the Basel Convention
UN	United Nations
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNCCD	United Nations Convention to Combat Desertification
UNCTAD	United Nations Conference on Trade and Development

UNDESA/DSD	United Nations Department of Economic and Social Affairs, Division for Sustainable Development
UNDG	United Nations Development Group
UN/DM	UN Department of Management
UNDOALOS	Division for Ocean Affairs and the Law of the Sea of the Office of Legal Affairs of the United Nations
UNDP	United Nations Development Programme
UN/DPA	United Nations Department of Political Affairs
UN/DPI	United Nations Department of Public Information
UN/DPKO	United Nations Department of Peacekeeping Operations
UNEP	United Nations Environment Programme
UNEP-DELC	UNEP - Division of Environmental Law and Conventions
UNEP-WCMC	UNEP - World Conservation Monitoring Centre
UNECE	United Nations Economic Commission for Europe
UNESCO	United Nations Educational Scientific and Cultural Organisation
UNFCCC	United Nations Framework Convention on Climate Change
UNFPA	United Nations Population Fund
UNGA	United Nations General Assembly
UN-HABITAT	United Nations Human Settlements Programme
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
UNICPLOS	United Nations Informal Consultative Process on Ocean Affairs and the Law of the Sea
UNIDO	United Nations Industrial Development Organisation
UNITAR	United Nations Institute for Training and Research
UN/OLA	UN Office of Legal Affairs
UNPFII	United Nations Permanent Forum on Indigenous Issues.
UNU	United Nations University
UNU-IAS	United Nations University - Institute of Advanced Studies
UNWTO	World Tourism Organisation
UPOV	International Union for the Protection of New Varieties of Plants
UPU	Universal Postal Union
WCO	World Customs Organization
WFP	World Food Program
WHO	World Health Organisation
WIPO	World Intellectual Property Organisation
WMO	World Meteorological Organisation
WSSD	World Summit on Sustainable Development
WTO	World Trade Organisation
WWF	World Wildlife Fund/World Wide Fund for Nature

Executive Summary

- 1. Environment and development were acknowledged as representing UN system-wide challenges and opportunities already in the 1972 UN Conference on the Human Environment in Stockholm.** The environmental footprint of humanity has grown exponentially since 1972. The size of the footprint has followed the pace of a growing world population, stunning technological innovations and an ever expanding production and consumption of goods and services. Differences exist between the sizes of the footprint of different segments of the world population, but their cumulative effects have led to unprecedented levels of environmental change. These unprecedented changes are predicted to become even more severe if the current development patterns continue with potentially negative implications for economic and social development, especially for the poor and vulnerable groups in society and for future generations.
- 2. Environmental activities in the UN, has grown organically in response to emerging environmental problems and the evolution of the international environmental governance (IEG) system.** The system is a reflection of national political and economic interests and it has evolved in world of geopolitical change and increasing globalisation. Considerations such as of past and present responsibilities for environmental degradation, the need to avoid green conditionality, national sovereignty versus global commitments, and common but differentiated responsibilities have shaped the system. Increasingly observes from major groups has been invited in as an additional resource and reference point at the international level. As these factors have shaped the past, they will also continue to shape the future evolution of the IEG system and the environmental activities in the UN system.
- 3. Environmental activities have over the past four decades increasingly become an integral component of the wider UN system intrinsically linked with activities in a broad range of areas and reflecting a growing importance attributed to the environment by various governing bodies across the system.** While the integration of the IEG functions in the UN system is a significant achievement and represents important source of competence and capacity, it also represents a governance challenge. There is a need to strengthen coherence across the system with a view to ensuring delivery of UN system services to countries and to strengthen national coherence vis-à-vis the governing bodies of the various entities of the system. An effective system can help address accelerating environmental change which may adversely affect human well-being related to health, material needs, good social relations and security. The protection and enhancement of human-wellbeing is a common denominator which unites the entire UN system, and can be seen as the ultimate goal of sustainable development.
- 4. A significant number of UN institutions are involved in acquisition of environmental information through research, modelling, monitoring and observations, and the UN system has been at the forefront in developing international environmental assessment.** Significant attention has been given to the design and governance structure of these processes to ensure scientific independence and credibility on one hand and policy legitimacy and relevance on the other hand. The Intergovernmental Panel on Climate Change (IPCC) has set a standard for international assessment processes in the system. The UN system is also hosting a number of environmental scientific and technical advisory bodies, many of which are intergovernmental. A number of multilateral environmental agreements and all the three Rio conventions in particular have prominent intergovernmental scientific and technical advisory bodies.
- 5. There are now more than 500 international treaties and other agreements related to the environment, of which 323 are regional and 302 date from the period between 1972 and the early 2000s.** The environmental activities in the UN system have been regularly reviewed after the Stockholm Conference. The first decadal-review took place at the special session of the UNEP Governing Council in 1982. The second decadal-review, the 1992 United Nations Conference on Environment and Development (UNCED - also known as the Earth Summit), in Rio de Janeiro, Brazil which led to the adoption of Agenda 21. This decision paved the way for the establishment of the United Nations Commission on Sustainable Development (CSD). The CSD served as the Preparatory Committee for the third decadal review, the World Summit on Sustainable Development (WSSD), held in Johannesburg in 2002 which agreed on the Johannesburg Plan of Implementation. The fourth decadal review will take place at the United Nations Conference on Sustainable Development (UNCSD) - also referred to as 'Rio+20' - to be held in 2012.
- 6. The mainstreaming of environmental considerations into sectoral policies and strategies has not been adequate enough to address the underlying drivers of environmental change.** This is due to the scale of the challenge and a mix of factors related to amongst others the inherent inertia towards cooperation across the institutional silos of a sectoralised society, the complexity and fragmentation of environmental institutions, the failure of markets to reflect the value of environmental risks (environmental change) and opportunities (ecosystem services), and the demanding trade-offs between different interests and concerns in society. New opportunities for mainstreaming are however emerging. A shift toward a green economy through investments in addressing environmental change can generate economic wealth and job-creation which safeguard and enhance human well-being. The UN system is, with its many different

policy sectors institutions, uniquely placed to provide a comprehensive and multi-sectoral support to such a shift.

7. **A number of UN system entities are involved in efforts to ensure a responsive and cohesive approach to meeting country needs through capacity-building, technology support, the provision of financial support, training, enhancement of centres of excellence, promotion and support of South-South cooperation, exchanges of best practices and lessons learned, and development of partnerships and networks.** At the national level, UN Country Teams (UNCTs) present in 136 countries and serving all of the 180 countries where there are UN programmes facilitate coordinated development support of the UN system. The UNCT is composed of designated representatives of the agencies accredited to a given country (resident as well as non-resident) under the leadership of the UN Resident Coordinator (RC), who is also the designated representative of the UN Secretary-General. The main purpose of the UNCTs is for individual agencies to plan and work together as part of the Resident Coordinator system to deliver tangible results in support of the development agenda of the government. Country teams are responsible for the RC/UNCT work plan and for development, implementation and monitoring of the UN Development Assistance Framework (UNDAF). In 2007, "Delivering as One" pilot projects were initiated in eight countries. Most of the large UN bodies have regional offices which are engaged in environment-related activities, such as UNDP, UNEP, WHO, FAO, and the Regional Economic Commissions. Regional level coordination of environmental activities often occurs in the context of ministerial environmental conferences which regularly take place in several UN regions. UN organizations support these ministerial processes by providing secretariat functions.

8. **It is, today, difficult to assess the total amount of resources which is invested in environmental activities at normative and operational level in the UN system.** The current report gives an account of some of the main UN system actors involved in funding environmental activities, together with some preliminary and incomplete indicative levels of annual international environmental financial flows. It should be noted that there are some glaring gaps in the information provided, and that the figures presented are not necessarily comparable, amongst others because data are drawn from different years and represent a mix of recorded expenditures and budgeted costs. Estimation of funds are based on judgement by providers and budget processes of different institutions, and no common criteria for the different areas have been established for this mapping exercise. Also, financial flows may have been counted several times as they flow from one organisation to another or between funding categories. Furthermore, as much of the investment in environmental activities happens through mainstreaming, it is often times also difficult to distinguish environmental activities from the sectoral ones. The considerations reflected above illustrates the challenges that would have to be overcome in the further efforts to complete the current mapping exercise, or in developing a possible future environmental financial tracking system.

9. **Effectiveness, efficiency and coherence within the UN system are in principle achieved through a mix of system-wide intergovernmental, financial and knowledge management measures coupled with interagency cooperation.** Overall coordination in the UN takes place under the Chief Executives Board for Coordination (CEB), chaired by the Secretary General. Environmental relevant coordination activities directly under the CEB include climate change, water oceans and energy. As part of the commitment of the Secretary-General to foster a One UN approach in the area of climate change, the CEB established in 2007, under the High Level Committee on Programme (HLCP) a Working Group on Climate Change. The reinvigorated Environment management Group (EMG) is not formally part of the CEB, but works in close cooperation with the CEB system on several issues. In addition, there are a number of other collaborative efforts on environment in the UN system. These efforts are widespread but ad hoc in nature, in particular at the national level.

10. **The UN system, represented by the members of the Environmental Management Group, collectively constitutes a unique compilation of institutional capacity for addressing environmental change.** The role as facilitator of a UN system-wide coordinated approach to the environment and development nexus which so rightly was identified when UNEP was established, has long since not been played by UNEP alone. New opportunities for IEG reform are emerging. Political space for action is increasing following new insights in the risks of environmental change and the value of ecosystem services. Information and communication technologies connect people and institutions and allow for new and innovative consortium arrangements. New markets for trade in emissions and ecosystem services are opening up. Numerous lessons learned from four decades of IEG practice show that experiences in one area can apply to another, or be up-scaled or down-scaled. IEG reform efforts takes place amidst a continuously evolving complex system of international public institutions. Ultimately the efficiency of these institutions will be tested against how well they act together with the national and local institutions in setting the enabling conditions for private sector, house-holds and individuals to address the impact of environmental change on human well-being.

Introduction

11. This report is prepared by UNEP in close cooperation with the Environment Management as an input to the work of the UNEP Governing Council/Global Ministerial Environment Forum (GC/GMEF) on broader reform of the international environmental governance system and to the preparatory process. It is also meant as an input to the preparatory process to the United Nations Conference on Sustainable Development (UNCSD) - also referred to as 'Rio+20' - to be held in 2012, which amongst others will consider the institutional framework for sustainable development.

12. Several governments participating in the process on international environmental governance reform have requested an overview of environmental activities in the UN system to support their deliberations. The current report responds to such requests by outlining broadly how the UN system is engaged in performing the key objectives and functions being considered by the Consultative Group. It is not an exhaustive presentation of each entity's activities, rather it highlights the functions the UN system is performing, gives examples of past and ongoing work and draws attention to some lessons learned. The analysis focuses on the role of intergovernmental bodies, secretariats, funds and coordination mechanisms.

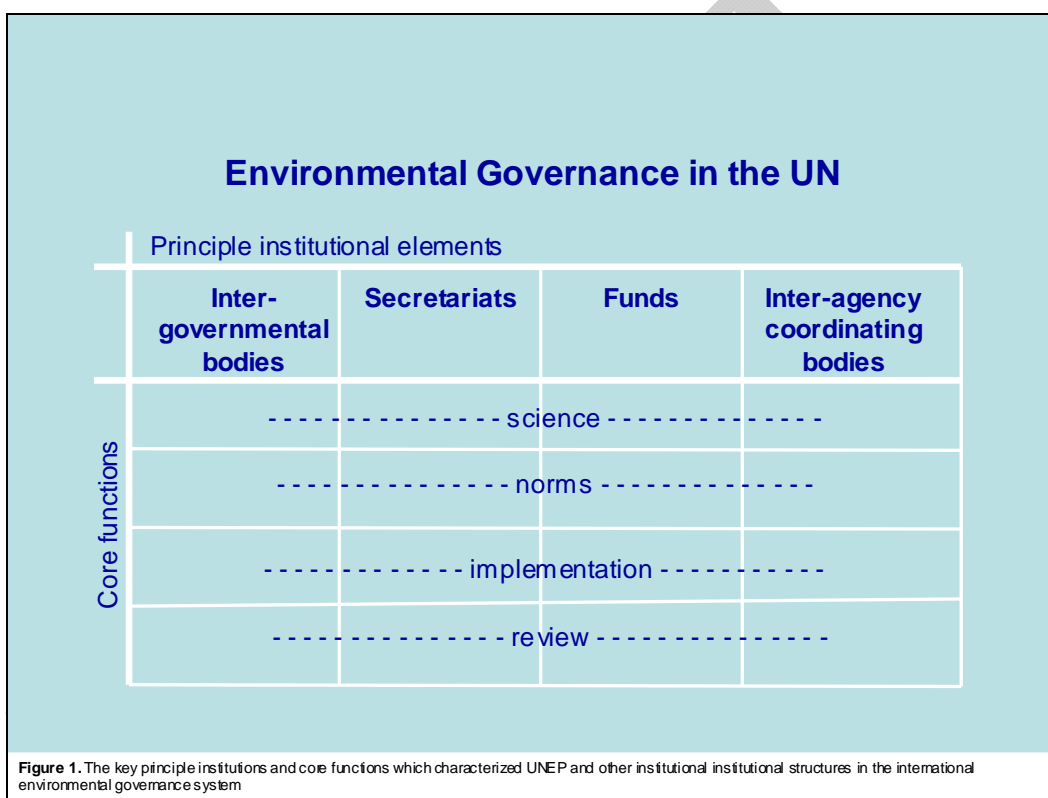
13. The current report sets out in chapter I how the environmental activities in the UN system are conducted in 2009 against the baseline of UNEP's original four-pillar design and mandate of 1972. Against this baseline an analysis is undertaken of the core objectives of IEG referred to above.

14. The note draws on publicly available information and preliminary findings of a stocktaking exercise initiated by the Environmental Management Group (EMG) in 2007 which was undertaken with the support of United Nations Institute for Training and Research (UNITAR). Annex I: Environmental management Profile of EMG Members and Annex II: UN Collaboration in Thematic Areas of Environmental Management of the draft note are both based on that exercise. The note has been subject to a review by the UN system through the Environment Management group. The current draft has been subject to three rounds of review by members of the EMG and has benefited from numerous substantive comments and inputs from within the UN system.

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I. Environment: a UN system-wide challenge

15. Environment and development were acknowledged as representing UN system-wide challenges and opportunities already in the 1972 UN Conference on the Human Environment in Stockholm. UNEP was the institutional mechanism established to ensure the follow up of the Conference. The promotion and coordination of environmental activities within the whole UN system was one of the core function assigned to UNEP when it was established in 1972. The four pillars constituting UNEP: - the Governing Council of UNEP (which since 2000 also sits as the Global Ministerial Environment Forum); - the Environment Secretariat; - the Environment Fund; and - the Environment Coordination Board were all given mutually supportive functions and responsibilities in this respect¹. As integral parts of the UN system these elements could all draw from and call upon the authority of the highest levels in the UN. Environmental issues could be brought to the attention of the General Assembly, the Secretary General and the Administrative Committee on Coordination (now CEB) for consideration in order to anchor further action at these levels. The principle institutional elements of the initial design of UNEP and the core functions assigned to UNEP can also be found in the institutions which later have been added to the international environmental governance system (see figure 1)



16. The environmental footprint of humanity has grown exponentially since 1972. The size of the footprint has followed the pace of a growing world population, stunning technological innovations and an ever expanding production and consumption of goods and services. Differences exist between the sizes of the footprint of different segments of the world population, but their cumulative effects have led to unprecedented levels of environmental change. These changes are predicted to become even more severe if the current development patterns continue. In March 2009 the General Assembly expressed its deep concern over unprecedented environmental changes at all levels and its potentially negative implications for economic and social development, especially for the poor and vulnerable groups in society.²

17. The scale and complexity of interactions between human society and the environment are a major reason why it has proved so hard for the international community and nations to halt environmental change. A better understanding of this interaction can help society in mainstreaming the management of

¹ UNGA resolution 2997 of 1972

² See resolution 63/220 of 9 March 2009 in which the Assembly referred to evidence in the fourth volume *Global Environment Outlook: Environment for Development (GEO-4)* (see <http://www.unep.org/geo/geo4/media/>). Changes referred to in the volume include global warming, outdoor and indoor air pollution, depletion of the stratospheric ozone layer, availability of freshwater, loss of biodiversity amongst others in the form of species loss and degradation of ecosystem including loss of forest cover, overexploitation of aquatic ecosystems and land degradation.

risks – such as climate change and degradation of ecosystem services – and opportunities – such as use of ecosystem services – into economic and social processes. The scale of the challenge has given rise to an increased ownership taken by all parts of the system in recognition of the need to address environmental concerns as a system-wide challenge and in the context of the specific mandates of all entities. Environment is moving from the periphery to the core of policy-making and its dimensions are increasingly mainstreamed into sectoral plans and policies³, as reflected amongst others in the Millennium Development Goal 7 on achieving environmental sustainability.

18. The expanding environmental agenda and its emerging integration into the development agenda, including the economic and social agenda, has made the performance of UNEP's originally envisaged system-wide role more demanding, while UNEP's own system-wide role has been eroding. For example, the Governing Council was mandated to give general policy guidance to the UN, yet it now only occasionally calls on other parts of the UN system to act. The secretariat which was requested to coordinate programmes and advise intergovernmental bodies, is now mostly engaged in thematic cooperation with other agencies. The Environment Fund which was intended to fund environmental activities in the entire UN system, and of which 40% in the late 1980's went to other UN agencies, now essentially finances UNEP's activities only. The Environment Coordination Board (ECB) which was meant to promote cooperation in the implementation of environmental programmes in the UN and was part of the overall coordination mechanism of the UN System⁴, in its new incarnation, the Environment Management Group (EMG), focuses on time-bound issues and is not a formal part of the Secretary General's coordination mechanism, i.e. the Chief Executives Board on coordination (CEB).

19. The increasing need to address environmental change has also put more demands on other parts of the system and increased the demand for system-wide coherence at all levels. It has impacted all entities of the system and challenged the division of labour and roles and responsibilities among entities. Mandates have evolved, but not always in a coherent way. This development is not unique to environment; challenges such as humanitarian response, disaster risk reduction, and gender have put similar demands on the system for more coherence.

20. Effectiveness, efficiency and coherence within the UN system is in principle achieved through a mix of system-wide intergovernmental, financial, knowledge management and interagency coordination measures. Central to coherence in the environment-development nexus at intergovernmental level is UNGA, ECOSOC, functional commissions under ECOSOC, including CSD, the governing boards of UN agencies, including UNEP GC/GMEF, and the COP's of MEAs, in particular of the three Rio Conventions. The role of some of these bodies in this respect is reviewed in Chapter III. The global financial mechanisms, such as the GEF, are a vehicle for coherence environmental activities but have limited impact on coherence in the area of development cooperation. Their role is considered in chapter V. Shared knowledge in the form of conceptual approaches, assessment processes and knowledge management systems (see Chapter II) can also be an effective vehicle for coherence, as demonstrated amongst others through IPCC and the Millennium Ecosystem Assessment. The fourth vehicle is interagency coordination at the secretariat level (see Chapter VI), and the fifth vehicle is interagency coordination at the country level in support of countries' own development aspirations (see Chapter IV).

21. The internal response by the UN system to expanding demands in several areas has inter alia been a strengthening of interagency coordination procedures through the Secretary-General's coordination mechanism, i.e. the Chief of Executives Board on Coordination (CEB) system at the global level and through the Delivering as One approach at the country level currently piloted in eight countries. While the strengthening of global and country level coordination have been the focus of these mechanisms, less attention has so far been paid to strengthening system-wide coherence at the regional level.

22. The combined UN system environment and development related secretariat resources, competencies, experiences, capacities and know-how represents a unique resource. At least 44 organizations are actively engaged in environmental activities (see annex 1). Many organisations have, over the years, established separate environmental divisions, units or programme elements which address specific environmental issues pertaining to the mandate of their organisation and for mainstreaming environmental considerations into their programmes and policies.

23. Agencies are increasingly working together on environmental activities. The EMG is gaining considerable ground in facilitating thematic inter-agency processes among its 44 members, which include the World Bank, the International Monetary Fund and the MEA secretariats. In addition, thematic inter-agency coordination mechanisms, notably UN-Energy, UN-Water, and UN-Oceans, have been set up in a number of other environment-related areas to promote coherence. Coordination mechanisms are also in place for MEAs and numerous other collaborative initiatives (see chapter VI and annex II).

³ See for example GEO 4 and UNEP's Medium-term Strategy 2010-2013.

⁴ The Administrative Committee for Coordination (ACC)

II. Creating a strong, credible and coherent science base and policy interface

24. A core function assigned to UNEP Governing Council in 1972 was to “keep under review the world environmental situation”. The purpose of such an ongoing activity was to “ensure that emerging environmental problems of wide international significance receive appropriate and adequate consideration by Governments”. Efforts in this respect have expanded tremendously since 1972, amidst a growing awareness of the need to understand how society interacts with the environment. Not only do policy-makers need to understand environmental change and its often inbuilt time-lags, but they also need to know what causes the environment to change and how these changes impact on human well-being⁵.

25. In keeping the environment under review the Council was tasked to “promote the contribution of the relevant international scientific and other professional communities to the acquisition, assessment and exchange of environmental knowledge and information”. For many years this endeavour was pursued within the framework of a UN system-wide Earthwatch, an idea which was conceived in the 1972 UN Conference on the Human Environment in Stockholm and reinforced by the 1992 UN Conference on Environment and Development in Rio de Janeiro.

26. The conceptual approach to understanding environmental problems has evolved to a focus on understanding the dynamic society-environment interactions and the risks and opportunities that lay therein (see figure 2). Such an approach is needed to facilitate a more effective mainstreaming of the management of environmental risks – such as climate change and degradation of ecosystem services – and opportunities – such as use of ecosystem services – into sectoral policies and strategies and strategies which can help abate adverse impacts while at the same time stimulating green economic growth and job creation.

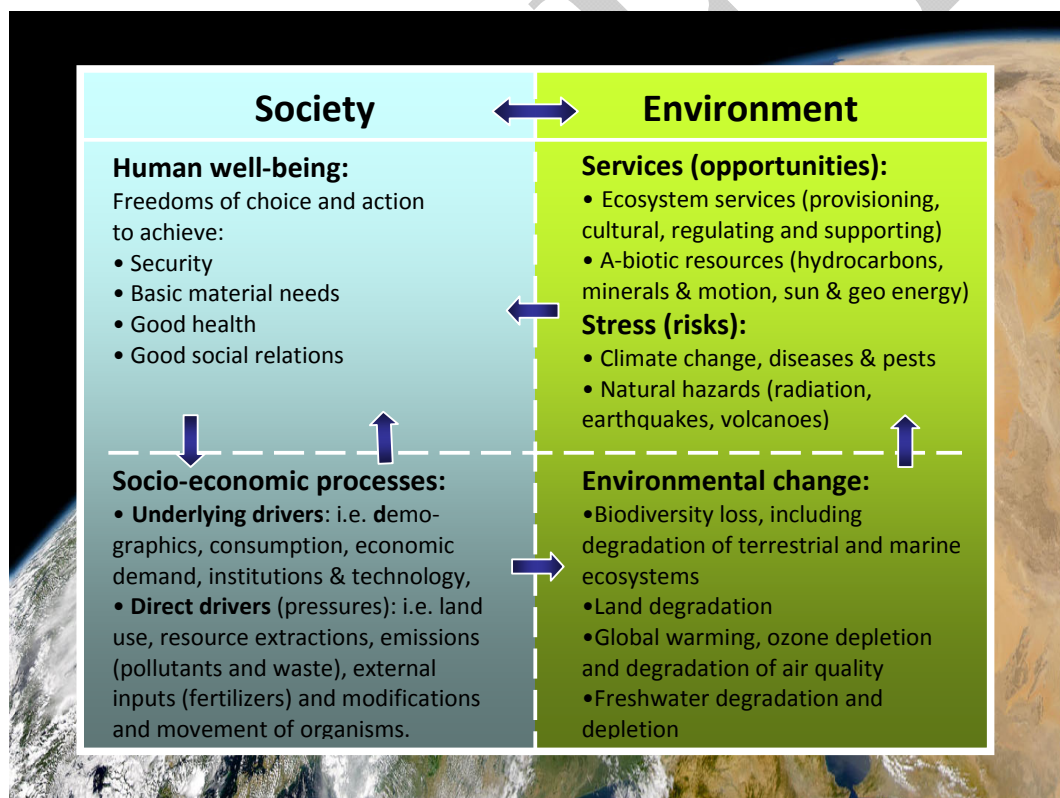


Figure 2 The interaction between society and environment: A look at the Earth will reveal a planet with diverse forms of life including a species, *Homo sapiens*, whose interactions with the environment has put it on a path to rapid change. The future wellbeing of the individuals of this species rests on their collective ability to understand this interaction and manage the risks and opportunities therein. The elements presented in this figure are drawn from the conceptual framework of the fourth Global Environmental Outlook, GEO4.

⁵ See for example the fourth volume of the Global Environment Outlook: Environment for development (GEO4) and its conceptual framework where human well-being in form of security, basic material needs, good health, and good social relations were central. See also decision 1 of the first UNEP Governing Council of 22 June 1973 which referred to the need to safeguard human well-being in the general policy objectives for UNEP.

27. Understanding the society-environment interactions requires data, expertise and knowledge from many walks of life, something the UN system with its broad technical expertise base is well placed to contribute to. Efforts to keep the environment under review are, however not confined to the technical level alone. Science and policy communities need to mutually inform each other through formal and informal processes and this dialogue can be helped through a well-structured science-policy interface. The key processes constituting this interface and the role of the UN system is playing in facilitating these processes are outlined below.

A. Acquisition of environmental information: - research, modelling, monitoring and observations

28. The acquisition of environmental knowledge and information is done through research, monitoring and observations. Modelling of environmental change predictions, especially climate change and development of scenarios has become an increasingly important tool. Most of the world's capacity in acquisition of environmental information is found in national public institutions. The UN system is however involved in the management of programmes, frameworks and systems which facilitates national cooperation in the area.

29. A number of UN system entities are involved in environmental research and modelling. The United Nations University (UNU) has for example a research and capacity-building programme on environment and sustainable development (ESD)⁶. The United Nations Educational, Scientific and Cultural Organisation (UNESCO) has its Natural Science Sector employing about 200 staff members⁷. Its Man and Biosphere Programme was launched in 1970 and now contains a network of more than 450 sites which serves amongst others as a foundation for conducting research and promoting earth sciences and earth system monitoring. The IAEA, under its Environment Programme, manages several Technical Cooperation projects, as well as Coordinated Research Programmes for development and capacity building⁸. A prominent example of the UN systems facilitation of in research programmes is the World Climate Research Programme (WCRP) which was established in 1980, under the joint sponsorship of the World Meteorological Organization (WMO) and the International Council for Science (ICSU). Since 1993, WCRP has also been sponsored by the Intergovernmental Oceanographic Commission (IOC) of UNESCO. UNEP is currently facilitating a similar but complementary initiative which involves the communities engaged in research on impacts of, vulnerabilities and adaptation to climate change.

30. A core component of the initial Earthwatch concept managed by UNEP was the development of a Global Environment Monitoring System (GEMS). Initially, GEMS focused on developing monitoring methodologies, establishing quality control systems and global databases, capacity-building and technical support. The system was not maintained as a coherent system, and one of its initial components GEMS/Air does no longer exist. However, GEMS/Water is still a UNEP programme, which since 1978, has been hosted at Environment Canada's National Water Research Institute. Since 1976, GEMS/Food implemented by the World Health Organisation (WHO) has provided information on levels and trends of contaminants in food. The Natural Resources Management and Environment Department of the Food and Agriculture Organization (FAO) has established an operational monitoring service on environmental and agricultural crop production that provides information to support Global Information and Early Warning System on food and agriculture, Emergency Centre for Locust Operations, Agrometeorology Group, Land Cover assessment and monitoring, Global Fire Information Management System, and regional and national food security and early warning systems, as well as operational geospatial data governance, discovery and repository tools that are playing an increasingly important role on utilization of environmental information products to members of the larger international community concerned with sustainable development, food security and responses to climate change.

31. Advances in remote sensing and geographical information systems have led to the evolution of global observing systems. UNEP spearheaded the application of these systems through the establishment of the Global Resource Information Database (GRID) system. Like GEMS it suffered from inadequate funds, lack of government oversight and was overtaken by technological events. While some centres still exist it never evolved into a repository of geo-referenced environmental data as was envisaged. In the nineties, UNESCO, WMO, UNEP and the Food and Agriculture Organisation (FAO) in partnership with ICSU initiated the formation of the three Global Observing Systems to monitor climate change, ensure data availability and build predictions in support to sustainable development: the Global Climate Observing System (GCOS) coordinated by WMO, the Global Ocean Observing System (GOOS) coordinated by UNESCO/IOC, and the Global Terrestrial Observing system (GTOS) coordinated by FAO.

⁶ <http://www.unu.edu/esd/index.html>

⁷ http://portal.unesco.org/science/en/ev.php-URL_ID=5805&URL_DO=DO_TOPIC&URL_SECTION=201.html

⁸ IAEA-EL website: <http://www.iaea.org/monaco>, IAEA-TC website: <http://www-tc.iaea.org>

32. Increasingly the overall coordination and architectural development of such systems takes place under the auspices of the Group on Earth Observations⁹ and its efforts in establishing a Global Earth Observation System of Systems (GEOSS).

B. Environmental assessments

33. Assessments analyse data and information stemming from research, modelling, monitoring and observations. Assessments vary in scope and in process. Commonly used tools are environmental impact assessments of concrete projects or Strategic Environmental Assessments of sector-wide or national policies. States of the Environment reports are commonly used at national and sub-national level as are the Country Environment Analysis (CEA) of the World Bank or the regional development banks and the Country Environment Profile (CEP) of the European Commission. (see analysis presented to the 25th session of the Governing Council¹⁰). A task team under the OECD Environment is currently looking into the possibilities for enhancing environmental assessments in a more harmonized way that also seeks to build national capacity and ensure greater country ownership. At the international level a whole host of assessments with different scope and process have evolved over the last two decades. A lot of attention has been given to the design and governance structure of these processes to ensure scientific independence and credibility on one hand and policy legitimacy and relevance on the other hand. The UN system has been at the forefront in developing these processes. An analysis of these assessments was presented to the 25th session of the UNEP Governing Council¹¹.

34. The Intergovernmental Panel on Climate Change (IPCC) is the most prominent international assessment process. The panel was established in 1988 by the governing bodies of WMO and UNEP and is served by a joint secretariat provided by the two organisations. It mobilises national and independent expertise and follows an elaborate process which includes peer review and procedures for intergovernmental oversight and endorsement of the final reports. Financed by members of the panel and in-kind contributions from member states, its fourth report was published in 2007 and its 20 years of contribution to addressing climate change and support to the work of the UNFCCC earned it the Nobel Peace Prize in 2007. In many ways the IPCC experience has a parallel in the The Technology and Economic Assessment Panel (TEAP) under the Montreal Protocol on Substances that deplete the Ozone Layer. UNEP initiated the assessment panel process in 1988 pursuant to Article 6 of the Montreal Protocol and reports have been prepared regularly since 1989 with the support also by WMO.

35. Non-recurrent global environmental assessments at thematic level include the Global Biodiversity Assessment (GBA) (UNEP 1995), the Global International Waters Assessment (GIWA) (UNEP 2006) and the Millennium Ecosystem Assessment (MA) (2005) which was prepared under the auspices of UNEP through a broad partnership including CBD, CITES, FAO, UNCCD, UNDP, UNESCO, UNDP, World Bank and WHO. GEF is also financing the Land Degradation Assessment in Drylands (LADA) project supported by FAO and UNEP. None of these assessments had an intergovernmental governance structure. The International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD) (2008) co-sponsored by FAO, GEF, UNDP, UNEP, UNESCO, World Bank, and WHO however, was an intergovernmental process with a multi-stakeholder Bureau. All of these global assessments with exception of the GBA contained regional and sub-global assessment components. The Global Environment Facility (GEF) has played a key role in funding all of these assessments.

36. Other well established thematic assessment processes include the Global Biodiversity Outlook of the CBD, whose third edition (GBO-3)¹² has been published on 10 May 2010 and is one of the principal milestones of the UN's International Year of Biodiversity, the State of the World's Plant Genetic Resources for Food and Agriculture (1998)¹³ which set the scene for the Global Plan of Action for the Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Agriculture¹⁴ and the State of the World's Animal Genetic Resources for Food and Agriculture. The Draft Second Report on the State of the World's Plant Genetic Resources for Food and Agriculture (2010)¹⁵ was presented to the Commission on Genetic Resources for Food and Agriculture, at its Twelfth Regular Session, and endorsed by the Commission as "*the authoritative assessment of this sector.*" The final report will be launched in July 2010.

⁹ The Group on Earth Observations is an intergovernmental mechanism established to develop a 10-year implementation plan for building a coordinated, comprehensive and sustained Global Earth Observation System of Systems (GEOSS). The focus of the Group is on advancing the GEOSS concept across the nine social benefit areas, developing the architecture and data policy required for GEOSS, further developing the science underpinning GEOSS, promoting sustained interactions with users of Earth observations and ensuring that the global capacity to produce and use Earth observations is developed.

¹⁰ UNEP/GC.25/inf/12/Add.1

¹¹ UNEP/GC.25/inf/12

¹² Available at : <http://gbo3.cbd.int/>

¹³ Available at : <ftp://ftp.fao.org/docrep/fao/meeting/015/w7324e.pdf>

¹⁴ Available at : <ftp://ftp.fao.org/docrep/fao/meeting/015/aj631e.pdf>

¹⁵ Available at : <ftp://ftp.fao.org/docrep/fao/meeting/017/ak528e.pdf>

The state of the world assessments of plant and animal genetic resources were the result of country-driven processes which also involved scientific review and validation. FAO also prepared the Global Forest Resource Assessment and State of the World Fisheries and Aquaculture while the World Water Development Report was published by UNESCO on behalf of the UN World Water Assessment Programme which consists of a broad range of UN partners from UN funds, programmes, agencies, regional commissions and secretariats of conventions.

37. Two new intergovernmental assessment processes are currently being considered. The first concerns an assessment of the marine environment. The UN General Assembly is currently considering the modalities of the regular process for global reporting and assessment of the state of the marine environment, including socio-economic aspects. The consideration is based on recommendation from an intergovernmental and expert-driven process jointly managed by UNEP and UNESCO/IOC in cooperation with FAO and WMO. The second process has involved intergovernmental and multi-stakeholder consideration of the possible establishment of an intergovernmental science-policy platform on biodiversity and ecosystem services (IPBES). In June 2010, following three intergovernmental and multi-stakeholder meetings concerning the form and function of a potential IPBES, with the “Busan Outcome” governments have giving the green light to its future establishment. It is anticipated that in many ways the independent platform will mirror the Intergovernmental Panel on Climate Change (IPCC) which has assisted in catalyzing world-wide understanding and governmental action on global warming. It is intended that both new bodies and processes will help to ensure the more effective use of scientific and technical knowledge in the development of policy at all levels, and in its implementation.

38. The Global Environment Outlook was initiated in 1995 by UNEP’s Governing Council in response to the need for a comprehensive and integrated assessment of the global environment. In 2003 the Council initiated a consultation on strengthening the scientific base of UNEP which led to measures to further evolve the GEO process into a more rigorous scientific and expert-driven process with ad-hoc elements of intergovernmental oversight and endorsement. The twenty-fifth session of the Governing Council requested the Executive Director to prepare a fifth GEO through a process with intergovernmental components similar to that of the fourth assessment. The Council requested amongst others that the report should contain policy options which could speed up the realisation of internationally agreed goals and targets and inform the strategic directions of UNEP.

39. UNEP’s International Panel for Sustainable Resource Management is another integrated assessment mechanism. It was recently established to undertake assessments which can contribute to a better understanding of how to decouple economic growth from environmental degradation. Other economically focused assessments include UNEP’s work with partners within the United Nations system, on a report that will make the economic case for a green economy and a report on the economics of biodiversity and ecosystems.¹⁶

40. A number of development assessment reports regularly produced by the UN system also increasingly consider environmental change as a defining parameter. In recent years the Human Development Report by UNDP have focused on issues such as water and climate change in global, regional and, increasingly, also in national reports. The same trend can be observed in the World Development by the World Bank and publications on economic and social affairs by DESA. Likewise, the UN-HABITAT Global Report on Human Settlements is focusing in 2011 on Cities and Climate Change and in 2013 on Sustainable Urban Transport. These reports contain information the social and economic aspects of sustainable development which are critical to understand in order to address environmental change.

C. *Information exchange*

41. A core component of Earthwatch was the establishment by UNEP of an environmental referral system, later called INFOTERRA. The system was supporting information exchange and was an active programme element of UNEP until the mid-nineties when the support to the system was drastically reduced, amongst others, because of limitations in funding. Ironically this happened at a time when the world was just about to witness information and communication technologies developments which revolutionised the exchange of information. These developments facilitated the growth of national and regional environmental information networks and systems such as in Africa¹⁷, the EU¹⁸, the United States of America¹⁹ and other federal States, such as Australia,²⁰ Brazil²¹ and India²².

¹⁶ See the interim report at http://www.unep.org/greeneconomy/docs/TEEB_English.pdf.

¹⁷ The Africa Environment Information Network (AEIN)

¹⁸ The European Environmental Information and Observation Network (EIONET)

¹⁹ The exchange network helps the US Environmental Protection Agency (EPA), federal states, ethnic groups, territories and regulated facilities exchange environmental information more efficiently (see also <http://www.exchangenetwork.net>).

²⁰ Environmental Resources Information Network (ERIN), see <http://www.deh.gov.au/erin/index.html>.

²¹ Sistema Nacional de Informação sobre o Meio Ambiente (SINIMA), see <http://www2.ibama.gov.br/~cni/sinima.htm>.

²² Environmental Information System (ENVIS), see <http://www.envfor.nic.in/envis/envis.html>.

42. Information networks help sustain capacity-building as amongst others identified in the Bali Strategic Plan and twinning arrangements between its nodes as demonstrated amongst others in the case of the Africa Environment Information Network. Networks make it possible to bridge scales, cover multiple themes, facilitate harmonisation of data and help aggregation and disaggregation of data. The UN statistical division works on gathering environmental data. A number of other UN system organisations are involved in gathering of nationally reported data and information on environmental, social and economic issues. The development of environmental and sustainable development indicators has been on the agenda of several entities including DESA, CBD, FAO and UNEP. The MDG data and analyses (including for MDG7) are the product of the work of the Inter-agency and Expert Group (IAEG) on MDG Indicators, coordinated by the United Nations Statistics Division. A database of MDG data is maintained and available online²³.

43. Web-based information platforms of up-to-date, coherent and quality-assured priority data and information, indicators, early warning and alert services draw information from information networks, research, monitoring and observations. The FAO Global Information and Early Warning System (GIEWS)²⁴ provides early warnings of impending food crises in individual countries which can be linked to environmental or disasters causes and keeps the world food supply/demand situation under continuous review so that appropriate actions can be taken by the governments, the international community, and other parties. A similar example is the work by UNESCO IOC on the establishment of a tsunami early warning system. Another recent example is the decision in the high level declaration by the third World Climate Conference to develop with the support of WMO a Global Framework for Climate Services based on networking and the development of information systems and user interfaces²⁵.

D. Scientific and technical advice

44. Many of the environmental scientific and technical advisory bodies in the UN system are intergovernmental. A number of multilateral environmental agreements and all the three Rio conventions in particular have prominent intergovernmental scientific and technical advisory bodies. These bodies consider assessment findings, commission studies, operate networks and advise their parent body. One of the oldest and still active non-intergovernmental advisory bodies is the Group of Experts on Scientific Aspects of Marine Environmental Protection (GESAMP). It was established in 1969 and advises the UN system on the scientific aspects of marine environmental protection. At present it is jointly sponsored by eight UN organizations with a secretariat hosted by IMO. Another prominent non-intergovernmental advisory body is the Scientific and Technical Panel (STAP) of the GEF managed by UNEP.

45. Several of the FAO governing bodies are reviewing issues related to environment. The 22nd session of the Committee on Agriculture in June 2010 will discuss “sustainable crop production intensification through ecosystem approach and services and enabling environment”. Its previous session in April 2009 reviewed partnerships to enhance Organic Agriculture and the 20th session in 2007 discussed a paper entitled “Environment and Agriculture”. The Committees on Forestry and on Fisheries, respectively the highest FAO Forestry and Fisheries statutory bodies, identify emerging policy and technical issues, including environmental ones, to seek solutions and advise FAO and others on appropriate action. The FAO Committee on World Food Security (CFS) approved at its last session in November 2009 a reform of the Global Food Security governance which will notably strengthen the participation of Civil Society/Non-Governmental Organizations (CSOs/NGOs) in the discussions of the Committee as well as the synergies between world class academic/scientific knowledge, field experience, knowledge from social actors and practical application in various settings through a High Level Panel of Experts on Food Security and Nutrition. This recent reform of the governance of World Food Security could be a good example for the planned revision of international environmental governance.

46. The UNEP Governing Council has, however, never established any intergovernmental technical and advisory subsidiary body which could maintain the technical agenda for keeping the environmental situation under review and ensure that the different functional elements of the science-policy interface complement each other. The collective capacity to perform this technical oversight function is apparent in the many highly competent regional and national environmental authorities around the world. The Council has itself mobilised this capacity in its efforts to explore ways of strengthening the scientific base of UNEP. In 2003 the Council discussed the proposal contained in the Cartagena package to consider the establishment of an Intergovernmental Panel on Global Environmental Change as a subsidiary advisory body²⁶. The Council did not agree on this proposal and initiated instead consultations on how to strengthen the scientific base of UNEP.

47. The question of strengthening the scientific base of UNEP was considered in a series of extensive consultations among governments, experts and agencies which concluded in 2004 with an agreed

²³ <http://unstats.un.org/unsd/mdg/Data.aspx>

²⁴ <http://www.fao.org/giews/english/index.htm>

²⁵ http://www.wmo.int/wcc3/page_en.php

²⁶ UNEP/GC.22/4/Add.1

set of gaps and needs²⁷. To address those needs the Executive Director proposed to the Council in 2005 a range of measures which followed three tracks. Firstly, a strengthened GEO process, which eventually assisted the Council and the General Assembly in expressing themselves substantively on the state of environmental change and its implications for development²⁸. Secondly, a refocused sub-programme on assessment and early warning of the biennial programme of work (POW) focusing on three core elements: assessments, networking and capacity building, whose elements are still reflected in the POW 2010-2011 although in a more integrated fashion. Thirdly, a proposed Environment Watch framework, which presented a longer term and more elaborate consideration of how the same three core elements could be mutually enhanced in the pursuit of a multi scaled and multi thematic knowledge infrastructure. Environment Watch was considered by the Council in four consecutive sessions and evolved from a proposed framework, via a proposed system, then a proposed intergovernmental targeted strategy, to a secretariat strategy. The 25th session of the Council in 2009 set out the directions for the further strengthening of the science base of UNEP including by noting the latest version of the strategy.

48. The recent developments in the area of creating a strong credible and coherent science base have centred on how the science-policy interface can be strengthened from national via regional to global level. Environmental change is predicted to become even more severe if the current development patterns continue, in particular in the area of climate change. The limited availability of environmental data at the country level is often a bottleneck for translating knowledge into advice that can inform the broader spectrum of development decisions at that level.

III. Developing a global authoritative and responsive voice for environmental sustainability

49. Promotion of international cooperation on environmental issues was one of UNEP's main responsibilities at its outset in 1972. The Governing Council was requested to provide policy advice and direction for environmental programmes in the UN system and review their implementation. The UN system has facilitated the development of international cooperation on environment and sustainable development. Such cooperation comes in different forms and shapes and includes international law; international policy organs and soft law instruments; and integration of the environment into development cooperation and economic activities.

A. International law

50. There are now more than 500 international treaties and other agreements related to the environment, of which 323 are regional and 302 date from the period between 1972 and the early 2000s²⁹. These instruments have all been carefully negotiated to balance the interests of the different member states including those related to the role of the environment in the wider development agenda. Agreed principles, objectives, commitments, standards and compliance measures constitute the foundation for a binding cooperation regime. Their implementation is overseen by conferences of parties with the support of advisory bodies and other support structures. As intergovernmental bodies of instruments which have been separately ratified by governments they have an independent and strong standing vis-à-vis other intergovernmental bodies such as UNEP's Governing Council and the Commission on Sustainable Development. These bodies serve as global voices for sustainability in their areas of competence and agree on strategies, policies, work programmes and other measures for the further implementation of the treaty.

51. Atmospheric change has been addressed through some landmark global treaties. The Montreal Protocol, which became effective in 1989 and had 196 parties, has helped decrease or stabilize atmospheric concentrations of many ozone depleting substances, including chlorofluorocarbons. The protocol, whose secretariat and fund³⁰ is administered by UNEP, is regarded as one of the most successful international agreements to date. Regional agreements are also in place such as the UNECE Convention on Long-range Transboundary Air Pollution (LRTAP) (1979).

52. The United Nations Framework Convention on Climate Change (UNFCCC) entered into force in 1994 and currently has 194 Parties (93 States and 1 regional economic integration organization). The Convention sets an overall framework for intergovernmental efforts to tackle the challenge posed by climate change. The associated Kyoto Protocol, which sets binding targets for 37 industrialized countries and the European Union for reducing greenhouse gas (GHG) emissions was adopted in 1997 and entered into force in 2005. Currently, there are 192 Parties to the Protocol (191 States and 1 regional economic

²⁷ It engaged more than 100 Governments and 50 partners in written submissions and face-to-face dialogue for documentation and outcome see <http://science.unep.org>.

²⁸ See UNEP Governing Council decision SS.X/5 of February 2008 and UNGA resolution 63/220 of 9 March 2009

²⁹ Global Environment Outlook 4 (GEO 4), Environment for Development, Summary for Decision Makers (UNEP 2007) (<http://www.unep.org/geo/geo4/media/>)

³⁰ The multilateral fund for the implementation of the Montreal Protocol

integration organization). In Bali in 2007, the Conference of the Parties (COP) of the UNFCCC launched a comprehensive process to enable the full, effective and sustained implementation of the Convention through long-term cooperative action, now, up to and beyond 2012, in order to reach an agreed outcome and adopt a decision at its fifteenth session in 2009 in Copenhagen. The process was conducted under a subsidiary body under the Convention, the Ad Hoc Working Group on Long-term Cooperative Action under the Convention (AWG-LCA), which was to complete its work in 2009 and present the outcome to the COP for adoption at its fifteenth session in Copenhagen. In Copenhagen, Parties were unable to reach agreement and the COP decided to extend the mandate of the AWG-LCA to enable it to continue its work with a view to presenting the outcome of its work to the COP for adoption at its sixteenth session. The discussions under the Protocol to agree on future commitments for industrialized countries, were undertaken in the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol (AWG-KP) which was set up in December 2005. The AWG-KP was also to complete its work by the end of 2009, however the mandate of the AWG-KP was also renewed and the group will continue its work with a view to presenting the outcome at the sixth session of the Conference of the Parties serving as the Meeting of the Parties.

53. The Conference of the Parties at its first session decided “that the Convention secretariat shall be institutionally linked to the United Nations, while not being fully integrated in the work programme and management structure of any particular department or programme”³¹. The secretariat consists of several hundred staff members out of which approximately 140 are funded out of the core budget. Formally, the Executive Secretary reports to the Secretary-General on administrative matters through the Under-Secretary-General for Management, and on substantive matters through the Under-Secretary-General for Economic and Social Affairs. At its fourteenth session the COP, by its decision 8/CP.14, invited “the Secretary-General of the United Nations, in consultation with the Conference of the Parties through the Bureau, to undertake an independent review of the UNFCCC secretariat’s structure, including an evaluation of the current levels and responsibilities, taking into account the scope and complexity of work”. This review is currently being undertaken through the office of the Secretary-General.

54. Another Rio convention, is the UN Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa (UNCCD). The convention aims at combating desertification and mitigating the effects of drought through national action programs that incorporate long-term strategies supported by international cooperation and partnership arrangements. It entered into force in 1996 and has 193 parties. It is based on the wide adoption of sustainable land management (SLM), and follows the principles of participation, programmatic partnership and decentralization - the backbone of good governance and sustainable development. A similar reporting arrangement to that of the UNFCCC secretariat applies to the Executive Secretary of UNCCD.

55. Biological Diversity is dealt with by a number of treaties of which the Convention on Biological Diversity (CBD) has the most generic and broad scope. The CBD was the first of the Rio conventions to enter into force in 1993 and has 191 parties. A supplementary agreement to the Convention—the Cartagena Protocol on Biosafety—seeks to protect biological diversity from the potential risks posed by living modified organisms resulting from modern biotechnology. Recent developments include consideration of the post 2010 biodiversity targets and negotiations of an international regime on access to genetic resources and benefit-sharing. The CBD is, as other biodiversity-related treaties, such as the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (1973) and the Convention on the Conservation of Migratory Species of Wild Animals (also known as CMS or Bonn Convention) (1979), served by secretariats that are managed by UNEP, with Executive Secretaries reporting to the Executive Director of UNEP. The cluster on biodiversity goes beyond UNEP however, and includes for example the Convention Concerning the Protection of World Cultural and Natural Heritage (1972) administered by UNESCO. It also includes the International Treaty on Plant Genetic Resources for Food and Agriculture (2004) whose objectives are the conservation and sustainable use of plant genetic resources for food and agriculture and the fair and equitable sharing of the benefits arising out of their use, in harmony with the Convention on Biological Diversity, for sustainable agriculture and food security.

56. The largest cluster of multilateral environmental agreements is related to the marine environment, accounting for over 40 per cent of the total. The United Nations Convention on the Law of the Sea (UNCLOS) defines the rights and responsibilities of nations in their use of the world's oceans, establishing guidelines for businesses, the environment, and the management of marine natural resources. UNCLOS resulted from the third United Nations Conference on the Law of the Sea (UNCLOS III) which was concluded in 1982, replaced four 1958 treaties, came into force in 1994 and has to date 158 parties. The secretariat is provided by the UN Secretary General as performed by the UN Division for Ocean Affairs and the Law of the Sea. The International Maritime Organization (IMO) manages several treaties related to the protection of the environment, including the International Convention for the Prevention of Pollution from Ships (MARPOL), the International Convention on Oil Pollution Preparedness, Response and Cooperation (OPRC 90), the Protocol on Preparedness, Response and Cooperation to Pollution Incidents by Hazardous

³¹ FCCC/CP/1995/7/Add.1 Decision 14

and Noxious Substances (OPRC-HNS Protocol) 2000, the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (LDC 1972), and its related 1996 Protocol, the International Convention on the Control of Harmful Anti-fouling Systems on Ships (AFS Convention), 2001 and the International Convention for the Control Management of Ships' Ballast Water and Sediments (2004). The cluster also includes 17 multi-sectoral regional seas conventions and action plans embracing 46 conventions, protocols and related agreements supported by UNEP's regional seas programme³² as well as numerous regional fisheries conventions and protocols.

57. The use of chemicals is regulated in several conventions including the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade and the Stockholm Convention on Persistent Organic Pollutants. In addition, UNEP's Governing Council has recently initiated the negotiation of a convention on mercury. The secretariats to the Basel and Stockholm conventions are managed by UNEP and the secretariat to the Rotterdam convention is jointly managed by FAO and UNEP. Several ILO conventions also address occupational hazards in the workplace.

58. Clustering of the chemical conventions has been firmly put on the agenda by governments. The Ad Hoc Joint Working Group on Enhancing Cooperation and Coordination among the Basel, Rotterdam and Stockholm Conventions, was established by the respective Conferences of the Parties. The group has recommended a set of measures to the respective Parties of the conventions, including steps to improve effectiveness and efficiency in administering the conventions through joint administrative arrangements and services. Simultaneous Extraordinary Conferences of the Parties to the Basel-, Rotterdam- and Stockholm Conventions (Ex-COPs) were held from 22 to 24 February 2010 in Bali, Indonesia. On the basis of the meeting documents prepared by the three Secretariats for consideration by delegates to the Ex-COPs, the three Conferences of Parties took simultaneously decisions regarding joint audit, joint review, joint management, and joint Secretariat arrangements, amongst others. The proposed Review Arrangements and the proposed Review Mechanism were approved by the Ex-COPs, but relevant Terms of References for these arrangements will need to be made available to the next ordinary meetings of the Conferences of Parties of each of the three Conventions. The Joint Managerial functions with a Joint Head supervising the Executive Secretaries of all three Conventions located at UNEP in Geneva, as well as the already established Joint Service Unit for the three Secretariats of the Basel-, Stockholm-, and Rotterdam Convention at UNEP in Geneva was approved. Joint activities were supported. Synchronization of budget cycles among the three Conventions was supported. However these arrangements and the new management structure have to be cost neutral, or based on voluntary trust funds. The Ex-COPs requested a more efficient management through co-operation which represent a significant practical step towards realising the long-discussed approach of clustering of MEAs.

59. The question of coherence among multilateral environmental agreements, which constitute the normative backbone of the IEG structure, has been subject of consideration for a long time. The Brundtland Commission (1987) already stressed the need to build on existing declarations, conventions and resolutions, to consolidate and extend relevant legal principles on environmental protection and sustainable development³³. It observed that the lack of wider agreement on basic rules for interstate behaviour "undermines both national sovereignty and the economic development potential of each and all states". It recommended that "the General Assembly commit itself to preparing a Universal Declaration and later a Convention on environmental protection and sustainable development". While the first element of the recommendation saw the light of day in the form of the Rio Declaration on Environment and Development, the idea of a universal convention did not materialise. This stands in contrast to other areas of advanced and evolving international law, such as that of the World Trade Organization (WTO) which dates back to 1948³⁴. Unlike the international trade regime the evolution of the international environmental legal regime has so far taken place without any agreed overarching legal framework.

60. The further evolution of international environmental law is likely to be shaped by the need to manage the risks that increasing environmental change pose to human well-being. Not only is there a need to manage risks, but there is also a need to better manage the opportunities - such as use of ecosystem services - which arise in the interaction between society and environment. The future evolution of environmental law is also likely to be shaped by the need to address what in the Malmoe declaration in 2000 was referred to as an "alarming gap between commitments and actions" a gap which ten years later

³² More than 140 countries participate in 13 Regional Seas programmes established under the auspices of UNEP: Black Sea, Wider Caribbean, East Asian Seas, Eastern Africa, South Asian Seas, ROPME Sea Area, Mediterranean, North-East Pacific, North-West Pacific, Red Sea and Gulf of Aden, South-East Pacific, Pacific, and Western Africa. Six of these programmes, are directly administered by UNEP.

³³ Our common future, The world commission on environment and development (1987), page 332 - 333

³⁴ The WTO was established in 1995, but its trading system is half a century older. Since 1948, the General Agreement on Tariffs and Trade (GATT) had provided the rules for the system. Whereas GATT had mainly dealt with trade in goods, the WTO and its agreements now also cover trade in services, and in traded inventions, creations and designs (intellectual property).

still prevails. A focus on environmental actions needed for a fair and equitable enhancement of human well-being would help ensure that the evolution of international environmental governance system takes place, - not at the expense of - but in support of the social and economic pillars of sustainable development.

B. Intergovernmental policy organs and soft law instruments

61. The decision by the United Nations General Assembly (UNGA) to convene the UN Conference on the Human Environment, i.e. the Stockholm Conference (1972), marked the beginning of regular considerations by the UNGA of the environment and development agenda. The considerations have taken place in regular sessions of the UNGA, in conferences and summits initiated by the UNGA and through subsidiary bodies of the UNGA. UNEP Governing Council with 58 members was established in 1972 (resolution 2997) to oversee the implementation of the Programme of Action from the Stockholm Conference. The Council is mandated to promote international cooperation and keep the environment under review. It is also to give policy guidance on the planning, coordination and effectiveness of UN system-wide environmental programmes, as well as on their impact on developing countries and the relation to their social and economic policies and priorities. The Council was instructed by the UNGA to meet annually and but the Council was subsequently requested to meet only every second year. This changed in 2000 following the creation by the UNGA of the Global Ministerial Environment Forum (Forum)³⁵ that would meet annually on the occasion of the UNEP Governing Council.

62. The environmental activities in the UN system have been regularly reviewed after the Stockholm Conference. The first decadal-review took place at the special session of the UNEP Governing Council in 1982³⁶. The review led, amongst others, to the establishment of the World Commission of Environment and Development which presented its report "Our Common Future" in 1987. The recommendations from the Commission served as inputs to the second decadal-review, the 1992 United Nations Conference on Environment and Development (UNCED - also known as the Earth Summit), in Rio de Janeiro, Brazil which led to the adoption of Agenda 21³⁷. The UNGA did not task the UNEP Governing Council to prepare for the summit in spite of the fact that the Council was established amongst others to oversee the implementation of the Stockholm Plan of Action. Instead it appointed a separate inter-governmental preparatory committee to prepare for the summit. This decision paved the way for the establishment of the United Nations Commission on Sustainable Development (CSD).

63. The CSD was established in 1992 by General Assembly Resolution A/RES/47/191 as a functional commission with 53 members of the UN Economic and Social Council, in follow up to a recommendation in Chapter 38 of Agenda 21. CSD is tasked with ensuring the effective follow-up of the Earth Summit. It is also responsible for enhancing international cooperation and rationalizing the intergovernmental decision-making capacity for the integration of environment and development issues. CSD has through its multi year programme of work focused on monitoring and reporting on implementation of the Earth Summit agreements at the local, national, regional and international levels. CSD prepared for the Five-Year Review of the 1992 Earth Summit, which took the form of the 19th Special Session of the General Assembly. CSD is supported by the UN Department of Social and Economic Affairs (DESA) through its Division on Sustainable Development.

64. The CSD also served as the Preparatory Committee for the third decadal review, the World Summit on Sustainable Development (WSSD), held in Johannesburg in 2002 which agreed on the Johannesburg Plan of Implementation. The summit also endorsed the Cartagena Package on international environmental governance³⁸ previously adopted by UNEP's GC/GMEF³⁹, but the issue of universal membership of UNEP Governing Council was referred to UNGA⁴⁰. The package was the agreed outcome of a review initiated in 2000 by the first meeting of the GMEF on the requirements for a greatly strengthened institutional structure for international environmental governance (IEG).

65. The 2005 World Summit, among other things, also addressed the IEG issues and agreed to explore the possibility of a more coherent institutional framework to address the need for more efficient environmental activities within the United Nations⁴¹. This led to the initiation by the president of the UNGA in 2006 of the Informal Consultative Process on the Institutional Framework for the United Nations'

³⁵ Resolution UNGA/53/242 (based on the recommendations from the United Nations Task Force on Environment and Human Settlements).

³⁶ The 1982 special session of the UNEP Governing Council considered the first ten years of the implementation of the Stockholm Action Plan for the Environment and on priorities and institutional arrangements for the 1980s.

³⁷ The United Nations Conference on Environment and Development (Earth Summit) (1992)

³⁸ *Report of the World Summit on Sustainable Development*, Johannesburg, South Africa, 26 August–4 September 2002 (United Nations publication, Sales No. E.03.II.A.1 and corrigendum), chap. I, resolution 2, annex, chapter XI, entitled "Institutional framework for sustainable development", paragraph 140, subparagraph (d).

³⁹ UNEP/SS.VII/1 (2002)

⁴⁰ The General Assembly, by its resolution 61/205 of 20 December 2006, decided to consider, if necessary, the issue of universal membership of the Governing Council/Global Ministerial Environment Forum of UNEP at its sixty-fourth session, while noting the differences in views expressed on that important but complex issue.

⁴¹ *Ibid.*, para. 169.

Environmental Activities. In February 2009 the Co-Chairs indicated that “while agreement on a consensual decision might be possible, a consensus document would likely fail to add value to existing decisions or could even risk to fall behind improvements decided in other intergovernmental fora, in particular in the context of UNEP Governing Council/GMEF”. They recommended to all interested parties “to make best use of upcoming intergovernmental meetings to remain seized on the matter”⁴². This in turn led the UNEP Governing Council to establish a Consultative Group of Ministers or High-level Representatives to present a set of options on improving international environmental governance to the eleventh special session of the GC/GMEF.

66. The fourth decadal review will take place at the United Nations Conference on Sustainable Development (UNCSD) - also referred to as ‘Rio+20’ – to be held in 2012. The Conference seeks three objectives: securing renewed political commitment to sustainable development, assessing the progress and implementation gaps in meeting already agreed commitments, and addressing new and emerging challenges. The Member States have agreed on the following two themes for the Conference: green economy within the context of sustainable development and poverty eradication, and institutional framework for sustainable development. The EMG is currently undertaking work on green economy and international environmental governance.

67. The High-Level Conference on World Food Security: The Challenges of Climate Change and Bioenergy convened by FAO in Rome in June 2008 addressed the fundamental question of how to increase the resilience of present food production systems to challenges posed by climate change, ensuring natural resources preservation and maintaining biodiversity. The final declaration supported the “establishment of agriculture systems and the sustainable forest management practices that positively contribute to the mitigation of climate change and ecological balance”. Similarly, in November 2009, Heads of States and Governments assembles in Rome for the World Summit on Food Security committed to “implement sustainable practices, including responsible fisheries, improved resource use, protection of the environment, conservation of the natural resource base and enhanced use of ecosystem services”.

68. The UNGA considers, as a standing matter, reports from UNEP’s Governing Council, the CSD and the Rio conventions which are presented to the Assembly through the Economic and Social Council of the United Nations (ECOSOC). It also considers actions adopted by Governing Council of the United Nations Human Settlements Programme on urban environment issues. Furthermore the UNGA considers, as a standing matter, issues pertaining to oceans, law of the sea and sustainable fisheries. In 1999, the General Assembly decided to establish the United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea (the Consultative Process) in order to facilitate the annual review by the General Assembly. The International Oceanographic Commission of UNESCO and FAO’s Committee on Fisheries are central to this work. It is in this context also that the UNGA is considering the modalities of a regular process for global reporting and assessment of the state of the marine environment referred to in chapter II B.

69. Another international policy organ is the Commission on Genetic Resources for Food and Agriculture. The Commission strives to reach international consensus on policies and action programmes to ensure the conservation and sustainable utilization of genetic resources for food and agriculture, as well as the fair and equitable sharing of benefits derived from their use. The Commission provides an intergovernmental forum for negotiations of international policies on genetic resources for food and agriculture. At the request of the Commission, the Global Plan of Action for the Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Agriculture is currently being reviewed by FAO in the light of the findings of the Second Report on the State of the World’s Plant Genetic Resources for Food and Agriculture. The Commission, at its next Session (2011), is expected to adopt the up-dated Global Plan of Action. It might also be noteworthy that the “authorizing environment” of the GPA-PGR has changed with the direct reference to it in Article 14 of the International Treaty on Plant Genetic Resources for Food and Agriculture. A related instrument is the Global Plan of Action for Animal Genetic Resources (2007) of FAO. The UN system has established a number of soft law instruments of a non-binding nature. Sometimes these instruments evolve into binding agreements as was the case for the International Undertaking on Plant Genetic Resources the revision of which resulted in the FAO International Treaty on Plant Genetic Resources for Food and Agriculture...Other examples of UN soft law instruments are the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA) (1995) managed by UNEP or the FAO Code of Conduct for Responsible Fisheries, which is voluntary, but partly based on relevant rules of international law, including those reflected in United Nations Convention on the Law of the Sea.

70. In October 2000, ECOSOC in its Resolution 2000/35 established the United Nations Forum on Forests (UNFF), a subsidiary body with the main objective to promote “... the management, conservation and sustainable development of all types of forests and to strengthen long-term political commitment to this end...” based on the Rio Declaration, the Forest Principles, and Chapter 11 of Agenda 21. The Seventh

⁴² UNEP/GC.25/INF/35

Session of the Forum adopted the landmark Non-Legally Binding Instrument on All Types of Forests on 28 April 2007. The Collaborative Partnership on Forests (CPF) was established in April 2001, following the recommendation of ECOSOC. This innovative partnership of 14 major forest-related international organizations, institutions and convention secretariats, seeks to support the work of the UNFF and its member countries and to foster increased cooperation and coordination on forests. The CPF is chaired by FAO and its secretariat is provided by UNFF.

71. International environmental governance is pursued through many intergovernmental platforms with different mandates and thematic focus. The political rationale for the establishment of two subsidiary bodies tasked with overseeing the implementation of the environment and development agenda by the UNGA, namely UNEP GC and CSD, has been subject to several studies⁴³. Their relative strengths have varied over the years and the effectiveness of both bodies has, at times, been questioned. While their mandates are approaching the environment-development nexus from somewhat different perspectives, the national focal points in many countries for the two bodies remain the same and CSD is, maybe partly for that reason, generally perceived as primarily an environmental forum. Cooperation with other intergovernmental bodies is a standing topic under consideration by both UNEP GC and CSD. This offers opportunities for promoting enhanced cooperation and complementarity between these two and other bodies. However, coherence across the UN system first and foremost requires coherence internally in the UN system as well as coherent government policies across the governing bodies of the agencies of that system. With 44 UN agencies currently on the books engaged in environment, the number of governing bodies of international agencies or secretariats providing guidance to the UN system is correspondingly large. While this reflects a desired movement towards mainstreaming of environment across the system, the challenge of ensuring coherence remains unaddressed in many cases.

72. The recent developments in the area of international cooperation have centred on the further development of international law in particular for addressing issues related to climate change, biodiversity and chemicals as referred to in chapter III A above. These latest development in the UN system is responding to the need for a more effective deployment of resources in order to address unprecedented environmental change at all levels and its potentially negative implications for economic and social development, especially for the poor and vulnerable groups in society. The developments are responding to a call for a coherent and better coordinated approach to the use of meetings, bodies and secretariats. It reflects an urge not only to avoid an excessive work load on member states at the international level, but also to free up resources that could be oriented towards technology support and capacity-building at national level.

C. Mainstreaming environment into other relevant policy areas

73. The strong linkages between environment and development were clearly expressed already at the lead up to the Stockholm conference. A seminar held 1979 in Founex, Switzerland in 1971 has been considered as a particular important defining moment for both Stockholm and the ensuing environment and development discourse. Here, it was made clear that environmental problems had to be addressed through development which involved trade-offs between different concerns, and that there was a need for a “widening of the development concept” to include “urgent social and human problems”⁴⁴. The need for integration of the environmental, social and economic dimensions of development at both national and international level has been further enhanced by the vision put forward by the Brundtland Commission (1987), the subsequent establishment of the Commission on Sustainable Development (1992) and the establishment of the Millennium Development Goal 7 on environmental sustainability (2000).

74. In spite of increased attention to sustainable development, the world is now facing unprecedented levels of environmental change, most of which are predicted to become even more severe if the current development patterns continue. These changes have potentially adverse implications for economic and social development, especially for the poor and vulnerable groups in society. The mainstreaming of environmental risks – such as climate change and degradation of ecosystem services – and opportunities – such as use of ecosystem services – into sectoral policies and strategies has not been adequate enough to address the underlying drivers of environmental change. This is due to the scale of the challenge and a mix of factors related to amongst others the inherent inertia towards cooperation across the institutional silos of a sectoralised society, the complexity and fragmentation of environmental institutions, the failure of markets to reflect the value of environmental risks (environmental change) and opportunities (ecosystem services), and the demanding trade-offs between different interests and concerns in society. New opportunities for mainstreaming are however emerging.

⁴³ See amongst others “From Stockholm to Johannesburg and beyond: The evolution of the international system for sustainable development governance and its implications”, Lars Goran Engfeldt, The Government Offices of Sweden (2009)

⁴⁴ as footnote above

75. Economics is the currency of decision-making regarding trade-offs between different intra- and inter-generational aspects of human well-being which are associated with environmental risks (environmental change) and opportunities (ecosystem services). Efforts to improve the understanding of the monetary value of these risks and opportunities⁴⁵ may assist society in identifying new win-win situations across sectors. A shift toward a green economy through investments in addressing environmental change can generate economic wealth and job-creation which safeguard and enhance human well-being. The environmental institutional pillar of sustainable development is through the efforts of supporting such a shift striving towards a mainstreaming of economic and social considerations into its own policies and programmes.

76. Investments at the global, regional, national and local levels to achieve sustainable development and to take timely action to prevent, mitigate and adapt to unprecedented environmental change offer opportunities for addressing the nature and scale of the multiple global crises related to food, energy, freshwater and finance and for transitioning to a green economy.⁴⁶ In its recent resolution 63/303 the United Nations General Assembly endorsed the outcome document adopted at the Conference on the World Financial and Economic Crisis and its Impact on Development, which concluded that the response to the global financial crisis presented an opportunity to promote green economy initiatives. Similarly, a recent interagency statement provided that a shift towards a green economy could create dynamic new industries, quality jobs and income growth while mitigating and adapting to climate change and arresting biodiversity decline. It called for greater investment of stimulus funds in such sectors as energy efficient technologies, renewable energies, public transportation systems, sustainable agriculture, environmentally friendly tourism and the sustainable management of natural resources, including ecosystems and biodiversity. It also stressed that many developing countries would require financial support in this endeavour and called for fiscal reforms, a review of trade and further investment in education, training and capacity-building.⁴⁷

77. There is now a need to substantiate and broaden the economic case for short- and long-term investment in the environment. UNEP is therefore currently working with partners, including partners within the United Nations system, on a report that will make the economic case for a green economy while providing policymakers and other stakeholders with information on the important role of the government in the march towards such an economy. UNEP is also working with partners on a report on the economics of biodiversity and ecosystems.⁴⁸ Such reports will along with others support current efforts by individual agencies and joint efforts such as those by the High level Committee on Programmes on the global financial crisis and its impact on the work of the United Nations system. An interagency initiative on the “Green economy” which goes beyond the crisis response is also launched within the EMG.

78. The ILO works on green jobs through partnerships, of which the most important continues to be the Green Jobs Initiative between the United Nations Environment Programme (UNEP), the International Labour Organization (ILO), the International Trade Union Confederation (ITUC) and the International Organization of Employers (IOE). The Green Jobs Initiative was launched in order to promote opportunity, equity and just transitions to sustainable economies and to mobilize governments, employers and workers to engage in dialogue on coherent policies and effective programmes leading to a green economy with green jobs and decent work for all. The ILO strategy for the green jobs programme also includes producing a comprehensive knowledge base, tested tools and practical approaches.

79. Promotion of sustainable consumption and production (SCP) is a key strategic approach to integration of environmental considerations into development cooperation and economic activities. It requires a fundamental rethinking of the way societies produce, use, and dispose of products which has been subject to consideration by CSD since 1995. The Johannesburg Plan of Implementation (JPOI) calls for the development of “a 10-year framework of programmes in support of regional and national initiatives to accelerate the shift towards SCP.” Related to this, the Marrakech Process is a global effort to promote progress on the implementation of SCP organized by DESA’s Division for Sustainable Development and UNEP. Regarding cleaner production, coordination is mainly facilitated by UNEP and UNIDO which jointly manage the National Cleaner Production Centres (NCPC) Programme in collaboration with other partners. These efforts are further described in annex II and include the work of International Panel for Sustainable Resource Management described in subchapter II B.

80. Public awareness raising, gender dimensions of environmental management, and training and education are increasingly subject of joint efforts in the UN system. Participatory processes have evolved at all levels including within the UN as spearheaded by the CSD and its cooperation with major groups⁴³.

⁴⁵ See the Stern Review Report on Economics of Climate Change

⁴⁶ See the discussion paper: “Globalization and the environment – global crises: national chaos?” (UNEP/GC.25/16) and Governing Council decision SS.X/5, paragraph 5.

⁴⁷ Interagency statement of 25 June 2009 entitled “Green Economy: A Transformation to Address Multiple Crises”, http://www.unep.org/pdf/pressreleases/Green_Economy_Joint_Statement.pdf

⁴⁸ See the interim report at http://www.unep.org/greeneconomy/docs/TEEB_English.pdf

Other examples include the UN Global Compact and UNEP's Civil Society Forum, as well as the Sustainable Agriculture and Rural Development (SARD) Initiative, facilitated by FAO, with a view to provide a multi-stakeholder umbrella framework that engages civil society, governments and intergovernmental organizations in a joint effort to make rapid progress toward achievement of the Agenda 21 vision for SARD.

81. Although achievements have been made in greening economies and social behaviour, they have not kept up with the pace of the accelerating environmental change including climate change, degradation of ecosystem services, and the release of chemicals into the environment. Mainstreaming of environmental concerns into the development agenda and economic activities requires collaborative efforts across multiple sectors. - It remains a substantial challenge for all sectors. To be successful, mainstreaming efforts need to be led and owned by the institutions where the mainstreaming has to take place, including in the instruments they lead, such as national and sectoral development plans. National and international environment institutions need to facilitate mainstreaming through systemic and sustained internal coordination and support efforts aiming at making environmental knowledge and expertise available for those institutions engaged in mainstreaming. Such support includes assisting in making the economic and social case for addressing environmental change. Environmental institutions need to be predictable and trusted partners in areas such as trade, poverty alleviation, energy, transport, industry, and primary production, including mining, forestry, and agriculture, and need to organize themselves accordingly. Mainstreaming is knowledge and human resource intensive and further progress depends on advances in strengthening multi-scaled science-policy interfaced processes and knowledge infrastructures. Further progress at international level may also benefit from more coherent intergovernmental guidance and enhanced crosscutting strategic and cooperative arrangements in the UN. Finally, mainstreaming of environmental concerns into the development assistance framework represents challenges but even more so opportunities which are dealt with in the next chapter.

IV. Ensuring a responsive and cohesive approach to meeting country needs

82. The need for capacity-building was a key concern already in 1972. UNEP has, over the years, contributed to capacity-building through its programme of work as funded by the Environment Fund, by partnering with other institutions and by serving as an implementing agency for GEF. The main vehicle for ensuring environmental coherence and coherence in the poverty-environment nexus in the UN at the country level is interagency coordination by UN Country Teams in support of countries' own development aspiration. A number of UN system entities are involved in capacity-building and technology support, in particular through the provision of financial support as described in chapter VI below. UNDP is playing a lead role and providing the bulk of institutional capacity development at the national and sub-national level through its primary mandate in capacity development, including for environmental sustainability, in particular as part of the provision of financial support. Provision of capacity-building and technology support are also achieved through training, enhancement of centres of excellence; promotion and support of South-South cooperation; exchanges of best practices and lessons learned; and development of partnerships and networks.

83. The need to strengthen and coordinate capacity-building in the field of the environment was brought to the front of UNEP's priorities through the IEG process and the adoption of the Bali Strategic Plan on Capacity-building and Technology Support (BSP) in 2005. The plan takes into account activities undertaken across the UN system, including by MEA secretariats as well as by international financial institutions, relevant partners at regional and sub-regional levels, bilateral donors, NGOs and the private sector and encourages all agencies in the UN system to take the Plan into account while planning their own technology support and capacity-building efforts. The UNGA has repeatedly stressed the need to further advance and fully implement the BSP, and in its resolution 63/220 it invited the UN system to mainstream the plan into their overall activities. The full recognition of the BSP as a system-wide plan may be enhanced through a revision of the Plan to project a focus on the UN system as a whole in a contemporary context, and to strengthen the ownership of the plan across the UN.

A. National level

84. The Bali Strategic Plan identified generic capacity-building and technology support needs including: Strengthening of national and regional environmental or environment-related institutions (government institutions, judiciary, enforcement); development of national environmental law; assistance for facilitating compliance with and enforcement of obligations under multilateral environmental agreements and implementation of environmental commitments; preparation, integration and implementation of environmental aspects of national sustainable development plans; facilitating access to and support for environmentally sound technologies and corresponding know-how; education and awareness raising, including networking among universities with programmes of excellence in the field of

the environment; promotion of sustainable consumption and production patterns, including support for cleaner production centres; and development of gender mainstreaming strategies in environmental policies.

85. The plan made an explicit reference to the outcomes of the intergovernmental consultation on strengthening the scientific base of UNEP, held in Nairobi on 14 and 15 January 2004 (as described in document UNEP/GCSS.VIII/5/Add.4), which specify a number of important capacity-building needs. These include the need to strengthen national capacities for data collection, research, analysis, monitoring and integrated environmental assessment; developing institutional capacities, staff training and support for appropriate and adaptable technologies and methodologies; support for assessments of environmental issues of regional and subregional importance and for the assessment and early warning of emerging environmental issues; support for scientific exchanges and for the establishment of environmental and inter-disciplinary information networks; and promotion of coherent partnership approaches.

86. Given the specific circumstances of the different countries concerned, each country needs to identify its own needs in capacity-building and technology support in order to meet its environmental priorities. As identified in chapter 34 of Agenda 21, entitled "Transfer of environmentally sound technology, cooperation and capacity-building", environmentally sound technologies and corresponding capacity-building needs encompass a broad range of issues, from which each country might identify elements suitable to its needs in achieving environmental objectives of sustainable development. The multilateral system is assisting national Governments to develop practical arrangements, taking into account national and, where applicable, GEF-UNDP self assessments geared towards transforming the needs of each country into a set of strategic priorities and the means to respond to them. Close cooperation between UNEP, UNDP, GEF and the secretariats of MEAs is essential in order to effectively meeting this challenge.

87. At the national level, UN Country Teams (UNCTs) present in 136 countries and serving all of the 180 countries where there are UN programmes facilitate coordinated development support of the UN system. The UNCT is composed of designated representatives of the agencies accredited to a given country (resident as well as non-resident) under the leadership of the UN Resident Coordinator (RC), who is also the designated representative of the UN Secretary-General. The main purpose of the UNCTs is for individual agencies to plan and work together as part of the Resident Coordinator system to deliver tangible results in support of the development agenda of the government. Country teams are responsible for the RC/UNCT work plan and for development, implementation and monitoring of the UN Development Assistance Framework (UNDAF). In 2007, "Delivering as One" pilot projects were initiated in eight countries.⁴⁹ The pilot countries agreed to work with the UN to capitalize on the strengths and comparative advantages of the different members of the UN family. Together they are experimenting with ways to increase the UN system's impact through more coherent programmes, reduced transaction costs for governments, and lower overhead costs for the UN system. The Delivering as One initiative is a reflection upon, among other things, the Paris Declaration (2005) and the Accra Agenda for Action (2008) in which developed and developing countries underscored the need for aid/development effectiveness through country ownership, harmonization and alignment.

88. Environmental sustainability is one of the five principles that guide the development of UNDAFs by UNCT. Consequently, and responding to demands from UNCTs, a Task Team under UNDG co-chaired by UNDP and UNEP in 2009 prepared a Guidance Note on Mainstreaming Environmental Sustainability into Country Assessments and the UNDAF. A complementing Guidance Note on Integrating Climate Change Concerns in Country Assessments and the UNDAF has been finalized in 2010. The purpose of these guidance notes is to enable UNCTs to help countries identify their needs in the field of climate change and environment and to reflect countries' priorities in these areas in the overall assistance of the UN. Reporting on these issues are part of the Resident Coordinator Annual Report (RCAR) and also included in the annual synthesis report summarizing these reports. A database is being developed by the Secretariat of UNDG to pull data from the RCARs also on these issues.

89. A separate survey of climate change activities in the work of UNCT's was conducted by the UNDG Task Team in 2008-2009⁵⁰. 24 UNCTs responded to the survey, which revealed that many capacity building efforts, especially linked to policy development and implementation, appear to be linked with supporting countries' obligations under the existing legal frameworks, such as reporting requirements of the UNFCCC. Planning and implementation of climate change; mitigation activities in support of the Clean Development Mechanism; UN-REDD, energy efficiency; clean energy development and renewable energies; transportation, and related technology transfer and development are some examples of such United Nations country activities. The study also found examples of support for country compliance with treaty obligations, such as those under the UNFCCC and other Rio Conventions (UNCBD and UNCCD). The study also demonstrated some examples of UNCTs effectively working together in a coordinated and integrated fashion towards "Delivering as One" on climate change. This is especially the case in the Pacific where 16 United Nations agencies are working towards delivering as one under the United Nations Country

⁴⁹ Pilot countries include Albania, Cape Verde, Mozambique, Pakistan, Rwanda, Tanzania, Uruguay, and Viet Nam.

⁵⁰ <http://www.undg.org/docs/10587/UNDG-Study-on-Climate-Change.pdf>

Programme for Papua New Guinea and under the UNDAF for the Pacific sub-region; in China where nine agencies are working together with their 10 government counterparts under a common climate change framework; and in Cape Verde where nine agencies contribute to the common goal of reducing vulnerability and climate change.

90. UNDG's increased focus on environment and climate change is a response to the challenges that remain on how to effectively integrate environmental collaboration and coordination in the work of the UN at the national level. This challenge reflects the challenges many countries are facing in articulating their needs in the field of environment, in sustaining these needs with environmental data and scientific knowledge, and in integrating such needs and priorities in their national development plans. But is also reflects the fact that the capacity of UNCT's in environment as well as more broadly is overstretched by many competing demands. In addition, the expertise of UNEP as well as the expertise of the small and highly specialized convention secretariats has difficulties to be brought to bear at the country level, because of the way the normative environment work of the UN is currently organized at the global and regional level and the transaction costs that are associated with providing relevant knowledge and expertise in areas such as assessments, science and environmental data on an individual basis. In later years, UNEP has increasingly been engaging itself at the country level, in Delivering as One countries and beyond. UN-HABITAT works to strengthen local government capacity for environmental sustainability in urban areas, with an increasing focus on supporting cities to address climate change.

91. The UNDP-UNEP Poverty Environment Initiative is a joint programme to help countries develop their capacity to "mainstream" poverty-environment linkages into national development planning processes, such as Poverty Reduction Strategy Papers (PRSPs) and MDG Achievement Strategies, as well as budgets and using, inter alia, economic assessments of environmental assets to make the case. Based on experience and lessons learned from assisting 9 countries in Africa and Asia a decision was made in 2007 to scale up efforts in a new 5 year programme under which efforts are expanded to other countries in Africa, Asia, Latin America and Europe. Today, PEI is operational in 22 countries. On the ground, UNDP's country offices work on PEI with country counterparts – mainly planning and finance ministries – supported and backed up by UNDP's and UNEP's regional centres and the joint UNDP-UNEP Poverty Environment Facility in Nairobi.

92. Since the start of the new millennium, the world has witnessed over 35 major conflicts and some 2,500 disasters. Over two billion people have been affected, and millions have lost their lives. Not only do these tragic events destroy infrastructure, cause population displacement and fundamentally undermine human security, they also compound poverty and tear apart the fabric of sustainable development. UNEP seeks to minimize environmental threats to human well-being from the environmental causes and consequences of conflicts and disasters, and through the Disasters and Conflicts programme, UNEP provides four core services to Member States: Post-crisis environmental assessments; Post-crisis environmental recovery; Environmental cooperation; and Disaster risk reduction. The UN has also established the Joint UNEP/OCHA Environment Unit (JEU) as its core mechanism for the mobilization and coordination of the international response to environmental emergencies. Work is also undertaken by the UN secretariat for the International Strategy for Disaster Risk reduction (UN/ISDR)⁵¹ which aims at building communities resilient to disasters, including environmental disasters, through the implementation of the Hyogo Framework for Action⁵².

B. Regional level

93. Most of the large UN bodies have regional offices which are engaged in environment-related activities, such as UNDP, UNEP, WHO, FAO, and the Regional Economic Commissions. Regional level coordination of environmental activities often occurs in the context of ministerial environmental conferences which regularly take place in several UN regions. UN organizations support these ministerial processes by providing secretariat functions. While UNEP supports ministerial conferences in Africa, the secretariats of the regional economic commissions support ministerial environmental processes in Asia and the Pacific (ESCAP), Europe (UNECE), Latin America and the Caribbean (ECLAC), and West Asia (ESCWA).

94. The regional ministerial processes provide a valuable opportunity to exchange information and coordinate activities including for promotion of South-South cooperation. Regional and subregional strategies are defined by regional and subregional bodies, such as the New Partnership for Africa's Development (NEPAD), the Latin American and Caribbean Initiative for Sustainable Development (ILAC) and the "Environment for Europe" process. The 'Environment for Europe' process, for example, is a partnership of the member States within the UNECE region, organizations of the UN system represented in

⁵¹ adopted by United Nations Member States in 2000 and is owned by local, national, regional and international organizations (A/RES/54/597, A/RES/56/195)

⁵² The Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters (also referred to as the Hyogo "Framework for Action"). adopted by the World Conference on Disaster Reduction which was held in January 2005 in Kobe, Hyogo, Japan,

the region (UNEP, UNDP, World Bank, WHO), other intergovernmental organizations (OECD, EBRD), the European Commission, regional environment centres, non-governmental organizations, and other major groups, with ministerial conferences taking place every 4-5 years.

95. The UN Regional Directors Teams are an important vehicle to facilitate UN system-wide coherence at regional level, but some challenges exist in facilitating effective regional coordination, in particular at the level of implementation. For example, the geographical coverage and membership of the regional offices of UN bodies is not fully consistent, e.g. in the case of the UN and WHO regions. Furthermore, in some cases, regional headquarters are located in different locations. Finally, regional development banks, which often have robust environmental management programmes, are not always fully integrated with UN system action on the environment.

V. Securing sufficient, predictable and coherent funding

96. When UNEP was created in 1972, two sources of financing were put in place: firstly, contributions from the UN regular budget for secretariat costs and, secondly, the establishment of an Environment Fund to cover UN wide operational programme costs, including for support and administrative. However, the regular budget allocations soon turned out to be insufficient to cover the secretariat's costs so they were partly covered by the Fund, and the resources for the Fund were insufficient to finance the system in the manner envisaged. Already then other agencies had themselves earmarked resources to environment related activities and these resources have naturally increased with expanding levels of activities and the establishment of new secretariats, divisions and units. Also, additional funds, new economic instruments and new markets have emerged since then.

97. It is, today, difficult to assess the total amount of resources which is invested in environmental activities at normative and operational level in the UN system. Proposals have been made though for the establishment of a financial tracking system of environmental funds in the UN system along the lines of the tracking system that has been established in the humanitarian field.

98. The current chapter gives an account of some of the main UN system actors involved in funding environmental activities. It is supported by a table presented in Annex 3 which indicates annual international environmental financial flows. The annex should therefore be seen as a preliminary and incomplete account of such flows. There are some glaring gaps in the information provided, as data are missing from some important actors.

99. The estimated financial flows are based on available information on the web and submissions from EMG members. Estimation of funds are based on judgement by providers and budget processes of different institutions, and no common criteria for the different areas have been established for this mapping exercise.

100. It should be noted that the figures presented are not necessarily comparable, amongst others because the financial year and budget procedures varies among the actors. Indicative financial flows are drawn from different years and represent a mix of recorded expenditures and budgeted costs. For instance, the information regarding UNEP is biannual and projected, while the information on the World Bank is multi-year budgets/commitments, and the information regarding UNDP is actual expenditure in 2009.

101. Also, financial flows may have been counted several times as they sometimes flow from one organisation to another. An apparent example is the GEF portion of the OECD DAC funds which are then recorded as going through the GEF before they are reflected in the implementing agencies. Attempts have been made to single out the GEF component of the agencies, but the data are still incomplete. Some financial flows indicated in the annex may also be double counted as they appear in different thematic and functional funding categories. Furthermore, as much of the investment in environmental activities happens through mainstreaming, it is often times also difficult to distinguish environmental activities from the sectoral ones.

102. The considerations reflected above illustrates the challenges that would have to be overcome in the further efforts to complete the current mapping exercise or in developing a possible future environmental financial tracking system.

A. Funds

103. The Environment Fund was created to “enable the Governing Council of UNEP to fulfil its policy-guidance role for the direction and coordination of environmental activities” as well as for “financing such programmes of general interest as regional and global monitoring, assessment, and data collecting systems, including, as appropriate, costs for national counterparts; the improvement of environmental quality management, environmental research; information exchange and dissemination; public education and training; assistance for, national, regional and global environmental institutions; the promotion of environmental research and studies for the development of industrial and other technologies

best suited to a policy of economic growth, compatible with adequate environmental safeguards; and such other programmes the Governing Council may decide upon. For the biennium 2010-2011 the annual appropriation from the Environment Fund is US\$90 million, while the total annual projected use of resources including also regular budget, trust funds and earmarked contributions by UNEP is US\$217 million.

104. For nearly 20 years the Environment Fund was the main fund financing environmental activities and support to developing countries. Amidst growing concerns that the environmental agenda were under funded some countries in the 80-ties proposed to open a development window in the fund, but the proposal did not receive sufficient support.⁵³ Funding for development in the area of environment has instead been channeled through other parts of the UN system, including the World Bank and the regional development banks, as well as through bilateral channels.⁵⁴

105. The World Bank provides lending to environmental and natural resource management (ENRM) activities are increasingly being integrated into sectoral (agriculture, water sanitation, urban, etc.) projects. As much as 85 percent of the Bank's ENRM projects are currently being managed by non-environmental sectors in the Bank, indicating the extent of environmental mainstreaming. As of mid-fiscal year 2009 (end of December, 2009), the World Bank had approved 20 projects with ENRM content amounting to US\$1.7 billion in commitments. On average, ENRM activities have accounted for about 8.3 percent of total new Bank lending over the past five years. As of mid-fiscal year 2009, the total active portfolio of projects with ENRM activities amounts to US\$12.1 billion—representing about 10.5 percent of the total Bank portfolio. Of this, the core ENRM portfolio (projects with more than 65 percent ENRM content) amounts to US\$4.3 billion in commitments.⁵⁵

106. In 2009 UNDP disbursed approximately US\$ 227 million to developing countries in the areas of environment and climate change, in addition to UNDP administered GEF and MLF funds (see below). These funds were a mix of core funds and funds leveraged for specific programmes and projects globally, regionally or at the country level. Programmes and activities include the Africa Adaptation Programme (AAP), the Territorial Approach to Climate Change (TACC), Capacity Development for Climate Change Decision Makers; the Water Governance Facility; The Drylands Development Centre; the Equator Initiative; the UN-REDD Programme; Chemicals Management; capacity development.⁵⁶

107. In October 1991 the Global Environment Facility was established as a US\$1 billion pilot program in the World Bank to assist in the protection of the global environment and to promote environmentally sustainable development. The GEF would provide new and additional grants and concessional funding to cover the "incremental" or additional costs associated with transforming a project with national benefits into one with global environmental benefits. In 1994 GEF was restructured and moved out of the World Bank system. The World Bank remains the Trustee of the GEF trust fund and provide administrative services. The GEF has evolved into a unique partnership between the UN and the Bretton Woods institutions. The restructuring enhanced the involvement of developing countries in the decision-making process and ensured their leading role in the development and implementation of GEF projects.

108. As part of the restructuring, the GEF was entrusted to become the financial mechanism for both the UN Convention on Biological Diversity (CBD) and the UN Framework Convention on Climate Change (UNFCCC). In partnership with the Montreal Protocol of the Vienna Convention on Ozone Layer Depleting Substances, the GEF started funding projects that enable the Russian Federation and nations in Eastern Europe and Central Asia to phase out their use of ozone destroying chemicals. The GEF subsequently was also selected to serve as a financial mechanism for two more international conventions: The Stockholm Convention on Persistent Organic Pollutants (2001) and the United Nations Convention to Combat Desertification (2003). The GEF assists countries in meeting their obligations under the conventions that they have signed and ratified. These conventions and MEAs provide guidance to the two governing bodies of the GEF: the GEF Council and the GEF Assembly. The GEF is also associated with many global and regional MEAs that deal with international waters or transboundary water systems.

109. The United Nations Development Program (UNDP), the United Nations Environment Program (UNEP) and the World Bank were the three initial partners implementing GEF projects and they continue to be the three Implementing Agencies of the GEF. Seven more agencies joined the GEF family over the years: The Food and Agriculture Organization (FAO), the Inter-American Development Bank (IaDB), the United Nations Industrial Development Organization (UNIDO), the Asian Development Bank (ADB), the

⁵³ "From Stockholm to Johannesburg and beyond: The evolution of the international system for sustainable development governance and its implications", Lars Goran Engfeldt, The Government Offices of Sweden (2009)

⁵⁴ The Development Assistance Committee (DAC) of OECD keeps track of bilateral environmental development assistance.

⁵⁵ <http://web.worldbank.org/WBSITE/EXTERNAL/NEWS/0,,contentMDK:20036126~menuPK:34480~pagePK:36694~piPK:116742~print:Y~theSitePK:4607,00.html>

⁵⁶ More information available at <http://www.undp.org/energyandenvironment/>

African Development Bank (AfDB), the European Bank for Reconstruction and Development (EBRD), and the International Fund for Agricultural Development (IFAD).

110. GEF is the largest funder of projects to improve the global environment. It provides grants for projects related to six focal areas: biodiversity, climate change, international waters, land degradation, the ozone layer, and persistent organic pollutants. Since 1991, GEF has provided US\$8.6 billion in grants and leveraging US\$36.1 billion in co-financing for over 2,400 projects in more than 165 countries⁵⁷. In 2002, 32 donor countries pledged US\$3 billion to fund operations through 2006. At the Fourth GEF Assembly in 2006, an additional US\$3.13 billion was committed. The Fifth replenishment of GEF was approved at the GEF Assembly in May 2010, with an total of \$4.2 billion pledged.

111. UNDP currently delivers approximately US\$ 250 million per year of GEF funds to countries to support the strengthening of national, sub-national, and regional institutional and financial capacities. As of April 2010, UNDP's GEF-supported portfolio stood at over US\$ 13.3 billion (including US\$ 3.5 billion in GEF grants). The strategic focus of UNDP's support is to help countries put in place the policy, institutional and financial frameworks that will help drive private investment flows towards environmentally sustainable solutions. In addition, UNDP provides over US\$ 37 million per year to more than 1,000 community level projects in 119 countries through the Small Grants Programme (SGP).

112. UNEP helps more than 150 countries to access GEF resources through approximately \$80 million per year of GEF funds and \$120 million per year of co-financing. Up to April 2010, UNEP's GEF supported portfolio was an aggregate of \$720 million in GEF financing. UNEP's support focuses on five areas of work : a) normative projects (guidelines, assessments, standards), b) projects that bridge the science to policy gap (including obligations to conventions); c) capacity building and technical assistance in its core mandated areas; d) promoting transboundary and international cooperation, and e) advocacy and awareness raising. UNEP works at all levels : local, national, regional or global. In GEF-4, UNEP's portfolio of projects , while maintaining their demand-driven character, were increasingly focused on complementarity with UNEP's regular programme of work.

113. The Multilateral Fund was established by a decision of the Second Meeting of the Parties to the Montreal Protocol (London, June 1990) and began its operation in 1991. The main objective of the Multilateral Fund is to assist developing country parties to the Montreal Protocol whose annual per capita consumption and production of ozone depleting substances (ODS) is less than 0.3 kg to comply with the control measures of the Protocol. Currently, 146 of the 196 Parties to the Montreal Protocol meet these criteria. They are referred to as Article 5 countries. Contributions to the Multilateral Fund from the industrialized countries, or non-Article 5 countries, are assessed according to the UN scale of assessment.

114. The Fund has been replenished seven times: US\$240 million (1991-1993), US\$455 million (1994-1996), US\$466 million (1997-1999), US\$440 million (2000-2002), US \$474 million (2003-2005), US\$400.4 million (2006-2008) and US\$400 million (2009-2011). The total budget for the 2009-2011 triennium is US\$490 million; US\$73.9 million of that budget is from the 2006-2008 triennium and US\$16.1 million will be provided from interest accruing to the Multilateral Fund during the 2009-2011 triennium. As at July 2009 the contributions made to the Multilateral Fund by some 49 industrialized countries (including Countries with Economies in Transition or CEIT countries) totalled over US\$2.5 billion. The Fund is managed by an Executive Committee assisted by the Fund Secretariat provided by UNEP. Projects and activities supported by the Fund are implemented by four international implementing agencies the MLF: UNDP, UNEP, UNIDO and the World Bank.

115. The UN Multi Donor Trust Funds (MDTF)⁵⁸ have increasingly been used to provide funding for environment and climate change through joint UN agency funds at the global and national level such as the MDG Achievement Fund (59 countries eligible), the UN REDD Programme (currently operating in 9 countries), and the One UN country funds (operational in 23 countries). The MDTF system is governed by UNDG and administered by the UNDP MDTF Office according to UNDP's financial rules and regulations. Each individual fund has its own steering committee composed by all partners. The overall purpose of the MDTF system is to support UN reform by leveraging UN agency expertise through a single entry point, to ensure transparency and accountability, and to enable partnerships.

B. Economic instruments

116. Over the past few years, the international community has developed a vast array of public policies, public finance mechanisms and market-based instruments to shift investments from fossil fuels to more climate-friendly alternatives. As a result, investments in the sustainable energy market have grown from US\$ 22 billion in 2002 to US\$155 billion in 2008 and could reach US\$ 400-500 billion by 2020. Unfortunately, only a limited number of developing countries are benefiting from these new financing opportunities as their existing markets often fail to attract investments in lower carbon and sustainable land use projects. For example, only five countries are expected to generate over 80 percent of

⁵⁷ The GEF database for project information (www.thegef.org.)

⁵⁸ <http://mdtf.undp.org/>

CDM credits by 2012. Almost half of these credits will come from non-CO₂ industrial gas emissions - such as HFC₂₃ destruction and N₂O emissions capture - that are characterized by a high return on investment but have very limited co-development benefits.

117. Used properly, economic instruments provide market corrections, promote production efficiency or cost minimization, and facilitate flexible responses to changing circumstances. They can help economic development to foster environmental protection and vice versa. A combination of market-based mechanisms and regulatory structures is often needed. The cap-and-trade model, in the case of carbon emissions, is an example of a regulatory framework defining overall emission limits before a market for emission credits can be established.

118. The central feature of the Kyoto Protocol is its requirement that countries limit or reduce their greenhouse gas emissions. By setting such targets, emission reductions took on economic value. To help countries meet their emission targets, and to encourage the private sector and developing countries to contribute to emission reduction efforts, negotiators of the Protocol included three market-based mechanisms – Emissions Trading, the Clean Development Mechanism (CDM) and Joint Implementation. The CDM allows emission-reduction (or emission removal) projects in developing countries to earn certified emission reduction (CER) credits, each equivalent to one tonne of CO₂. These CERs can be traded and sold, and used by industrialized countries to meet a part of their emission reduction targets under the Kyoto Protocol.

119. The mechanism stimulates sustainable development and emission reductions, while giving industrialized countries some flexibility in how they meet their emission reduction targets. The projects under the CDM must qualify through a rigorous and public registration and issuance process designed to ensure real, measurable and verifiable emission reductions that are additional to what would have occurred without the project. The mechanism is overseen by the CDM Executive Board, answerable ultimately to the countries that have ratified the Kyoto Protocol.

120. In order to be considered for registration, a project must first be approved by the Designated National Authorities (DNA). Operational since the beginning of 2006, the mechanism has registered more than 2,400 registered projects. In addition there are over 4,200 projects in the pipeline⁵⁹. It is anticipated to produce CERs amounting to more than 2.7 billion tonnes of CO₂ equivalent in the first commitment period of the Kyoto Protocol, 2008–2012. The mechanism is the first global, environmental investment and credit scheme of its kind, providing a standardized instrument for offsetting emissions.

121. According to the World Bank⁶⁰ the overall carbon market continued to grow in 2008, reaching a total transaction value of about US\$126 billion (€6 billion) at the end of the year, doubling its 2007 value. Approximately US\$92 billion (€3 billion) of this overall value is accounted for by transactions of allowances and derivatives under the EU Emissions Trading Scheme (EU ETS) for compliance, risk management, arbitrage, raising cash and profit-taking purposes. The second largest segment of the carbon market was the secondary market for certified emission reductions (CERs), which is a financial market with spot, futures and options transactions in excess of US\$26 billion, or €18 billion, representing a five-fold increase in both value and volume of that of 2007. Unlike transactions in the primary market these trades do not directly result in emission reductions.

122. A relatively new approach called payments for environmental or ecosystem services (PES) attempts to address the overexploitation of ecosystems, abandonment of forests due to lack of profitability or unwise management by rewarding the individuals and communities that secure the supply of ecosystem services; the beneficiaries must pay for the services themselves. Three main markets are emerging for payments for ecosystem services⁶¹:

123. (a) Watershed management, which may include control of floods, erosion, access to nutrients, sedimentation and quality water, as well as maintenance of aquatic habitats and dry season flows;

124. (b) Biodiversity protection, which includes eco-labeled products, ecotourism and payments for conservation of wildlife habitat;

125. (c) Carbon sequestration, in which, for example, international buyers pay to plant new trees to absorb carbon, or take measures to avoid deforestation to offset carbon emissions elsewhere.

126. FAO's SARD-Mountain project (2005-2010) worked specifically on improving livelihoods of mountain people by applying the 1992 Earth Summit principles of sustainable agriculture and rural development, including prospects for Payment for Environmental Services. Currently, this project has been expanded to cover "Remuneration of Positive Externalities" (RPE) in all agroecosystems (2010-13), with a

⁵⁹ <http://cdm.unfccc.int/Statistics/index.html>

⁶⁰ http://siteresources.worldbank.org/EXTCARBONFINANCE/Resources/State_and_Trends_of_the_Carbon_Market_2009-FINALb.pdf

⁶¹ Global Environment Outlook 4 (GEO 4), Environment for development, Summary for Decision Makers (UNEP 2007) (<http://www.unep.org/geo/geo4/media/>)

view to develop tools for decision-makers on policies and instruments for rural goods and services. The consultative process of this project will target the preparations and discussions to be held within the context of the UN Conference on Sustainable Development (UNCSD), to be held in Brazil in 2012 (also referred to as “Rio+20”). The project will build on lessons learned through the SARD-M project and other initiatives, such as the FAO project on the Roles of Agriculture in Development (2000-2006) and FAO’s State of Food and Agriculture’s publication on Payment for Environmental Services (SOFA, 2007). It will also draw the experience of developed countries and more specifically the European Union and its Common Agricultural Policy on agri-environmental measures as well as PES projects around the world.

127. A prominent example of the emerging carbon sequestration market is the United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (UN-REDD Programme). It is a joint effort between FAO, UNDP and UNEP to create a financial value for the carbon stored in forests, offering incentives for developing countries to reduce emissions from forested lands and invest in low-carbon paths to sustainable development. “REDD+” goes beyond deforestation and forest degradation, and includes the role of conservation, sustainable management of forests and enhancement of forest carbon stocks. The Programme assists developing countries in preparing and implementing national REDD+ strategies, and builds on the convening power and expertise of the three agencies. Its Policy Board has approved a total of US\$42.6 million for eight of the Programme’s nine initial member countries. While current funding is programmed for its nine pilot countries, the Programme has also welcomed 13 others to be observers to its Policy Board, and has given them access to many other benefits, such as networking, participation in regional workshops and knowledge sharing, facilitated by the Programme’s interactive online workspace. The Programme brings together technical teams from around the world to help develop analyses and guidelines on issues such as measurement, reporting and verification (MRV) of carbon emissions and flows, ensuring that forests continue to provide multiple benefits for livelihoods and the environment, and supporting the engagement of Indigenous Peoples and Civil Society at all stages of the design and implementation of REDD+ strategies. The UN-REDD Programme also seeks to build consensus and knowledge about REDD+, as a contribution to the negotiation of a post-2012 climate change agreement.

128. In the Copenhagen Accord “developed countries commit to a goal of mobilizing jointly USD 100 billion dollars a year by 2020 to address the needs of developing countries”, with the funds coming from “public and private, bilateral and multilateral, including alternative, sources of finance”. The process of identifying the potential sources of climate change finance has already started. Developed countries, as part of the Copenhagen Accord, have made a commitment of \$30 billion “fast-start” funding for the period 2010-2012. Climate change finance is unlikely to come from a single source of finance, with more than 50 international public funds, 60 carbon markets and 6,000 private equity funds already providing green finance.

VI. Achieving effectiveness, efficiency and coherence within the UN system

129. Effectiveness, efficiency and coherence within the UN system are in principle achieved through a mix of system-wide measures. The intergovernmental measures are considered in chapter III, the financial measures in chapter V, and the knowledge management measures in chapter II. The current chapter explores the evolution and state of interagency coordination measures on environment and the environment development nexus. Interagency coordination was seen as a central pillar in the follow up to the Stockholm Conference in 1972. Efficient programme coordination among UN agencies and the economic commissions was to be assured through the Environment Fund and the Environment Coordination Board. The board was chaired by the Executive Director of UNEP. It worked under the auspices and within the framework of the Administrative Committee on Co-ordination (ACC)⁶² and reported annually to the Governing Council. In a restructuring of the UN system in 1977, however, the UNGA in decision 32/197 assigned the functions of the Environment Coordination Board and other similar thematic coordination mechanisms to the ACC.

130. The disappearance of Environment Coordination Board led to the establishment by UNEP of a system of designated officials. An initiative aimed at providing guidance to the UN system was the System-Wide Medium-Term Environment Programmes (SWIMTEP), which was approved by UNEP Governing Council for the periods of 1984 – 1989 and 1990 – 1995. The Joint Inspection Unit (JIU) in its Management Review of Environmental Governance⁶³ within the UN system makes reference to an acknowledgement of the strategy by the ACC as a “useful instrument and a compilation of activities and as a coordinating tool in the field of environment”.

⁶² UNGA resolution 2997 (1972) part IV

⁶³ JIU/REP/2008/3, Management Review of Environmental Governance

131. The establishment of the EMG by UNGA resolution (A/RES/53/242) in 1999 can be seen as a re-establishment of a separate environmental coordination mechanism in the UN. It was established with the “purpose of enhancing inter-agency coordination in the field of environment and human settlements”. The concept of the EMG had been recommended to the Secretary-General by his designated Task Force on Environment and Human Settlements in 1998. The establishment of the EMG was part of a broader suite of measures included in the resolution to enhance coherent and coordinated action within the UN system, as recommended by the Secretary-General in his report on Environment and Human Settlements (A/53/463).

132. Overall coordination in the UN takes place under the Chief Executives Board for Coordination (CEB), chaired by the Secretary General. Environmental relevant coordination activities directly under the CEB include climate change, water, oceans and energy. EMG is not formally part of the CEB, but works as illustrated below in close cooperation with the CEB. In addition there are as illustrated in annex 2 a number of additional collaborative efforts on environment in the UN system. These efforts are widespread but ad hoc in nature, in particular at the national level.

A. *The Environment Management Group*

133. Members of the EMG comprise the specialized agencies, programmes, and organs of the UN system, including the secretariats of multilateral environmental agreements (MEAs), as well as the Bretton Woods institutions and the World Trade Organization.⁶⁴ It differs slightly in its membership from CEB membership, as it also includes MEA secretariats. Participation of non-UN partners in the EMG is possible through its Issue Management Groups (IMGs) and specific meetings by invitation of the EMG Chair. The Terms of reference of the EMG were endorsed by the Administrative Committee on Coordination (ACC) in 1999⁶⁵, following a process of consultation carried out by the Inter-Agency Committee on Sustainable Development (IACSD)⁶⁶.

134. The group is chaired by the Executive Director of UNEP and supported by a secretariat provided by UNEP. The Senior Officials Meeting of the EMG meets once a year and the meeting is normally co-chaired by the organisation hosting the meeting. EMG identifies issues on the international environmental agenda that warrant cooperation, and finds ways of engaging its collective capacity in coherent management responses to those issues. In accordance with its Terms of Reference the EMG works through technical meetings, time-bound and issue specific Issue Management Groups (IMGs) and consultative groups. Meetings of the EMG are, inter alia, used to initiate consultations on specific issues; establish, as appropriate, IMGs; decide on the mandate and time-frame of IMGs; receive and approve reports of IMGs and give directions to their further work and agree on modalities for reporting to intergovernmental and other inter-agency bodies. The work is set out in a two yearly work-plan. An annual report, which has been circulated to members of the EMG for comments, is provided by the Executive Director to the UNEP Governing Council.

135. The report of the EMG activities for 2009 can be found in document UNEP/GCSS.XI/3. The council in its decision SS.XI/3 took note of the report of the Executive Director on enhanced coordination across the United Nations system welcomed the progress by the EMG in facilitating cooperation across the United Nations system to assist Member States in implementing the environmental agenda. It encouraged the EMG to continue its cooperation, including by working with the United Nations System Chief Executives Board for Coordination and its subsidiary bodies in enhancing:

- (a) The promotion of sustainable management practices in the United Nations system, including by making further progress towards climate neutrality and sustainable procurement;
- (b) Cooperation in programming environmental activities in the United Nations system in the areas of biodiversity, land degradation and green economy, including by supporting the implementation of the strategic plans of the United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa,⁶⁷ and the Convention on Biological Diversity, including the post-2010 biodiversity targets, and by assessing how the United Nations system could more coherently assist countries in making the transition to a green economy;
- (c) Coherence in mainstreaming environmental considerations in United Nations operational activities at the country level, in particular by identifying options for the development of a possible United Nations system-wide approach to environmental aspects.

136. The next report by the Executive Director on the work of EMG will be presented in document UNEP/GC.26/16 Enhanced coordination across the United Nations system, including the Environment

⁶⁴ A summary of the environmental mandate/activities of each EMG member is provided in Annex 1.

⁶⁵ The precursor to today’s Chief Executives Board (CEB).

⁶⁶ The functions of IACSD have now been incorporated into the High-level Committee on Coordination of Programme (HLCP) of CEB.

⁶⁷ ICCD/COP(8)/16/Add.1.

Management Group: Report by the Executive Director. Further information on the work of the EMG is also available on www.unemg.org.

137. The EMG portfolio represents a selected set of issues, and does not cover all environmental issues which are under consideration by the UN system. Issues such as climate change, forests, oceans, water and energy are dealt with in separate processes (see Part B and C below). The EMG, however with its 44 members represents a unique compilation of environmental expertise, competence and capacity across the UN system. This capacity is a resource in ensuring that the UN system adapts to environmental change and its impact on social and economic development. EMG may also be taken into account in considerations of recommendation 7 of the JIU report⁶⁸ to develop a joint system-wide planning framework for the management and coordination of environmental activities as was done in the United Nations response coordinated by the Chief Executives Board for Coordination and presented in a note by the Secretary General⁶⁹.

138. While the Environment Coordination Board, and subsequently the EMG was working under the auspices of and within the framework of ACC, the EMG is currently not recognised as a subsidiary body of the CEB as such. However, in practical terms the EMG cooperates with the CEB and its subsidiary bodies on issues such as climate neutrality and sustainable procurement. The EMG is embedded and functions within a web of interagency mechanisms which cover both strategic and specific aspects of sustainable development and environmental management collaboration and coordination within the UN system, including mechanisms at the global, regional, and national levels. EMG is increasingly interacting with intergovernmental bodies in contributing to both agenda setting and implementation. It illustrates that interagency cooperation can be advanced if it is paired with coordination efforts at intergovernmental level. The need to approach coordination from multiple angles were acknowledged in the envisaged complementary coordination roles assigned to UNEP Governing Council, the secretariat the Environment Fund and the Environment Coordination Board already in 1972.

B. Environmental coordination by the Chief Executives Board for Coordination (CEB)

139. The UN CEB is the highest level inter-agency coordinating mechanism in the UN system and a “successor” of the former Administrative Committee on Coordination (ACC). CEB members comprise the Executive Heads of the Specialized Agencies, Funds, Programmes, International Monetary Fund (IMF), and World Bank. The UN Secretariat is represented by the Secretary General, and the UN Department of Economic and Social Affairs (UNDESA) provides administrative support to the CEB secretariat. The CEB is important because it formally includes the Specialized Agencies and the World Bank and IMF (unlike the UN Development Group where the Specialized Agencies join voluntarily). While the UN Secretariat is represented by the Secretary General, the heads of departments are not present. One of the Executive Secretaries of the Regional Commissions is usually invited to represent all five Regional Commissions. The CEB meets twice a year in plenary and has the following three sub-committees: the High Level Committees on Programmes (HLCP), the High Level Committee on Management (HLCM) and the United Nations Development Group (UNDG). It is chaired by the SG and reports to the UN Economic and Social Council (ECOSOC) in an annual report. In addition to its regular reviews of contemporary political issues and major concerns facing the UN system, the CEB approves policy statements on behalf of the UN system as a whole.

140. The High Level Committee on Programmes (HLCP) is the principle mechanism for system-wide coordination in the programme area in the UN system. It is responsible to CEB for fostering coherence, cooperation and coordination on the programme dimensions of strategic issues for the UN System. The High-level Committee on Management (HLCM) is responsible for ensuring coordination in administrative and management areas across the UN System. HLCM is charged with identifying and analysing administrative management issues of common concern, which require a system-wide response and is authorised to take decisions on behalf of the Executive Heads and to identify, promote and coordinate management reforms that will improve services, achieve productivity improvements and increase efficiency and effectiveness across the United Nations System.

141. The United Nations Development Group (UNDG) was established in 1997 and later became a sub-committee of the CEB to deliver more coherent, effective and efficient support to countries seeking to attain internationally agreed development goals, including the Millennium Development Goals (MDGs). Its members include Funds and Programmes of the UN, the UN Secretariat Departments as well as, on a voluntary basis, the Specialised Agencies. UNDG deals mainly with operational activities for development such as the implementation of the Triennial Comprehensive Policy Review (TCPR), governance of the Multi Donor Trust Fund (MDTF) system, the development of guidelines for the UN Development

⁶⁸ JIU/REP/2008/3, Management Review of Environmental Governance

⁶⁹ <http://www.unemg.org/MeetingsDocuments/EMGSeniorOfficialsMeetings/2009/ReferenceDocuments/tabid/1331/language/en-US/Default.aspx>.

Assistance Framework (UNDAF), as well as support to the Resident Coordinator system and the UN country teams. UNDG membership has grown to 32, plus five observers.⁷⁰ UNDG meets at least three times yearly and decides on issues related to country level coordination including the United Nations Development Assistance Framework (UNDAF), and the Multi Donor Trust Fund system. Environmental sustainability is one of the guiding principles of the UNDAF and in 2009 and 2010 UNDG issued guidance notes for UN Country Teams and implementing partners on mainstreaming environmental sustainability and climate change in the Country Analysis and the UNDAF.

142. Coordination mechanisms outside the CEB include the Executive Committee of Economic and Social Affairs (ECESA), the Executive Committee on Peace and Security (ECPS), the Executive Committee on Humanitarian Affairs (ECFIA), and the UN Evaluation Group (UNEG), the Inter-Agency Standing Committee (IASC), (which involves key UN and non-UN humanitarian Partners). Their work is also relevant environmental activities within the UN in practical efforts to address threats to human well-being from the environmental causes and consequences of conflicts and disasters (see sub chapter V A).

C. Coordinating Mechanisms for Thematic Areas of Environmental Management

143. As part of the commitment of the Secretary-General to foster a One UN approach in the area of climate change, the CEB established in 2007, under the High Level Committee on Programme (HLCP) a Working Group on Climate Change. In response to the priorities identified under the UNFCCC negotiation process, and in pursuance of the broader mandates and capacities in the UN system, the Working Group has undertaken an extensive exercise in coordination to align the strengths, capacities and expertise of the organizations of the United Nations system in order to “deliver as one” on climate change. Inter-agency working groups have been established for both thematic and cross-cutting areas. The five thematic groups are: Finance (Mitigation, Adaptation), Adaptation, Technology Transfer, Capacity Building, and Reducing Emissions from Deforestation and Forest Degradation (REDD). In addition a number of five cross-cutting working groups are: Climate knowledge: science, assessment, monitoring and early warning; Supporting global, regional and national action; Climate-neutral United Nations; Public awareness-raising; Social Dimensions of Climate Change.

144. United Nations system organizations are engaged individually and through collaborative and innovative projects and programmes in the areas referred to in the paragraph above. Several specific activities have been launched, providing an effective support platform for the efforts of Parties to fight climate change through both domestic action and international cooperation. Such initiatives include: - A One UN Training Service Platform on Climate Change (UN CC: Learn) with a searchable inventory of United Nations training and learning material online, a One UN Climate Change Training Package and provision of support to country-driven processes to strengthen human resources, learning and skills development on climate change; - Capacity development for national policymakers through regional and sub-regional preparatory workshops for climate change negotiators from Parties not included in Annex I to the UNFCCC (non-Annex I Parties), technical and policy support to non-Annex I Parties for preparing their national communications and strengthening the capacity of developing countries to assess climate change policy options across different sectors and economic activities; and - A Climate Financing Platform that will help match developers of projects with donors.

145. The CEB also oversees specific inter-agency collaborative arrangements to deal with water and sanitation (UN-Water), energy (UN-Energy), oceans and coastal areas (UN-Oceans), and consumption and production. These mechanisms were established in 2003, when the CEB adopted a set of approaches and guidelines to orient the system’s follow-up to the World Summit on Sustainable Development (WSSD). The aim of relevant action was to strengthen system-wide support for the implementation of WSSD outcomes and integrate them into the follow-up processes for other relevant UN conferences. The secretariat functions for the above mechanisms are provided by UNDESA.

146. In addition to the CEB (and its subordinate bodies), coordinating mechanisms, both formal and informal, exist which cover thematic areas of environmental management (see also annex II). The Executive Director of UNEP, for example, convenes the executive heads of the UNEP administered MEAs through the UNEP MEA Management Team and also involves the executive heads in an annual UNEP retreat. In the area of biodiversity under the Cartagena Protocol on Biosafety to the Biodiversity Convention, governments established a formal mechanism to coordinate biosafety capacity development activities, which involves UN organizations as well as representatives from member states. In the area of chemicals management, the Inter-Organisation Programme for the Sound Management of Chemicals (IOMC) serves as the principal mechanism for initiating, facilitating, and coordinating international action to achieve the WSSD 2020 goal for sound management of chemicals. IOMC is a formal coordinating mechanism with an MoA signed by the heads of agencies of all participating organizations. The Biodiversity Liaison Group was established between the heads of the secretariats of the conventions in 2002 to enhance coherence and cooperation in implementation of the six biodiversity-related conventions.

⁷⁰ For further details, please see: www.undg.org.

147. In addition, mechanisms exist which facilitate coordination and cooperation *across* thematic areas. One such mechanism is the the Joint Liaison Group which has the aim of enhancing coordination between the three Rio Conventions and exploring options for further cooperation, including the exchange of relevant information. Under the UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention), an information clearinghouse has been set up and regular meetings are organized by the secretariat to facilitate coordinating of capacity-building activities of UN and non-UN actors under the Convention.

VII. Conclusions

148. Environmental activities in the UN, has grown organically in response to emerging environmental problems and the evolution of the international environmental governance (IEG) system. The system is a reflection of national political and economic interests and it has evolved in world of geopolitical change and increasing globalisation. Considerations such as of past and present responsibilities for environmental degradation, the need to avoid green conditionality, national sovereignty versus global commitments, and common but differentiated responsibilities have shaped the system. Increasingly observes from major groups has been invited in as an additional resource and reference point at the international level. As these factors have shaped the past they will also continue to shape the future evolution of the IEG system and the environmental activities in the UN system.

149. Environmental activities have over the past four decades increasingly become an integral component of the wider UN system intrinsically linked with activities in a broad range of areas and reflecting a growing importance attributed to the environment by various governing bodies across the system. While the integration of the IEG functions in the UN system is a significant achievement and represents important source of competence and capacity, it also represents a governance challenge. There is a need to strengthen coherence across the system with a view to ensuring delivery of UN system services to countries and to strengthen national coherence vis-à-vis the governing bodies of the various entities of the system. An effective system can help address accelerating environmental change which may adversely affect human well-being related to health, material needs, good social relations and security, especially of poor and vulnerable groups in society. The protection and enhancement of human-wellbeing is a common denominator for the entire UN system and can be seen as the ultimate goal of sustainable development.

150. The UN system, represented by the members of the EMG (see annex 1), collectively constitutes a unique compilation of institutional capacity for addressing environmental change. The role as facilitator of a UN system-wide coordinated approach to the environment and development nexus which so rightly was identified when UNEP was established, has long since not been played by UNEP alone. New opportunities for IEG reform are emerging. Political space for action is increasing following new insights in the risks of environmental change and the value of ecosystem services. Information and communication technologies connect people and institutions and allow for new and innovative consortium arrangements. New markets for trade in emissions and ecosystem services are opening up. Numerous lessons learned from four decades of IEG practice show that experiences in one area can apply to another, or be up-scaled or down-scaled. IEG reform efforts takes place amidst a continuously evolving complex system of international public institutions. Ultimately the efficiency of these institutions will be tested against how well they act together with the national and local institutions in setting the enabling conditions for private sector, house-holds and individuals to address the impact of environmental change on human well-being.

Annex 1: Environmental Profile of EMG Members

The environmental mandate/activities of each EMG member as of 2008 are briefly outlined below.⁷¹ EMG members are organised according to the following categories:

1. UN Secretariat 36
2. Regional Commissions 36
3. UN Funds and Programmes 37
4. Other UN Entities 38
5. Research and Training Institutes 39
6. Specialized Agencies 39
7. Convention Secretariats 42
8. Related Organizations 43

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⁷¹ Additional details can be found at: www.unemg.org/members/index.php.

1. UN Secretariat

United Nations Department of Economic and Social Affairs, Division for Sustainable Development (UNDESA/DSD), www.un.org/esa/sustdev

UNDESA/DSD promotes sustainable development as the substantive secretariat to the CSD and through technical cooperation and capacity-building at international, regional, and national levels. It provides coordinated support for the implementation of Agenda 21, the Programme for the further implementation of Agenda 21, the Barbados Programme of Action for the Sustainable Development of SIDS, the Johannesburg Plan of Implementation (JPOI), and work programmes and decisions adopted by the CSD.

Office for the Coordination of Humanitarian Affairs (OCHA), ochaonline.un.org

OCHA mobilizes and coordinates effective and principled humanitarian action in partnership with national and international actors. It also plays a role in identifying, monitoring, and providing technical and policy support both before and after a crisis, and effectively responding to environmental emergencies. The Joint UNEP/OCHA Environment Unit serves as the integrated UN emergency response mechanism to countries facing environmental emergencies and natural disasters with significant environmental impacts.

2. Regional Commissions

The five UN Regional Commissions provide intergovernmental frameworks for regional cooperation to assist countries in promoting economic and social development and addressing sustainable development issues. The Regional Commissions have unique convening power in organizing ministerial conferences and high level meetings to further the implementation of regional and global sustainable development action plans through policy dialogues.

Economic and Social Commission for Africa (ECA), www.uneca.org

Consistent with the NEPAD framework, activities focus on the following four priorities: Strengthening strategies and programmes for integrated water resources management; Improving land resources management; Harnessing science and technology for sustainable development; and Assessing and monitoring progress on the implementation of the WSSD outcomes.

United Nations Economic Commission for Europe (ECE), www.unece.org

ECE services five environmental Conventions and 12 Protocols to them; services the tripartite Transport, Health and Environment process together with the ECE Transport Division and WHO/Euro; and provides the secretariat services to the 'Environment for Europe' Ministerial process and to the regional follow-up to the WSSD.

Economic and Social Commission for Latin America and the Caribbean (ECLAC), www.eclac.cl

The work of ECLAC in the area of environment and human settlements is articulated in four areas: Evaluation of sustainability in Latin America and the Caribbean; Public policies and pursuit of a global environmental agenda; Economy and environment; and Poverty and the environment.

Economic and Social Commission for Asia and the Pacific (ESCAP), www.unescap.org

ESCAP's environmental activities focus primarily on: Coordinating and monitoring the implementation of the Regional Action Programme for Environmentally Sound and Sustainable Development, 2001-2005, JPOI, the Phnom Penh Regional Platform on Sustainable Development for Asia and the Pacific, and other recommendations of the Ministerial Conference on Environment and Development in Asia and the Pacific; Reviewing the regional implementation of relevant international conventions; Promoting the integration of environmental considerations into economic and social planning; Developing and implementing strategic environmental plans and sustainable development indicators; Promoting the increased involvement of stakeholders in achieving sustainable development goals; Serving as a focal point for the coordination of natural disaster reduction; and Strengthening the capacity of member and associate member countries to achieve sustainable energy development.

Economic and Social Commission for West Asia (ESCWA), www.escwa.org.lb

Environmental issues recently addressed by ESCWA include: Enforcement of environmental legislations; Evaluation of environmental impact assessments (EIA); Development of guidelines for harmonized EIA; National Sustainable Development Strategies and Action Plans; Institutional capacities to upgrade environmental monitoring systems; Public access to environmental information for public participation; State of implementation in the fields of water, sanitation and human settlements, climate change, and air pollution; Environment in the transboundary context in the ESCWA region; and Governance for sustainable development.

3. UN Funds and Programmes

United Nations Conference on Trade and Development (UNCTAD), www.unctad.org

Established in 1964, UNCTAD promotes the development-friendly integration of developing countries into the world economy, through functioning as a forum for intergovernmental deliberations; undertaking research, policy analysis, and data collection; and providing technical assistance. UNCTAD's environmental activities include: Environmental goods and services; MEAs (conceptual and ad-hoc agreements, Basel, Montreal, POPs, etc.); Organic agriculture; Traditional knowledge; REACH and chemicals; Gender and environment; Biotrade; Climate change; POPs; Clean Development Mechanism; Standards and trade; Environmental requirements and market access; Services from ecosystems and related economic instruments; Economic instruments and MEAs; Sustainable tourism, eco-tourism, fair trade, eco-labelling; and Research, policy-advice, capacity-building, training and technical cooperation on above mentioned topics.

United Nations Development Programme (UNDP), www.undp.org

UNDP is the global development network, present in 166 countries, and host to the Resident Coordinator's Network and the UN Multi Donor Trust Fund Office. UNDP's Administrator chairs the United Nations Development Group. UNDP is an organization advocating for change and connecting countries to knowledge, experience and resources to help people build a better life. Environment and energy is one of the four areas of work in UNDP's Strategic Plan (2008-2013). Activities are organized in four pillars: Mainstreaming, climate change adaptation, local solutions, and financing and comprise issues such as frameworks and strategies for sustainable development including sub-national low carbon and climate resilient strategies, water governance, access to sustainable energy sustainable land management, conservation and sustainable use of biodiversity, low carbon policy and planning to control emissions of ozone depleting substances, sound management of chemicals, climate change adaptation and mitigation, including through reduced emissions from deforestation and degradation, Poverty and Environment Initiative (PEI), capacity development, mainstreaming gender, gender and climate change, and community based approaches to sustainable development, including climate change.

United Nations Environment Programme (UNEP), www.unep.org

UNEP provides leadership and encourages partnership in caring for the environment by inspiring, informing, and enabling nations and peoples to improve their quality of life without compromising that of future generations. Within the framework of the medium-term strategy UNEP will focus its efforts during the biennium 2010-2011 on six cross-cutting thematic priorities, namely, climate change; disasters and conflicts; ecosystem management; environmental governance; harmful substances and hazardous waste; and resource efficiency and sustainable consumption and production. The programme will be implemented by a matrix approach through the existing UNEP divisions: Early warning and assessment; Environmental policy development and law; Technology, industry, and economics; Environmental policy implementation; Regional cooperation; Environmental conventions; and GEF coordination.

United Nations Population Fund (UNFPA), www.unfpa.org

UNFPA promotes the right of every woman, man, and child to enjoy a life of health and equal opportunity, and supports countries in using population data for policies and programmes to reduce poverty and to ensure that every pregnancy is wanted, every birth is safe, every young person is free of HIV/AIDS, and every girl and woman is treated with dignity and respect. UNFPA's environmental activities include: Policy dialogue, planning, and research relating to population, poverty, environment, and sustainable development; Providing support for institutional capacity-building to improve data collection, analysis, research, and dissemination; and Promoting population and sustainable development information, education, and advocacy.

United Nations Children's Fund (UNICEF), www.unicef.org

UNICEF advocates for the protection of children's rights, to help meet their basic needs and to expand their opportunities to reach their full potential. UNICEF's environmental activities include: Promoting enabling environments to ensure the effectiveness and sustainability of all water and sanitation programmes; Community and household water security; Water, sanitation, and education focusing on improving the health of school children; and Water and sanitation in emergencies.

United Nations Human Settlements Programme (UN-HABITAT), www.unhabitat.org

UN-HABITAT is mandated by UNGA to promote socially and environmentally sustainable towns and cities with the goal of providing adequate shelter for all. Within UN-HABITAT four main sub programmes can be identified: Shelter and Sustainable Human Settlements Development; Monitoring the Habitat Agenda; Regional and Technical Cooperation; and Financing Human Settlements. Particularly in the area of environment, UN-HABITAT assists local authorities on urban environmental planning and management; urban climate change action planning; basic urban services, such as waste management, water, sanitation; sustainable urban mobility and transportation issues; and urban poverty and environment nexus through capacity building, providing technical advice, guidelines, tools, etc.

United Nations High Commissioner for Refugees (UNHCR), www.unhcr.org

UNHCR was established in 1950 by UNGA to lead and coordinate international action to protect refugees and resolve refugee problems worldwide. UNHCR's environmental activities include: Site planning and settlement establishment; Water and sanitation; Reforestation; Household energy conservation; Sustainable agriculture; Environmental education and awareness raising; Soil and water conservation; Environmental friendly shelter construction; Livestock and animal husbandry; and Environmental assessment, monitoring, and evaluation.

World Food Program (WFP), www.wfp.org

As the food aid arm of the UN, WFP uses its food to meet emergency needs and support economic and social development. It also provides the logistics support necessary to effectively provide food aid and works to put hunger at the centre of the international agenda, promoting policies, strategies, and operations that directly benefit the poor and hungry. WFP has undertaken a number of initiatives to address environmental concerns in both its relief and development interventions including: Incorporating the consideration of environmental issues in its programme design manual; Presenting a paper to the Committee on Food Aid Policies and Programmes (CFA) on sustainable development; Adopting as much as possible various procedures and measures to systematically introduce sound environmental practices in its operations; and Helping poor communities adopt sustainable coping strategies and by addressing environmental concerns in relief and development.

4. Other UN Entities

Office of the High Commissioner for Human Rights (OHCHR), www.ohchr.org

OHCHR has a unique mandate from the international community to promote and protect all human rights. OHCHR works on issues related to human rights as a component of sustainable development and conducts work in the field of MDGs and poverty. OHCHR provides assistance to the Special Rapporteur of the Commission on Human Rights on the adverse effects of the illicit movement and dumping of toxic and dangerous products and wastes on the enjoyment of human rights, and conducts research on the linkages between human rights and sustainable development.

United Nations University (UNU), www.unu.edu

UNU contributes, through research and capacity building, to efforts to resolve the pressing global problems that are a concern of the UN, its peoples, and Member States. UNU focuses on the interactions between human activities and the natural environment and their implications for sustainable human development. The basic issues of human survival, development, and welfare are at the core of the themes covered. Environmental activities include: Management of fragile ecosystems; Water crises; Sustainable urbanization; Environmental governance and information; and Holistic view of environmental transitions.

5. Research and Training Institutes

United Nations Institute for Training and Research (UNITAR), www.unitar.org

UNITAR was established in 1965 as an autonomous body within the UN with the purpose of enhancing the effectiveness of the Organization through appropriate training and research. UNITAR's Environmental Programmes are committed to assisting the development of sustainable institutional, technical, and human resource capacities; raising awareness; increasing knowledge; and improving communication in partner countries and organizations. Six environmental and sustainable development-related areas are involved: Chemicals and waste management; Environmental governance and democracy; Climate change, Decentralized cooperation; Environmental law; and Information society frameworks.

6. Specialized Agencies

Food and Agriculture Organisation (FAO), www.fao.org

FAO's mandate is to raise levels of nutrition, improve agricultural productivity, better the lives of rural populations, and contribute to the growth of the world economy. FAO's Natural Resources Management and Environment Department provides leadership, technical and policy advice and knowledge towards the sustainable use of the earth's natural resources (land, water, genetic resources and biodiversity); improved responses to global environmental challenges affecting food and agriculture, such as climate change and land degradation; assessment of opportunities and challenges of bioenergy; and development of ecological approaches to food security, including organic agriculture and the green economy. FAO's Agriculture and Consumer Protection Department strives to strengthen food systems in terms of nutrition, food safety, sustainable intensification of production and agroindustries. The Economic and Social Department focuses on food security, economic development and trade and gender and rural employment. FAO's Forestry Department focuses on sustainable forest management including forest resource assessment, best silvicultural practices, forest degradation and restoration, protection of forests against pests and fires, forests and climate change, forests, water and erosion protection, forests and wildlife, forest governance, forests industries and forest communication. The Fisheries and Aquaculture Department performs also important environmental functions in relation to meteorological events, pollution, the impact of capture or culture on the resource and the ecosystem approach to fisheries.

International Civil Aviation Organisation (ICAO), www.icao.int

ICAO, as the global forum for civil aviation, aims to achieve safe, secure, and sustainable development of civil aviation through cooperation amongst its member States. ICAO's environmental activities include: Standards and Recommended Practices (SARPs) for aircraft noise and engine emissions certification; Noise abatement operational procedures; Land-use planning and management; Operation restrictions to minimize aircraft noise; Fuel efficiency; Aircraft noise scenarios; Aircraft emissions scenarios; Aircraft noise modeling; Aircraft emissions modeling; Aircraft noise charges policies; Local air quality; Market-based options to reduce emissions including local air quality emissions charges, emissions trading, and voluntary agreements to reduce emissions; Aviation's impact on the upper atmosphere; Climate change; Ozone depletion; and Health issues related to aircraft operations.

International Fund for Agricultural Development (IFAD), www.ifad.org

IFAD is dedicated to eradicating rural poverty in developing countries, focusing on country-specific solutions, which can involve increasing rural poor peoples' access to financial services, markets, technology, land, and other natural resources. IFAD uses a sustainable livelihoods approach (SLA) to improve understanding of the livelihoods of poor people.

International Labour Organisation (ILO), www.ilo.org

ILO is dedicated to bringing decent work and livelihoods, job-related security, and better living standards to the people of both poor and rich countries, by promoting rights at work, encouraging opportunities for decent employment, enhancing social protection, and strengthening dialogue on work-related issues. Activities of ILO's SafeWork programme seek to advance four goals: Preventive policies and programmes are developed to protect workers in hazardous occupations and sectors; Effective protection is extended to vulnerable groups of workers falling outside the scope of traditional protective measures; Governments and employers' and workers' organizations are better equipped to address problems of workers' well-being, occupational health care, and the quality of working life; and The social and economic impact of improving workers' protection is documented and recognized by policy- and decision-makers.

In a broader sense, the ILO is endeavouring to become the recognized international organization for dealing with the impact of climate change, of policies related to it and of other environmental challenges and opportunities in the World of Work. To this end, it is working to deepen its expertise in analysis and policy advice on the formulation and implementation of policies and measures which contribute to economic and development growth in the short-term and to promoting fair globalization and the development of sustainable enterprises and economies which are efficient, socially just and environmentally sound in the medium and long-term. The ILO strategy for the green jobs programme includes producing a comprehensive knowledge base, tested tools and practical approaches, a strong team from various ILO units and offices, the full involvement of the ILO constituents, strategic partnerships and the pooling of resources to achieve shared goals. Labour dimension of disaster management and disaster risk reduction, skills for green jobs, employment intensive infrastructure programmes in adaptation to climate change or creating sustainable enterprises are among the fields where the ILO is working on environment.

International Maritime Organisation (IMO), www.imo.org

IMO's mandate is to promote safe, secure, environmentally sound, efficient, and sustainable shipping. IMO's vision is to reduce to the barest minimum all the adverse environment effect from shipping through cooperation. Within its environmental mandate, IMO has developed and adopted 21 international instruments to address marine pollution arising from international shipping. In addition, a range of mandatory and voluntary Guidelines and Codes have been developed and adopted to provide international standards for the safe transport, storage, and handling of harmful substances. IMO has Secretariat responsibilities for such instruments and regulations, and regularly reviews and updates these. Moreover, IMO is extensively using a widely recognised tool for environmental protection, Marine Protected Areas: Special Areas, under MARPOL and Particularly Sensitive Sea Area (PSSAs). These are key instruments for an effective implementation of IMO regulatory framework as they are flexible horizontal tools that enable the enforcement of more stringent regulations according to the ecological, socio-economic and scientific characteristics of the area.

International Telecommunications Union (ITU), www.itu.int

ITU is the leading UN agency for information and communication technologies, which spans three core sectors: radiocommunication, standardization, and development. ITU's activities assist member states to implement national strategies for sustainable development by facilitating: Access to remote sensing technologies and communications networks permit more effective monitoring, resource management, mitigation of environmental risks; Increased access to/awareness of sustainable development strategies, in areas such as agriculture, sanitation and water management, mining, etc.; Greater transparency and monitoring of environmental abuses/enforcement of environmental regulations; and Facilitating knowledge exchange and networking among policy-makers, practitioners, and advocacy groups.

United Nations Educational Scientific and Cultural Organisation (UNESCO), www.unesco.org

UNESCO provides a forum for designing and coordinating regional and global scientific programmes, assessing and synthesizing scientific information for use by member governments, and building scientific and technological capacities in support of its programmes. A wide range of environmental issues are addressed through a series of UNESCO programmes: International Hydrological Programme (IHP); World Water Assessment Programme; Programme on the Management of Human Transformations (MOST); Man and the Biosphere (MAB) Programme; International Basic Sciences Programme (IBSP); Intergovernmental Oceanographic Commission; International Geoscience Programme; and Natural Disaster Reduction Programme.

United Nations Industrial Development Organisation (UNIDO), www.unido.org

UNIDO's vision is to reduce poverty in countries with developing and transition economies through sustainable industrial growth. Its work aims to enhance the diffusion and transfer of environmentally sound technologies (EST), through: Investment and technology promotion, quality and productivity, small business development, energy and different sectoral activities; and Environmental and energy management. Environmental activities include: Implementation of Montreal Protocol; Implementation of Stockholm Convention and chemicals management; Cleaner Production Centre Programme; Energy-related services; Water Management Programme; and Waste Management Programme.

Universal Postal Union (UPU), www.upu.int

Established in 1874, UPU is the primary forum for cooperation between postal-sector players and helps to ensure a truly universal network of up-to-date products and services. UPU's Task Force "Environment and Sustainable Development" 2005-2008 work programme includes: Gathering feedback from national postal services in order to understand their vision, actions, and policy regarding sustainable development; Updating the Guide "Postal services and the environment"; Developing a tool-kit for self-diagnosis of postal services; Implementing a public awareness campaign of postal services and their employees on the benefits implementing sustainable development polices; Organising an international conference on environment and sustainable development for national postal services in 2006; Continuing cooperation with UNEP; Continuing cooperation with the Group "Environment" of PostEurop; and Planning and conducting a 2008 international audit on the sustainable development practices of the national postal services of UPU member states.

World Tourism Organisation (WTO), www.world-tourism.org

WTO is the leading international organization in the field of tourism, serving as a global forum for tourism policy issues and a practical source of tourism know-how. Environmental activities include: The Sustainable Tourism-Eliminating Poverty programme (ST-EP); Planning for the sustainable development of tourism; Compilations of good practices in sustainable development of tourism; Indicators of sustainability for tourism; Voluntary initiatives and certification systems for sustainable tourism; Sustainable development of tourism in coastal areas and islands; Ecotourism, tourism in protected areas; Urban tourism and tourism at cultural heritage sites; Congestion management at cultural and natural sites; Global Code of Ethics for Tourism; Climate Change and Tourism; The Tour Operators Initiative; and Microfinance and Tourism.

The World Bank Group (The World Bank), www.worldbank.org

The World Bank's mission of global poverty reduction and the improvement of living standards is achieved through providing low-interest loans, interest-free credit, and grants to developing countries for education, health, infrastructure, communications, and many other purposes. Environmental activities include: Natural resources management—biodiversity, climate change, coastal and marine management, forests and forestry, land resources management, and water resources management; Pollution management and environmental health; Environmental economics and indicators; Global environmental management; and Environmental and social sustainability.

World Health Organisation (WHO), www.who.int

WHO is the directing and coordinating authority for health within the UN. It is responsible for providing leadership on global health matters, shaping the health research agenda, setting norms and standards, articulating evidence-based policy options, providing technical support to countries, and monitoring and assessing health trends. Through its Protection of the Human Environment Department, WHO addresses the following environmental issues: Chemical safety including WHO's participation in the International Programme on Chemical Safety; Environmental and occupational health focusing on climate change, indoor air pollution, traffic emissions, and occupational health; Radiation and health addressing the multiple and emerging threats to public health from technologies from exposure to ionizing and non-ionizing (EMF and UV) radiation; Water and sanitation which creates guidelines and identifies best practices; and Healthy environments for children focussing on the settings approach and supports countries in maintaining healthy environments for children.

World Intellectual Property Organisation (WIPO), www.wipo.org

WIPO, established in 1967, is dedicated to developing a balanced and accessible international intellectual property (IP) system, which rewards creativity, stimulates innovation, and contributes to economic development while safeguarding the public interest. Traditional Knowledge arises as an issue in relating to food and agriculture, biological diversity and the environment, biotechnology innovation and regulation, human rights, cultural policies, and trade and economic development. Working in cooperation with other international organizations and in dialogue with NGOs, WIPO provides a forum for international policy debate concerning the interplay between intellectual property and traditional knowledge, genetic resources, and traditional cultural expressions (folklore). It is developing draft legal mechanisms and a range of practical tools aimed at enhancing the IP interests of the holders of such knowledge, resources, and expressions.

World Meteorological Organisation (WMO), www.wmo.ch

WMO, established in 1950, is the UN system's authoritative voice on the state and behaviour of the Earth's atmosphere, its interaction with the oceans, the climate it produces, and the resulting distribution of water resources. WMO's environment-related activities include: Weather and climate observations both surface and space observations; Data collection, dissemination, and processing; Weather forecasting and warning to decision-making and public; Application of meteorological services and information to areas such as agriculture, transport, marine activities, etc.; Climate prediction including urban climatology and heat wave prediction; Application of climate information and services to socio-economic benefit and for human health and other sectors such as energy, urban issues, and tourism; Atmospheric research, in particular through the Global Atmosphere Watch to detect, monitor and assess and project changes in the composition of the atmosphere; Emergency response in cases of chemical and nuclear accidents, forest fire, and volcanic ash; Assessment of the quantity and quality of water resources; and Natural disaster prevention and mitigation.

7. Convention Secretariats**Secretariat of the Convention on Biological Diversity (CBD), www.biodiv.org**

The secretariat supports Parties to achieve the objectives of the Convention: the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources. A supplementary agreement to the Convention—the Cartagena Protocol on Biosafety—seeks to protect biological diversity from the potential risks posed by living modified organisms resulting from modern biotechnology. The COP to the CBD has initiated work on seven thematic work programmes addressing: marine and coastal biodiversity; agricultural biodiversity; forest biodiversity; island biodiversity; the biodiversity of inland waters; dry and sub-humid lands; and mountain biodiversity.

Secretariat of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), www.cites.org

Supported by the secretariat, CITES aims to ensure that international trade in specimens of wild animals and plants does not threaten their survival. CITES works by subjecting international trade in specimens of more than 30,000 species of animals and plants to certain controls. All import, export, re-export, and introduction from the sea of species covered by the Convention has to be authorized through a licensing system.

Secretariat of the Convention on Migratory Species (CMS), www.cms.int

The Convention on the Conservation of Migratory Species of Wild Animals (also known as CMS or Bonn Convention) aims to conserve terrestrial, marine, and avian migratory species throughout their range. It is an intergovernmental treaty, concluded under the aegis of UNEP, concerned with the conservation of wildlife and habitats on a global scale. The CMS Secretariat, under the auspices of UNEP, provides administrative support to the Convention.

Ramsar Convention on Wetlands Secretariat (RAMSAR), www.ramsar.org

RAMSAR is a multilateral treaty established in 1971, which deals with conservation and wise use of wetlands and water resources, through national actions and international cooperation. The secretariat facilitates its implementation by Parties. Environmental activities concern all aspects of wetland and water resource conservation and wise use, comprising both freshwater and saline inland waters (including subterranean systems), and marine waters up to a depth of six metres.

Secretariat of the Basel Convention (SBC), www.basel.int

The main goal of the Convention is to protect human health and the environment from the adverse effects which may result from handling, transporting, and disposing of hazardous and other wastes. To achieve this, the Convention pursues four objectives, with the assistance of the secretariat: To reduce transboundary movements of hazardous wastes to a minimum consistent with their environmentally sound management; To treat and dispose of such wastes as close as possible to their source of generation; To promote the environmentally sound management (ESM) of hazardous wastes; and To minimise the generation of hazardous wastes.

Secretariat of the UN Convention to Combat Desertification (UNCCD), www.unccd.int

Recognizing that desertification is a major economic, social, and environmental problem of concern to many countries in all regions of the world, the Convention aims to tackle desertification through an integrated approach, emphasizing action to promote sustainable development at the community level. Countries affected by desertification are implementing the Convention by developing and carrying out national, sub-regional, and regional action programmes. The secretariat facilitates the development of action programmes. Consultations among affected countries, donors, and intergovernmental and non-governmental organizations improve coordination and channel development assistance to where it can be most effective. They also produce partnership agreements that spell out the respective contributions of both affected and donor states and of the Secretariat and other international organizations.

Secretariat of the UN Framework Convention on Climate Change (UNFCCC), www.unfccc.int

The Convention on Climate Change sets an overall framework for intergovernmental efforts to tackle the challenge posed by climate change. Under the Convention, governments gather and share information on greenhouse gas emissions, national policies and best practices, launch national strategies for addressing greenhouse gas emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries and cooperate in preparing for adaptation to the impacts of climate change. The secretariat structure has evolved through the years responding to the development of its mandated activities, and the scope and complexity of its work. There are currently four technical programmes, Adaptation, Technology and Science (ATS), Financial and Technical Support (FTS), Reporting, Data, and Analysis (RDA) and Sustainable Development Mechanisms (SDM).

8. Related Organizations

International Atomic Energy Agency (IAEA), www.iaea.org

Set up as the world's "Atoms for Peace" organization in 1957 within the UN family, IAEA works with its Member States and multiple partners worldwide to promote safe, secure, and peaceful nuclear technologies. Environmental activities include: Nuclear techniques for development and environmental protection; Nuclear safety and security; Management of technical cooperation for development; and Nuclear power, fuel cycle and nuclear science.

World Trade Organisation (WTO), www.wto.org

The WTO provides a framework of disciplines to facilitate global trade and serves as a forum to negotiate further trade openness. In general terms, WTO rules, with their fundamental principles of non-discrimination and transparency, contribute to setting the framework for ensuring predictability and the fair implementation of measures to address environmental concerns. WTO specialized committees provide a forum to advance dialogue and understanding of trade and environment linkages. Furthermore, the WTO is an important forum for advancing sustainable development. This is reflected in the Preamble of the Marrakesh Agreement to allow for the optimal use of the world's resources in accordance with the objective of sustainable development. The 2001 Doha Development Agenda reaffirmed this objective and mandated key WTO fora to identify and debate developmental and environmental aspects of the Doha Round negotiations in order to help achieve the objective of having sustainable development reflected in the negotiations. The Doha Round, which represent the first significant multilateral negotiations on trade and environment issues, include negotiations that seek to liberalize trade in goods and services that have environmental benefits; to ensure a harmonious co-existence between WTO and multilateral environmental agreements (MEAs); to reduce trade distorting subsidies in agriculture that could lead to a more efficient allocation of global resources and production; and to clarify and improve WTO disciplines on fisheries subsidies, responding to the increasing attention being paid to the problems of overcapacity and over-fishing.

International Trade Centre (ITC), www.intracen.org

ITC is the joint technical cooperation agency of UNCTAD and the World Trade Organization. ITC enables small business export success in developing countries by providing, with partners, trade development solutions to the private sector, trade support institutions, and policy-makers. ITC provides environment-related technical assistance in each of its areas of work: Product and market development; Development of trade support services; Trade information; Human resource development; International purchasing and supply management; and Needs assessment, programme design for trade promotion

Global Environment Facility (GEF), www.gefweb.org

GEF is a catalyst and a facilitator of global environmental sustainability. As a financial mechanism with the core mandate of providing new and additional funding for agreed incremental costs of projects and programs in developing countries that produce global environmental benefits, GEF works in the following areas: Biological diversity; Climate change; International waters; Land degradation; Ozone depletion; and POPs.

United Nations International Strategy for Disaster Reduction secretariat (UN/ISDR), www.unisdr.org

ISDR aims at building disaster resilient communities by promoting increased awareness of the importance of disaster reduction as an integral component of sustainable development, with the goal of reducing human, social, economic, and environmental losses due to natural hazards and related technological and environmental disasters. ISDR secretariat activities related to the environment include: Promoting multi-disciplinary institutional mechanisms in countries to support effective disaster risk reduction implementation, involving environmental ministries; Promoting disaster risk reduction, as an integral part of sustainable development policies and practices, in relevant sectoral development agendas; Developing education material on environment and disaster risk reduction; Supporting capacity-building efforts, related to sound environmental practices that reduce disaster risk; and Compiling information on 'good practices' for environmental management that integrate disaster risk.

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ANNEX 2: UN COLLABORATION IN THEMATIC ENVIRONMENTAL AREAS

This annex provides a series of “fact sheets” which outline, for each thematic area of environmental management: key issues, international agreements, primary coordination mechanisms, collaborative global programmes and initiatives prepared in 2008.

More information on UN inter-agency collaboration can be found in the report “Inventory and Analysis of United Nations Development Programme (UNDP) and United Nations Environment Programme (UNEP) Collaboration” (March 2010)⁷². This worldwide global survey identified a significant number of joint UNDP-UNEP activities at the global, regional and national level that are in line with the respective strategic priorities of the two organizations. The analysis indicates that collaborative efforts are widespread but ad hoc in nature, sometimes based on a simple division of responsibility for provision of support to different countries (notably the case for projects financed by the GEF or similar global funds), and seldom integrated into UN Development Assistance Frameworks (UNDAF) or country programmes. There is no clear model of partnership although it appears that the One UN pilots and the Multi-Donor Trust Funds (MDTFs, such as MDG-F and UN-REDD) help the two agencies to organize collaboration and overcome operational difficulties stemming from differing administrative systems. Valuable lessons have been learned as well through the joint implementation of the Poverty and Environment Initiative (PEI), which helps countries mainstream environmental considerations into national planning and budgeting processes.

The following thematic areas are addressed:

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⁷² Insert weblink once available

AIR POLLUTION CONTROL**Context**

Air pollution control is a broad and multidimensional endeavour involving various sectors of economic activity. According to WHO, only 15% of the largest cities in developing countries have acceptable air quality—due, for example, to emissions of nitrogen oxides, sulphur oxides, particles, carbon monoxide, and hydrocarbons. CSD's fourteenth session in 2006 and fifteenth session in 2007 focused on a cluster of thematic issues, including atmosphere and air pollution.

International AgreementsSoft law:

- Agenda 21, Chapter 9: Protection of the atmosphere, 1992
- WSSD Johannesburg Plan of Implementation, Paras 39, 56, 2002

Legal instruments:

- UNECE Convention on Long-range Transboundary Air Pollution (LRTAP), 1979
- MARPOL Annex VI- Regulations for the Prevention of Air Pollution from Ships

Coordination

Information exchange and coordination in the area of air pollution control takes place within the context of agreements such as LRTAP and through major programmes such as the Clean Fuels and Vehicles Partnership.

Collaborative Programmes and Initiatives

Title/Topic	Partner Agencies	Website
Clean Fuels and Vehicles Partnership	UNDESA, UNDP, UNEP, WHO, World Bank	www.unep.org/pcfvt
Prevention and Control of Dust and Sandstorms in North-East Asia	ADB, UNESCAP, UNCCD, UNEP	www.adb.org
Partnership for Clean Indoor Air	WHO, UNEP, UNDP, World Bank, PREDAS, PAHO, CCAD	www.pciaonline.org

BIODIVERSITY

Context

The Millennium Ecosystem Assessment released in March 2005 concludes that there has been a substantial and largely irreversible loss in the diversity of life on earth due to human action. Among the outstanding problems is the dire state of many of the world's fish stocks, the vulnerability of the two billion people living in dry regions to the loss of ecosystem services, and the growing threat to ecosystems from climate change and nutrient pollution. In April 2002, the Parties to the CBD committed themselves 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. This "2010 Biodiversity Target" was subsequently endorsed by the WSSD and UNGA, and was incorporated as a new target under the MDGs. Biodiversity has also been discussed by CSD on several occasions and is one of the themes for discussion in the 2012/2013 two-year cycle.

International Agreements

Soft law:

- Agenda 21, Chapter 15: Conservation of biological diversity, 1992
- WSSD Johannesburg Plan of Implementation, Paras 44, 45, 2002

Legal instruments:

- Convention on Biological Diversity (CBD), 1992
- Cartagena Protocol on Biosafety to the Convention on Biological Diversity, 2000
- Convention on International Trade in Endangered Species (CITES), 1973
- Convention on the Conservation of Migratory Species of Wild Animals (CMS), 1979
- International Treaty on Plant Genetic Resources for Food and Agriculture, 2001
- Convention on Wetlands of International Importance Especially as Waterfowl Habitat (Ramsar Convention), 1971
- Convention concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention), 1972
- International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004
- International Convention on the Control of Harmful Anti-fouling Systems on Ships, 2001

Coordination

In order to enhance coherence and cooperation in implementation of the six biodiversity-related conventions, the Biodiversity Liaison Group was established between the heads of the secretariats of the conventions in 2002. The Group meets regularly to explore opportunities for synergistic activities and increased coordination, and to exchange information.

The Heads of Agencies Task Force on the 2010 Biodiversity Target, which held its first meeting in September 2006, includes representatives of UNEP, UNDP, FAO, UNESCO, UNCTAD, and UNITAR, as well as the CBD, CITES, CMS, Ramsar, IUCN, WWF, and the International Plant Genetic Resources Institute. In order to facilitate intersessional work and discussions, the CBD Secretariat maintains and moderates a listserv or equivalent, and each agency nominates a focal point(s) for the intersessional work of the partnership.

Under the Cartagena Protocol on Biosafety to the CBD, governments adopted the Capacity-building Coordination Mechanism, which involves UN organizations as well as representatives from member states. The Mechanism includes the Liaison Group on Capacity-building in Biosafety; biosafety capacity-building databases; information-sharing and networking mechanism; coordination meetings; and the Reporting Mechanism.

Collaborative Programmes and Initiatives

Title/Topic	Partner Agencies	Website/Webpage
Biological Diversity of Dry and Sub-humid Lands	CBD, UNCCD, UNEP-DELC	www.cbd.int/drylands
RAMSAR-CBD Joint Work Programme	RAMSAR, CBD	www.ramsar.org/cbd/key_cbd_jw_p3_e.htm
CBD-UNEP/WCMC Joint Work Programme	CBD, UNEP-WCMC	www.unep-wcmc.org/cbd/support/

Title/Topic	Partner Agencies	Website/Webpage
Forest Biodiversity	CBD, FAO, UNFF, other members of the CPF	www.cbd.int/forest
Island Biodiversity	CBD, WTO (Tourism), UNEP-WCMC, UNEP-DTIE	www.cbd.int/island
Marine and Coastal Biodiversity	CBD, UNIPLOS, IOC-UNESCO, FAO	www.cbd.int/marine
Global Ballast Water Management Programme (GloBallast) (2000-2004) on Invasive Aquatic Species (IAS) GloBallast Partnerships (2008-2012) on IAS	GEF, IMO, UNDP,	globallast.imo.org/
Inter-Agency Liaison Group on Invasive Species has been established by the CBD Secretariat,	CBD, IPPC, OEI, COFI, WTO, ICAO, IMO, CITES, GISP, IUCN	
Mountain Biodiversity	CBD, FAO	www.cbd.int/mountain
Protected Areas	CBD, UNESCO, UNEP	www.cbd.int/protected
Access and Benefit-sharing	CBD, UNEP, FAO, WIPO, WTO, UPOV, UNCTAD, UNU-IAS	www.cbd.int/abs
Traditional Knowledge, Innovations, and Practices	CBD, WIPO, UNESCO, UNPFII, members of IASG	www.cbd.int/traditional
Technology Transfer and Cooperation	CBD, WIPO, UNCTAD	www.cbd.int/tech-transfer
Economics, Trade, and Incentive Measures	CBD, UNEP	www.cbd.int/incentives
Biodiversity Planning Support Programme	UNDP, UNEP, GEF	www.undp.org/bpsp/
Global Partnership for Cities and Biodiversity	CBD, UN-HABITAT, ICLEI	www.iclei.org/lab
Year of the Dolphin Campaign	UNEP-CMS, UNESCO	www.yod2007.org/en/Start_page
Great Apes Survival Project (GRASP)	UNEP, UNESCO	www.unep.org/GRASP
Global Partnership for Plant Conservation	FAO, UNEP-WCMC, others	www.plants2010.org
2010 Biodiversity Indicators Partnership	UNEP, Convention Secretariats (CBD, CITES, CMS), UNESCO, FAO, UNEP, GEF	www.twentyten.net

CHEMICALS MANAGEMENT

Context

Chemicals are essential to meet the social and economic goals of the world community. Today's best practice demonstrates that they can be used widely in a cost-effective manner and with a high degree of safety. However, significant challenges remain to ensure the environmentally sound management of toxic chemicals, within the context of sustainable development. In addition to the many international agreements on chemicals management, the Strategic Approach to International Chemicals Management (SAICM), adopted in February 2006, will support the achievement of the goal, agreed at WSSD, of ensuring that, by the year 2020, chemicals are produced and used in ways that minimize significant adverse impacts on the environment and human health.

International Agreements

Soft law:

- Agenda 21, Chapter 19: Environmentally sound management of toxic chemicals, including prevention of illegal international traffic in toxic and dangerous products, 1992
- WSSD Johannesburg Plan of Implementation, Paras 23, 68, 2002
- Strategic Approach to International Chemicals Management (SAICM), 2006
- International Code of Conduct on the Distribution and Use of Pesticides (Revised version), 2002
- The Globally Harmonized System of Classification and Labelling of Chemicals (GHS), 2002
- International Code of Conduct on the Distribution and Use of Pesticides (Revised version), 2002
- The Globally Harmonized System of Classification and Labelling of Chemicals (GHS), 2002.

Legal instruments:

- Stockholm Convention on Persistent Organic Pollutants, 2001
- Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (PIC), 1998
- Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction (Chemical Weapons Convention; CWC), 1993
- ILO Chemicals Convention 1990, No. 170, 1990
- ILO Prevention of Major Industrial Accidents Convention 1993, No. 174, 1993
- MARPOL Annex I Regulations for the Prevention of Pollution by Oil
- MARPOL Annex II Regulations for the control of pollution from Noxious Liquid Substances in Bulk.
- MARPOL Annex III Regulations for the prevention of pollution of harmful substances carried by Sea in Package Form
- International Convention for the Safety of Life at Sea (SOLAS)
- Protocol on Pollutant Release and Transfer Registers to the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, 2003 (entry into force 2009)

Coordination

The Inter-Organization Programme for the Sound Management of Chemicals (IOMC) serves as the primary mechanism for initiating, facilitating, and coordinating international action to achieve the WSSD 2020 goal for sound management of chemicals. It was established in 1995 through a Memorandum of Understanding signed by the Executive Heads of seven Participating Organizations (POs). These organizations include FAO, ILO, OECD, UNEP, UNIDO, UNITAR, and WHO. UNDP and the World Bank currently participate as observer organizations. An Inter-Organization Coordinating Committee (IOCC) is composed of representatives of the POs and meets twice a year. The Chair position rotates annually and decisions are taken by consensus. For specific issues, subsidiary groups are established, such as the IOMC Coordinating Group on Persistent Organic Pollutants. WHO is currently the administering organization for the IOMC and provides secretariat services to IOCC.

Collaborative Programmes and Initiatives

Title/Topic	Partner Agencies	Website
International Programme on Chemical Safety	WHO, ILO, UNEP (working jointly with FAO and in collaboration with other UN agencies and IOMC)	www.who.int/ipcs
Africa Stockpiles Programme	AU, SBC, FAO, NEPAD, UNECE, UNEP, UNIDO, UNITAR, WORLD BANK, WHO, PAN-UK, PAN-Africa, WWF, CLI	www.africastockpiles.org
Partnership Initiative for the Integration of Sound Management of Chemicals: Considerations into Development Planning and Processes	UNEP, UNDP	www.undp.org/chemicals
Pesticide Residues in Food and the Environment	WHO, FAO	www.who.int/ipcs/food
Capacity-building to Implement the GHS	UNITAR, ILO, OECD, UNECE	www.unitar.org/cwm/ghs
GESAMP/ EHS Working Groups on: - the hazard evaluation for chemical substances carried by ships and Working; - on Ballast Water (active substances)	IMO with GESAMP partners	www.gesamp.org/work-programme/workgroups/working-group-34
Capacity building and implementation activities for the implementation of the objectives of the Strategic Approach to International Chemicals Management (SAICM)	UNITAR, IOMC Organizations, SAICM Secretariat, World Bank, UNDP, OPCW, SBC	www.saicm.org
Green Customs Initiative	UNEP, SBC, Stockholm Convention Secretariat, Rotterdam Convention Secretariat, CITES, Ozone Secretariat, Interpol, WCO, OPCW	www.unep.fr/ozonaction/partnerships/greencustoms.htm
Rotterdam Convention Secretariat	UNEP, FAO	www.pic.int
Alert and Response Mechanisms for Chemical Accidents	WHO, IPCS, UNEP, UNEP/OCHA, OPCW, IMO, WMO, UNICEF	www.who.int/ipcs/emergencies
Environmental Assessment following Chemical Emergencies	Joint UNEP/OCHA Environment Unit	www.reliefweb.int/ochaunep
EXICHEM Database	OECD, WHO, UNEP, ECETOC	webdomino1.oecd.org/ehs/exichem.nsf
Capacity-building to Implement the Rotterdam Convention	Rotterdam Convention Secretariat, UNITAR	www.unitar.org/cwm
Technical assistance for capacity building relating to implementation of obligations under the Stockholm Convention on Persistent Organic Pollutants (POPs)	GEF, UNDP, UNEP, UNIDO, Stockholm Convention Secretariat, UNITAR, WHO, FAO, IOMC	www.pops.int

CLIMATE CHANGE

Context

The Earth's climate system has changed on both global and regional scales since the pre-industrial era, with some of these changes attributable to human activities. The atmospheric concentrations of key anthropogenic greenhouse gases (i.e. carbon dioxide, methane, nitrous oxide and tropospheric ozone) reached their highest recorded levels, primarily due to the combustion of fossil fuels, agriculture, and land use changes. The consensus scientific basis on climate change is provided by the Intergovernmental Panel on Climate Change (IPCC), established in the late 1980s under the auspices of WMO and UNEP. The summary of the IPCC Fourth Assessment Report, released in early 2007, concludes that the warming of the climate system is unequivocal and accelerating. It goes on to state that the observed increase in global average temperatures is very likely (greater than 90% confidence) due to GHG emissions from human activities, up from greater than 60% confidence in its 2001 assessment report. Both Agenda 21 and the Johannesburg Plan of Implementation (JPOI) assert that the UNFCCC is the key instrument for addressing climate change. Climate change formed part of the thematic cluster with energy, industrial development, and air pollution/atmosphere reviewed by CSD at its fourteenth session in 2006 and fifteenth session in 2007.

International Agreements

Soft law:

- Agenda 21, Chapter 9: Protection of the atmosphere, 1992
- WSSD Johannesburg Plan of Implementation, Para 38, 2002

Legal instruments:

- United Nations Framework Convention on Climate Change (UNFCCC), 1994
- Kyoto Protocol to the UNFCCC, 1997

Coordination

The COP to the UNFCCC and the COP serving as the meeting of the Parties to the Kyoto Protocol (CMP), which usually meets annually for a period of two weeks (with over 50 intergovernmental agencies and international organizations attending as observers) provide a regular forum for sharing information and facilitating coordination (including among UN agencies) regarding climate change-related activities. In addition, the UNFCCC Secretariat regularly prepares reports to the COP on relevant UN activities and international cooperation.

Collaborative Programmes and Initiatives

Title/Topic	Partner Agencies	Website/Webpage
Global Climate Observing System	UNEP, UNESCO, WMO	www.wmo.int/pages/prog/gcos
Joint Liaison Group (JLG)	CBD, UNCCD, UNFCCC	www.cbd.int/climate/partners.shtml
Climate Change Capacity Development (C3D)	UNDP/GEF National Communication Programme, UNFCCC, UNITAR	www.c3d-unitar.org/
National Adaptation Programme of Action Training Workshops	UNDP/GEF, World Bank/GEF, GEF, UNFCCC, UNFCCC LDC Expert Group, UNITAR	www.unitar.org/ccp/napaworkshops
Information Exchange on the Reduction of Greenhouse Gas Emissions from International Transport	UNFCCC, UNEP (Vienna Convention and Montreal Protocol), ICAO, IMO, WMO, UNECE (LRTAP)	
Joint Programme of Work on Cities and Climate Change	Cities Alliance, UNEP, UN-Habitat, World Bank	www.citiesalliance.org
Adaptation Learning Mechanism	UNDP/World Bank/UNFCCC/UNEP/FAO/CC Gateway	http://www.adaptationlearning.net/

Title/Topic	Partner Agencies	Website/Webpage
UN Climate Change Gateway	38 UN Organisations	http://www.un.org/wcm/content/site/climatechange/gateway
Community Based Adaptation	UNDP/UN Volunteers, GEF	http://www.undp-adaptation.org/projects/websites/index.php?option=com_content&task=view&id=203
UN REDD Programme	FAO, UNDP, UNEP	http://www.un-redd.org/
PaCFA: Global Partnership Climate, Fisheries and Aquaculture	BCC, CBD, EBCD, FAO, GLOBEC, ICES, ICFA, ISDR, NACA, NACEE, OECD, OSPESCA, PICES, SEAFDEC, SPC, UNDP, UNEP, UNESCO-IOC, World Bank, WorldFish Centre	http://www.climatefish.org
The Green Jobs Initiative	ILO, UNEP, the International Trade Union Confederation (ITUC) and the International Organization of Employers (IOE).	www.ilo.org/greenjobs
Regions (local governments) and Food Security	FAO, UNDP, UNEP, FOGAR, NrG4SD	http://www.nrg4sd.net/ http://www.crpm.org/index.php?act=4,7,2#organisation
National Communications Support Programme	UNEP, UNDP, GEF, UNFCCC	ncsp.undp.org
Vulnerability and Adaptation Resource Group	BMZ, CIDA, DFID, DGIS, EC, GEF, GTZ, KfW, OECD, Red Cross/Red Crescent (Climate Center), SIDA, UNDP, UNEP, UNFCCC, UNISDR, USAID, USEPA, World Bank, WMO, WHO	www.climatevarg.org

DESERTIFICATION

Context

Desertification includes land degradation in arid, semi-arid, and dry subhumid areas resulting from various factors, including climatic variations and human activities. Desertification affects as much as one-sixth of the world's population, seventy percent of all drylands, and one-quarter of the total land area of the world. It results in widespread poverty as well as in the degradation of billion hectares of rangeland and cropland. Combating desertification and drought has been discussed by CSD in several sessions. In the framework of CSD's current multi-year work programme, the third cycle, CSD 16-17 in 2008 and 2009 will focus on desertification and drought along with the interrelated issues of Land, Agriculture, Rural development, and Africa.

International Agreements

Soft law:

- Agenda 21, Chapter 12: Managing fragile ecosystems: combating desertification and drought, 1992
- WSSD Johannesburg Plan of Implementation, Para 41, 2002

Legal instruments:

- United Nations Convention to Combat Desertification (CCD), 1994

Coordination

The COP to the UNCCD, which as of 2001 is held on a biennial basis, provides a regular forum for sharing information and facilitating coordination (including among UN agencies) regarding desertification-related activities. UNCCD activities are coordinated with the secretariats of other relevant international bodies and conventions, like those of the UNFCCC and CBD. The Facilitation Committee of the Global Mechanism of the UNCCD meets regularly to discuss coordination around issues concerning the Global Mechanism and provides advisory support to enhance its work. In addition, the UNCCD Secretariat regularly prepares reports to the COP on relevant UN activities and international cooperation.

Collaborative Programmes and Initiatives

Title/Topic	Partner Agencies	Website/Webpage
CCD/UNFCCC-related joint activities	UNCCD, UNFCCC	www.unccd.int/php/document.php?ref=ICCD/COP(8)/4
Conservation and sustainable management of Saharan biodiversity and ecosystems	CMS, UNCCD	www.unccd.int/php/document.php?ref=ICCD/COP(8)/4
Middle East North Africa Regional Investment Program	IFAD, UNDP, AFDB, UNEP, FAO	
TerrAfrica	World Bank, UNDP, IFAD, FAO, AFDB, UNEP, GEF	www.terrafrica.org

ENERGY

Context

Energy is fundamental to achieving sustainable development goals. Its use enables socio-economic development, but contributes to environmental degradation. Access to reliable and affordable energy services is essential for improving economic and social development and eliminating poverty. Today, across the world, 1.6 billion people lack access to electricity and 2.4 billion people rely on traditional biomass for their cooking and heating needs. Lack of energy services can negatively affect prospects for realizing sustainable development and achieving all of the MDGs. At WSSD, the linkages between energy and poverty reduction were clearly established, and there was an emphasis on changing unsustainable patterns of consumption and production. Energy was one of the major themes of the ninth session of the CSD, held in 2001. CSD's fourteenth session in 2006 and fifteenth session in 2007 focused on a cluster of thematic issues, which included Energy for Sustainable Development; Industrial Development; Air pollution/Atmosphere; and Climate Change.

International Agreements

Soft law:

- Programme for the Further Implementation of Agenda 21, 1997
- WSSD Johannesburg Plan of Implementation, Paras 9, 20, 21, 59, 62, 2002
- Agenda 21, Chapter 7: Promoting sustainable human settlement development, 1992
- Agenda 21 Chapter 9: Protection of the atmosphere, 1992

Coordination

UN-Energy is the principal collaborative mechanism to ensure that UN work on energy is undertaken in a coherent manner. With the diverse perspectives of the twenty members, the strength of this mechanism is the ability to offer synergies and new approaches in the design and implementation of programmes, projects, and products across the field. UN-Energy also offers a platform for knowledge sharing. UN-Energy has a rotating chairmanship at a high policy level, and vice chair at the expert level. It is open to all UN organizations, meets at least once each year, and will review its TOR every four years, or as appropriate. Secretariat services are provided by DESA.

Collaborative Programmes and Initiatives

Title/Topic	Partner Agencies	Website/Webpage
UN-Energy Africa	UNIDO, ECA, UN-HABITAT, UNDP, UNEP	esa.un.org/un-energy
Policy guidance, capacity building, and awareness on Tools for policy integration at national level	IAEA, DESA, FAO, UNEP, UNIDO	esa.un.org/un-energy
International Bioenergy Platform	UN-Energy, UNEP, UNDP, UNIDO, ECE, UNCTAD, ECLAC, INSTRAW	
Global Network on Energy for Sustainable Development	UNDESA, UNDP, UNEP, UNIDO, WORLD BANK	www.gnesd.org
Global Energy Efficiency 21 ,	5 Regional Commissions,	http://www.unece.org/energy/se/en/effic.html
Policy Coherence and Operational Cooperation on Bio-energy	FAO, UNEP, UNDP, ECE, UNIDO, DESA, ECLAC, INSTRAW	esa.un.org/un-energy
Collaboration on Energy Conservation	UNHCR, WFP	
Energy Sector Management Assistance Program	UNDP, World Bank	

Title/Topic	Partner Agencies	Website/Webpage
Delivering Coordinated Action on the Ground to Respond to Energy Challenges	UNDP, UNEP, World Bank	www.energyandenvironment.undp.org

DRAFT

ENVIRONMENTAL HEALTH

Context

Environmental health addresses all the physical, chemical, and biological factors external to a person, and all the related factors impacting behaviours. It encompasses the assessment and control of those environmental factors that can potentially affect health. It is targeted towards preventing disease and creating health-supportive environments. This definition excludes behaviour not related to environment, as well as behaviour related to the social and cultural environment, and genetics.

International Agreements

- Agenda 21, Chapter 6: Protecting and promoting human health conditions, 1992

Coordination

Information exchange and coordination in the area of environmental health mainly takes place through collaboration in specific programmes and initiatives (see below).

Collaborative Programmes and Initiatives

Title/Topic	Partner Agencies	Website/Webpage
Health and Environment Linkages Initiative	WHO, UNEP	www.who.int/phe
Global Initiative on Children Environmental Health	WHO, UNEP, UNICEF	http://www.who.int/ceh/en
Global Plan of Action on Workers' Health	WHO, ILO, UNEP	www.euro.who.int/occhealth
Health Adaptation to Climate Change	WHO, UNFCCC, WMO, UNEP, UNDP, GEF	www.who.int/globalchange/climate
Healthy Environments for Children Alliance	WHO, UNEP, UNICEF	www.who.int/heca
THE PEP – the Transport, Health and Environment Pan-European Programme	UNECE, WHO/Europe,	http://www.unece.org/thepep/en/welcome.htm
Focusing Resources on Effective School Health	UNESCO, WFP, UNICEF, WHO, World Bank, FAO	www.freshschools.org/
Environmental Management for Vector Control	WHO, FAO, UNEP	www.who.int/water_sanitation_health/resources

FORESTS

Context

Forests are an integral part of global sustainable development: forest-related economic activities affect livelihoods of 1.6 billion people worldwide; they provide socio-cultural benefits and are the foundation for indigenous knowledge; and as ecosystems, forests play a critical role in mitigating the effects of climate change, regulating the water cycle, protecting both soil and biodiversity. The yearly net loss of forests affects an area of 5,2 million ha due to conversion to agricultural land, unsound land management practices and establishment of human settlements are the most common reasons for this loss of forested areas. In 1946, FAO was established as the first specialized UN agency including a Forestry Department dealing with sustainable management of forests, forest governance and forest based industries. In 2000, ECOSOC established the United Nations Forum on Forests (UNFF), as a subsidiary body with the main objective to promote "...the management, conservation and sustainable development of all types of forests and to strengthen long-term political commitment to this end...". In the framework of CSD's current multi-year work programme, CSD 2012/13 will focus on forests along with biodiversity, biotechnology, tourism, and mountains.

International Agreements

Soft law:

- International Poplar Commission established in 1947 and hosted by FAO
- Silva Mediterranea established in 1948 and hosted by FAO
- Agenda 21, Chapter 11: Combating deforestation, 1992
- Non-legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of all Types of Forests (Forest Principles), 1992
- WSSD Johannesburg Plan of Implementation, Para 45, 2002
- Non-legally Binding Instrument on All Types of Forests, 2007

Coordination

FAO's Forestry Department tasks are ruled by its statutory bodies, namely the 6 Regional Forestry Commissions (Near East, Africa, Asia-Pacific, North America, Latin America and the Caribbean and Europe) and the Committee on Forestry (COFO) composed of member countries meeting biennially. FAO hosts the National Forest Programme Facility, the Mountain Partnership, the International Poplar Commission and Silva Mediterranea.

Within UNFF, three broad constituencies are central to the Forum's work: the member States of UNFF, major intergovernmental agencies working on forest issues, and the major groups as defined in Agenda 21. UNFF meets annually for two weeks and organizes intersessional meetings—ad hoc expert group meetings—in the interval between annual sessions.

The Collaborative Partnership on Forests (CPF) was established in 2001, following the recommendation of ECOSOC, to support the work of the UNFF and member countries and to enhance cooperation and coordination on forest issues. The Partnership is currently comprised of 14 international organization members—FAO, CBD, GEF, UNCCD, UNFF, UNFCCC, UNDP, UNEP, World Bank, CIFOR, ITTO, IUFRO, ICRAF, IUCN—which includes designated focal agencies and supporting agencies. CPF regularly holds meetings, with senior-level participation. CPF is chaired by FAO and its secretariat is provided by UNFF.

Collaborative Programmes and Initiatives

Title/Topic	Partner Agencies	Website/Webpage
Collaborative Partnership on Forests	FAO, CBD, GEF, UNCCD, UNFF, UNFCCC, UNDP, UNEP, World Bank, CIFOR, ITTO, IUFRO, ICRAF, IUCN	www.fao.org/forestry/site/cpf
UN REDD Programme	FAO, UNDP, UNEP	http://www.un-redd.org/
Integrated Programme of Work on Forests and Timber	UNECE, FAO	www.unece.org/trade/timber

FRESHWATER

Context

Freshwater resources are an essential component of the Earth's hydrosphere and an indispensable part of all terrestrial ecosystems. The freshwater environment is characterized by the hydrological cycle, including floods and droughts, which in some regions have become more extreme and dramatic in their consequences. Global climate change and atmospheric pollution could also have an impact on freshwater resources and their availability and, through sea-level rise, threaten low-lying coastal areas and small island ecosystems. Further recommendations to support implementation of Chapter 18 of Agenda 21, "Protection of the quality and supply of freshwater resources: application of integrated approaches to the development, management and use of water resources" were taken by CSD at its second (1994) and sixth (1998) sessions. CSD, at its twelfth session (2004), reviewed and assessed implementation of three thematic issues, including water and sanitation. At its thirteenth session, CSD explored policy options for furthering implementation on the issues of water and sanitation as well as on human settlements as reflected in its decision. It was also decided to monitor and follow up the implementation of CSD-13 decisions on water and sanitation, and their interlinkages in 2008 (CSD-16) and 2012 (CSD-20).

International Agreements

Soft law:

- Agenda 21, Chapter 18: Protection of the quality and supply of freshwater resources: application of integrated approaches to the development, management and use of water resources, 1992
- WSSD Johannesburg Plan of Implementation, Paras 29, 40, 58, 76, 2002

Legal instruments:

- UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes, 1992, with Protocols on Water and Health and on Liability

Coordination

UN-Water is the inter-agency mechanism that promotes coherence in, and coordination of, UN system actions aimed at the implementation of the agenda defined by the Millennium Declaration and the WSSD as it relates to its scope of work. UN-Water is made up of relevant UN agencies, programmes, and funds as well as major non-UN partners. UN-Water facilitates synergies and joint efforts and interfaces with other inter-agency mechanisms, including UN-Energy, UN-Oceans, EMG, and others, on issues of common concern. Management of UN-Water is performed by a Chair and Vice-Chair, elected from among its members on a rotational basis and normally serving for two years. Its plans of work are updated every two years. UNDESA provides secretariat support.

Collaborative Programmes and Initiatives

Title/Topic	Partner Agencies	Website/Webpage
Global Water Partnership and World Water Council	UN, UN-Water	www.worldwatercouncil.org
World Water Assessment Programme	CBD, ECA, ECE, ECLAC, ESCAP, ESCWA, FAO, IAEA, ISDR, UNCTAD, UNDESA, UNDP, UNEP, UNESCO, UNFCCC, UN-HABITAT, UNHCR, UNICEF, UNIDO, UNU, WHO, WMO, WORLD BANK	unesco.org/water/wwap
Global Environment Monitoring System/Water Programme	FAO, UNDP, UNEP, WHO, WMO, WORLD BANK	www.gemswater.org
Joint Monitoring Programme for Water Supply and Sanitation	WHO, UNICEF	www.wssinfo.org
Collaboration on Fresh-water Activities	IAEA, UNDP, GEF	www-naweb.iaea.org/napc/ih/Nubian/IH_S_nubian.html
WaterWiki	UNECE, UNESCO, WHO, FAO	www.waterwiki.net
International Waters Learning	UNEP, World Bank, GEF	www.iwlearn.net

Title/Topic	Partner Agencies	Website/Webpage
Exchange and Resources Network (IW:LEARN)		
Nile Basin Initiative/Nile Transboundary Environmental Action Project	UNDP, World Bank	www.nilebasin.org http://nteap.nilebasin.org/
Reversal of Land and Water Degradation Trends In the Lake Chad Basin	UNDP, World Bank	http://lakechad.iwlearn.org/
Reversing Land and Water Degradation Trends in the Niger River Basin	UNDP, World Bank	www.iwlearn.net/iw-projects/Fsp_112799468181
Strategic Action Programme for the Senegal River Basin	UNDP, World Bank	www.omvs-soe.org/portail_gef.htm
Sustainable Integrated Water Resources Management Project for Pacific Island Countries	UNDP, UNEP	www.sopac.org/Integrated+Water+Resource+Management
Integrating Watershed & Coastal Area Management in the Caribbean SIDS	UNDP, UNEP	www.iwcam.org
Global Mercury Project	UNDP, UNIDO	www.globalmercuryproject.org/
Nubian Aquifer Project	IAEA, UNDP	www-naweb.iaea.org/napc/ih/IHS_projects_nubian.html
Environmental Protection and Sustainable Management of the Okavango River Basin (EPSMO)	FAO, UNDP	http://epsmo.iwlearn.org/
2005 Water Resources Alliance Initiative	UNDESA, UNDP, UNEP, UNESCO, UN-HABITAT, WORLD BANK	www.unep.org

OCEANS AND COASTAL ZONE MANAGEMENT

Context

Oceans, seas, islands, and coastal areas form an integrated and essential component of the Earth's ecosystem and are critical for global food security and for sustaining economic prosperity and the well-being of many national economies, particularly in developing countries. Important considerations for oceans and coastal zone management include: global and regional coordination and cooperation; sustainable fisheries; marine biodiversity and ecosystems; marine pollution from both land-based and sea-based sources; and marine science and assessments of the marine environment. CSD reviewed implementation of the goals and targets called for in Chapter 17 of Agenda 21, "Protection of the oceans, all kinds of seas, including enclosed and semi-enclosed seas, and coastal areas and the protection, rational use and development of their living resources", at its fourth (1996), fifth (1997) and, in particular, seventh (1999) sessions, which resulted in a comprehensive decision, 7/1.

International Agreements

Soft law:

- Agenda 21, Chapter 17: Protection of the oceans, all kinds of seas, including enclosed and semi-enclosed seas, and coastal areas and the protection, rational use and development of their living resources, 1992
- WSSD Johannesburg Plan of Implementation, Para 30, 2002
- Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities, 1995
- Regional Seas Programme, 1974

Legal instruments:

- United Nations Convention on the Law of the Sea (UNCLOS), 1982
- International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78)
- Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Dumping Convention), 1972

- International Convention on Oil Pollution Preparedness, Response and Co-operation (OPRC), 1990
- The International Convention on Liability and Compensation for Damage in Connection with the carriage of Hazardous and Noxious Substances by Sea (HNS Convention), 1996
- Protocol on Preparedness, Response and Co-operation to pollution Incidents by Hazardous and Noxious Substances (HNS Protocol to OPRC), 2000
- International Convention on Civil Liability for Oil Pollution Damage and the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, & Supplementary Fund Protocol (92' CLC/Fund Conventions and Supplementary Fund Protocol).
- International Convention on Civil Liability for Bunker Oil Pollution Damage, 2001
- International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004

Coordination

In 2003, UN-Oceans was established to serve as the UN inter-agency coordinating mechanism on oceans and coastal issues. In addition to overseeing the management and development of the UN Atlas of the Oceans, UN-Oceans has established four time-bound task groups, each coordinated by a lead organization. These focus on: post-Tsunami Response (led by UNESCO/IOC); global monitoring of the marine environment (led by UN-DOALOS); marine biodiversity in areas beyond national jurisdiction (led by CBD secretariat); and the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (led by UNEP/GPA).

UN-OCEANS operates as a flexible mechanism to review joint and overlapping ongoing activities and to support related deliberations of the UN Informal Consultative Process on Oceans and the Law of the Sea (ICP), coordinating as far as possible its meetings with ICP sessions. The Coordinator and Deputy Coordinator of UN-OCEANS are normally elected for a term of two years. UN-OCEANS is served by an Organizing Secretariat (established in UN-DOALOS) and an Implementing Secretariat (established in IOC-UNESCO).

Collaborative Programmes and Initiatives

Title/Topic	Partner Agencies	Website/Webpage
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Title/Topic	Partner Agencies	Website/Webpage
Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities	FAO, GEF, IAEA, IMO, UNDP, UNEP, UNESCO, UN-HABITAT, UNIDO, WHO, WMO, WORLD BANK	www.gpa.unep.org
Atlas of the Oceans	FAO, IAEA, IMO, UNEP, WMO, IOC-UNESCO, CBD, HDNO, NOAA, CoMI, National Geographic Society	www.oceansatlas.org
Global Ocean Observing System (GOOS)	UNEP, UNESCO/IOC, WMO, FAO, ICSU	www.ioc-goos.org
Partnerships for Environmental Protection and Management of the Seas of East Asia	IMO, GEF/UNDP	www.pemsea.org
International Coral Reef Initiative	CBD, CITIES, FAO, UNDP, UNEP, UNESCO, WORLD BANK	www.icriforum.org
Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection	IMO, FAO, IOC-UNESCO, UNIDO, IAEA, UN, UNEP	gesamp.net
GESAMP Working Group on Metal	UNEP	www.gesamp.org/work-programme/workgroups/working-group-37
GESAMP Working Group on Atmospheric input of chemicals to the ocean	WMO	gesamp.org/work-programme/workgroups/working-group-38
GESAMP Working Group on Global trends in pollution of coastal ecosystems: retrospective ecosystem assessment	IAEA	www.gesamp.org/work-programme/workgroups/working-group-39
GESAMP Working Group on Ballast Water	IMO, UN, UNECO, IAEA, FAO, UNIDO, WMO, UNEP	www.gesamp.org/page.php?page=12
GESAMP Working Group on the Evaluation of Hazards of Harmful Substances Carried by Ships	IMO, UN, UNECO, IAEA, FAO, UNIDO, WMO, UNEP	www.gesamp.org/page.php?page=12
UNGA 60/30 Assessment of Assessments of the Regular Process for Global Reporting and Assessment of the State of the Marine Environment	UNEP, IOC/ UNESCO, FAO, WMO, UNDOALOS, IMO, ISA	www.unga-regular-process.org
Global Ballast Water Management Programme	IMO, GEF, UNDP	globallast.imo.org
Joint IMO/FAO Working Group on Illegal Unreported and Unregulated Fishing and Related Matters	IMO, FAO	
The Marine Highway Development and Coastal and Marine Contamination Prevention Project	IMO, GEF/World Bank	www.gefonline.org/projectDetails.cfm?projID=2098
Technical Backstopping and Management of Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea	IMO, UNEP	www.rempec.org
Technical Backstopping and Management of the Regional Marine Pollution Emergency Information and Training for the Caribbean	IMO, UNEP	
Guinea Current Large Marine Ecosystem Project	IMO, GEF/UNDP, GEF/UNEP, UNIDO	www.chez.com/gefgclme

Title/Topic	Partner Agencies	Website/Webpage
Integrating Watershed & Coastal Area Management in the Caribbean SIDS	UNDP, UNEP	www.iwcam.org
Partnerships in Environmental Management for the Seas of East Asia/Sustainable Development Strategy for the Seas of East Asia	UNDP, World Bank	www.pemsea.org
Caspian Environment Programme	UNDP, UNEP	www.caspianenvironment.org/newsite/index.htm
Pollution Reduction through Improved Municipal Wastewater Management in Coastal Cities in ACP Countries with a Focus on SIDS	UNDP, UNEP	www.training.gpa.unep.org/
Western Indian Ocean Marine Highway Development and Coastal and Marine Contamination Prevention Project	WB, IMO	http://www.iwlearn.net/iw-projects/Fsp_112799471087/view
Collaborative arrangement in progress: fisheries related issues	Office of the London Convention and FAO	
Partnership Agreement 2006 and collaborative arrangement in progress: riverine and sub-sea disposal of tailings and associated wastes from mining operations	Office of the London Convention and UNEP-GPA	
Collaborative arrangements in progress: dumping reports and for the implementation of technical co-operation activities.	Office of the London Convention and UNEP and Regional Seas Programme	
Collaborative arrangement in progress: Ocean Fertilization	Office of the London Convention and UNESCO-IOC	
Capacity-building activities to implement and enforce MARPOL regulations on Special Areas and PSSAs guidelines	IMO	
Protection of the Canary Current Large Marine Ecosystem (CCLME)	FAO, GEF and UNEP	www.canarycurrent.org (not available yet)
Sustainable Management of the Bay of Bengal Large Marine Ecosystem Programme (BOBLME)	FAO, GEF, SIDA, NORAD, NOAA, and World Bank	www.boblme.org
Collaborative arrangement in progress: impact of radioactive waste/ disposal on the marine environment	Office of the London Convention and IAEA	
Seminar on Ocean Affairs and Law of the Sea	UNITAR, DOALOS/OLA	www.un.org/law/programmeofassistance

PROTECTION OF THE OZONE LAYER

Context

The ozone “hole”— an area of sharp decline in ozone concentrations over most of Antarctica for about two or three months during the southern hemisphere spring—was discovered in 1985 and led to the development of an international general agreement in 1985, known as the Vienna Convention for the Protection of the Ozone Layer. Specific commitments came in 1987 through the Montreal Protocol on Substances that Deplete the Ozone Layer, with governments, over subsequent years, taking action to strengthen the Protocol through amendments. The implementation of the Protocol has led to a dramatic drop in the consumption of ozone depleting chemicals in the last ten years. Scientists predict that the ozone layer will begin to recover in a few years and will be fully restored by the year 2050, if implementation of the Protocol is completed. CSD’s fourteenth and fifteenth session in 2006 and 2007 respectively focused on a cluster of thematic issues, including atmosphere and air pollution.

International Agreements

Soft law:

- Agenda 21, Chapter 9: Protection of the atmosphere, 1992
- WSSD Johannesburg Plan of Implementation, Para 39, 2002

Legal instruments:

- Vienna Convention for the Protection of the Ozone Layer, 1985
- Montreal Protocol on Substances that Deplete the Ozone Layer, 1987

Coordination

The Vienna Convention COP/Montreal Protocol MOP provide regular fora for sharing information and facilitating coordination (including among UN agencies) regarding activities related to protection of the ozone layer. In addition, the Ozone Secretariat regularly prepares reports to the COP/MOP on relevant UN activities and international cooperation.

The Multilateral Fund for the Implementation of the Montreal Protocol, which operates under the authority of the parties to the Protocol, works together with ‘implementing agencies’—the World Bank, UNEP, UNDP, and UNIDO—in delivering financial and technical assistance. Its operations are overseen by an Executive Committee comprising seven Article 5 and seven non-Article 5 parties, with a voting structure designed to ensure that neither donors nor recipients could dominate.

Collaborative Programmes and Initiatives

Title/Topic	Partner Agencies	Website
Collaboration on methyl bromide information and training activities	UNEP, FAO	www.uneptie.org/ozonaction/partnerships/mfgef.htm
Capacity Development, Technical Assistance and Technology Transfer to achieve compliance with Montreal Protocol Targets	UNEP, UNIDO, UNDP, The World Bank	www.unep.c/ozone/Meeting_Documents/mop/19mop/MOP-19-4E.pdf
Mainstream Ozone in Education	UNEP, UNESCO, WHO	www.unep.fr/ozonaction/partnerships/education.htm

SUSTAINABLE AGRICULTURE

Context

Sustainable agriculture and rural development can be defined as the management and conservation of the natural resource base, and the orientation of technological and institutional change in a way that ensures the attainment and continued satisfaction of human needs for present and future generations (FAO, 1999). Furthermore, such sustainable development (e.g. in the agriculture, forestry, and fisheries sectors) conserves land, water, plant, and animal genetic resources, is environmentally non-degrading, technically appropriate, economically viable, and socially acceptable. Chapter 14 of Agenda 21, "Promoting sustainable agriculture and rural development", notes that, by the year 2025, 83% of the expected global population of 8.5 billion will be living in developing countries. Yet the capacity of available resources and technologies to satisfy the demands of this growing population for food and other agricultural commodities remains uncertain. Agriculture has to meet this challenge, mainly by increasing production on land already in use and by avoiding further encroachment on land that is only marginally suitable for cultivation. Agriculture is included as one of the thematic areas along with rural development, land, drought, desertification, and Africa in the CSD's 3rd implementation cycle (CSD-16/17) in 2008-2009.

International Agreements

Soft law:

- Agenda 21, Chapter 14: Promoting sustainable agriculture and rural development, 1992
- WSSD Johannesburg Plan of Implementation, Para 40, 2002

Coordination Mechanisms

Information exchange and coordination in the area of sustainable agriculture mainly takes place through collaboration in specific programmes and initiatives (see below).

Collaborative Programmes and Initiatives

Title/Topic	Partner Agencies	Website/Webpage
Agricultural Biodiversity PoW	CBD, FAO	www.cbd.int/agro
UN-Water	CBD, FAO, IAEA, IFAD, UNICEF, UNCTAD, UNCCD, UN DESA, UNDP, UN ECA, UN ECE, UN ECLAC, UN ESCAP, UN ESCWA, UNESCO, UNEP, UNFCCC, UN-Habitat, UNHCR, UNIDO, UNISDR, UNU, WB, WHO, WMO, UNWTO, ILO + other non UN partners	http://www.unwater.org/members.html
Organic Research Centres Alliance (ORCA)	FAO, FiBL, ICROFS, Soil Association, Louis Bolk Institute, ISOFAR, IFOAM, vTI, IOL, BOKU	www.fao.org/organicag
Regions (local governments) and Food Security	FAO, UNDP, UNEP, FOGAR, NrG4SD	http://www.nrg4sd.net/ http://www.crpm.org/index.php?act=4,7,2#organisation
Joint FAO/IAEA Programme: Nuclear Techniques in Food and Agriculture	IAEA, FAO	www-naweb.iaea.org/nafa

SUSTAINABLE CONSUMPTION AND PRODUCTION

Context

Sustainable consumption and production (SCP) requires a fundamental rethinking of the way societies produce, use, and dispose of products. Changing consumption and production patterns is one of the overarching objectives of and essential requirements for sustainable development, as recognized in the Johannesburg Declaration. The Johannesburg Plan of Implementation (JPOI) calls for the development of “a 10-year framework of programmes in support of regional and national initiatives to accelerate the shift towards SCP.” Related to this, the Marrakech Process is a global effort to promote progress on the implementation of SCP and the elaboration of the 10-year framework. At its third session, in 1995, CSD adopted an International Work Programme on Changing Consumption and Production Patterns. “Changing consumption and production patterns” has been the subject of discussion by CSD at its first, second, third, fourth, fifth, sixth, and seventh sessions. In the context of the multi-year programme of work adopted by the GA for the CSD in 1997, it will continue to appear, as an “overriding issue”, on the agenda of CSD each year. CSD will review the theme of SCP during its 2010/11 two-year cycle.

International Agreements

Soft law:

- Agenda 21, Chapter 4: Changing consumption patterns, 1992
- Agenda 21, Chapter 20: Environmentally sound management of hazardous wastes, in hazardous wastes, 1992
- Agenda 21, Chapter 30: Strengthening the role of business and industry, 1992
- WSSD Johannesburg Plan of Implementation, Paras 15, 16, 2002
- UNEP International Declaration on Cleaner Production, 1998

Coordination

The Marrakech Process was launched at the first international expert meeting on the 10-year framework held in Morocco, 2003, organized by DESA’s Division for Sustainable Development and UNEP. The Marrakech Process, inter alia, provides opportunities for information exchange and coordination through organising regional consultations, building regional strategies and implementation mechanisms, implementing concrete projects and programmes, and evaluating progress and encouraging international cooperation and coordination. A DESA-UNEP SCP database provides information on various international cooperation mechanisms on SCP, organised by policy instrument initiatives (such as analytical tools changing consumption patterns) and sectors and issues-related initiatives (such as solid waste management and urban planning and transport).

Regarding cleaner production, coordination is mainly facilitated by UNEP-DTIE and UNIDO which jointly manage the National Cleaner Production Centres (NCPC) Programme in collaboration with other partners. UNEP is responsible for developing and disseminating conceptual, strategic, and policy guidance and materials on Cleaner Production. UNIDO is the executing agency for the Programme, managing donor funding and providing technical expertise. UNEP’s International Panel for Sustainable Resource Management undertake assessments which can contribute to a better understanding of how to decouple economic growth from environmental degradation.

Collaborative Programmes and Initiatives

Title/Topic	Partner Agencies	Website/Webpage
Interagency Cooperation on the 10-year Framework on Sustainable Consumption and Production	ILO, SBC, UNCTAD, UNDESA, UNDP, UNEP, UN-HABITAT	www.un.org/esa/sustdev/sdissues/consumption/Marrakech/conprod10Y.htm , www.uneptie.org/pc/sustain/10year/home.htm
International Expert Meetings on the 10-Year Framework of Programmes for Sustainable Consumption and Production	UNDESA, UNEP	www.un.org/esa/sustdev/sdissues/consumption/Marrakech/conprod10Yglobmeet.htm
National Cleaner Production Centres	UNEP, UNIDO, WHO, World Bank, FAO, IFAD, ILO, UNDP	www.uneptie.org/pc/cp/ncpc
YouthXchange	UNEP, UNESCO	www.youthxchange.net

DRAFT

WASTE MANAGEMENT

Context

Effective control of the generation, storage, treatment, recycling and reuse, transport, recovery, and disposal of hazardous wastes is, according to Agenda 21, “of paramount importance for proper health, environmental protection and natural resource management, and sustainable development.” Prevention of the generation of hazardous wastes and the rehabilitation of contaminated sites are the key elements, and both require knowledge, experienced people, facilities, financial resources, and technical and scientific capacities. Waste management can also address solid wastes, such as all domestic refuse and non-hazardous wastes such as commercial and institutional wastes, street sweepings, and construction debris and, in some countries, human wastes. Hazardous waste is frequently intermixed with other waste, posing particular management challenges. CSD will review the theme of waste management, along with transport, chemicals, mining, and sustainable consumption and production, during its 2010/11 two-year cycle.

International Agreements

Soft law:

- Agenda 21, Chapter 20: Environmentally sound management of hazardous wastes, in hazardous wastes, 1992
- Agenda 21, Chapter 21: Environmentally sound management of solid wastes and sewage-related issues 1992
- Agenda 21, Chapter 22: Safe and

environmentally sound management of radioactive wastes, 1992

- WSSD Johannesburg Plan of Implementation, Paras 22, 23, 2002

Legal instruments:

- Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, 1989
- Stockholm Convention on Persistent Organic Pollutants
- MARPOL Annex V- Regulations for the Prevention of Pollution by garbage from ships.
- International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009
- The Nairobi International Convention on the Removal of Wrecks, 2007

Coordination

The COP to the Basel Convention as well as meetings of its subsidiary bodies, provides a regular forum for sharing information and facilitating coordination (including among UN agencies) regarding waste management activities. In addition, the Basel Convention Secretariat regularly prepares reports to the COP on relevant UN activities and international cooperation.

Collaborative Programmes and Initiatives

Title/Topic	Partner Agencies	Website/Webpage
Pacific Islands Waste Management Initiative	FAO, UNEP, SBC, WHO, UNDP	http://webapps01.un.org/dsd/partnerships/public/partnerships/1193.html
Working Group on Ship Scrapping	ILO, IMO, UNEP (SBC)	www.imo.org/Environment/mainframe.asp?topic_id=1044
POPs/Waste-related issues	SBC, Stockholm Convention Secretariat, FAO, UNDP	UNEP/CHW.8/3/Rev.1, i28e
Capacity-building activities to implement and enforce MARPOL (Annex V regulations)	IMO	
Health/Waste-related issues	WHO, SCB, UNDP	UNEP/CHW.8/3/Rev.1
Recycling, Reuse and Resource Recovery Methods towards the ESM of Hazardous Wastes and Implementation of Basel Convention	BCRCs, African Union, New Partnership for African Development Secretariat (NEPAD), UNCTAD, UNIDO, UNEP, GEF, SBC	UNEP/CHW.8/INF/4

WETLANDS PROTECTION

Context

Wetlands are among the world's most productive environments. They are cradles of biological diversity, providing the water and primary productivity upon which countless species of plants and animals depend for survival. They support high concentrations of birds, mammals, reptiles, amphibians, fish and invertebrate species. Wetlands are also important storehouses of plant genetic material. Rice, for example, which is a common wetland plant, is the staple diet of more than half of humanity. The multiple roles of wetland ecosystems and their value to humanity have been increasingly understood and documented in recent years. While this has led to large expenditures to restore lost or degraded hydrological and biological functions of wetlands, it remains important to improve practices on a significant global scale as the world copes with the accelerating water crisis and the effects of climate change. The thematic area of wetlands was addressed at CSD-13 and in particular in Decision 6/1, "Strategic approaches to freshwater management".

International Agreements

Soft law:

- WSSD Johannesburg Plan of Implementation, Paras 32, 37, 40, 66, 2002

Legal instruments:

- Convention on Wetlands of International Importance Especially as Waterfowl Habitat (Ramsar Convention), 1971

Coordination

The COP to the Ramsar Convention, which is held every three years, provides a regular forum for sharing information and facilitating coordination (including among UN agencies) regarding wetlands protection-related activities.

Collaborative Programmes and Initiatives

Title/Topic	Partner Agencies	Website
RAMSAR-CBD Joint Work Programme	RAMSAR, CBD	www.ramsar.org/cbd/key_cbd_jw_p3_e.htm
Joint Work Plan	RAMSAR, CMS, AEWAs	
MOU between the Ramsar Secretariat and the World Heritage Centre	RAMSAR, UNESCO	
Wings Over Wetlands: The African-Eurasian Flyways Project	UNEP-GEF, UNOPS, Wetlands International, BirdLife International, UNEP/AEWA Secretariat, RAMSAR	www.wingsoverwetlands.org

ANNEX 3. INDICATIVE LEVELS OF ANNUAL INTERNATIONAL ENVIRONMENTAL FINANCIAL FLOWS

The table presented in this annex indicates financial flows through some of the main international actors which are involved in funding environmental activities. It should be noted that the annex is a preliminary and incomplete account of annual international environmental financial flows. There are some glaring gaps in the information provided, as data are missing from some important actors.

The estimated flows are based on available information on the web and submissions from EMG members. Estimation of funds are based on judgement by providers and budget processes of different institutions, and no common criteria for the different areas have been established for this mapping exercise.

It should be noted that the figures presented are not necessarily comparable, amongst others because the financial year and budget procedures varies among the actors. Indicative financial flows are, as noted in the footnotes, drawn from different years and represent a mix of recorded expenditures and budgeted costs. For instance, the information regarding UNEP is biannual and projected, while the information on the World Bank is multi-year budgets/commitments, and the information regarding UNDP is actual expenditure in 2009.

Financial flows may have been counted several times, as they sometimes flow from one organisation to another. An apparent example is the GEF portion of the OECD DAC funds which are then recorded as going through the GEF before they are reflected in the implementing agencies. Attempts have been made to single out the GEF component of the agencies, but the data are still incomplete.

Some financial flows indicated in the annex may also be double counted as they appear in different thematic and functional funding categories. This double counting is due to lack of distinct definitions and the inherent overlaps between categories. Such overlaps would mean that funds spent on climate also could appear again under capacity-building for example. Furthermore, as much of the investment in environmental activities happens through mainstreaming, it is often times also difficult to distinguish environmental activities from the sectoral ones.

DRAFT

INSTITUTIONS / FUNDS	INDICATIVE LEVELS OF ANNUAL INTERNATIONAL ENVIRONMENTAL FINANCIAL FLOWS (million US\$) ⁱ											
	Total	Indicative levels of funds going to selected thematic and functional areas										
		Climate change	Ecosystem management			Ozone	Harmful substances	Disasters & conflicts	Resource efficiency	Science	Governance / Norms	Capacity building
		Bio-diversity	Desertification	Water								
OECD DAC	13 000 ⁱⁱ	4 300 ⁱⁱⁱ	3 500 ^{iv}	1 700 ^v								
GEF	--											
The GEF trust fund	1 050 ^{vi}	350	288	100	105	105				--		40
Adaptation fund ^{vii}	160	160										
LDCF ^{viii} SCCF ^{ix}	94	94										
The World Bank^x	2 989 ^{xi}	1 426	158				268 ^{xii}	139 ^{xiii}	178 ^{xiv}	11 ^{xv}	206 ^{xvi}	2 050
- GEF portfolio	--	--	--	--	--	--						
- CIF & CTF ^{xvii}	--											
UNDP	1 120 ^{xviii}	73 ^{xix}	179 ^{xx}				48 ^{xxi}	620 ^{xxii}			200 ^{xxiii}	1 120
- GEF portfolio	--	--	--	--	--	--						
- UNREDD	39 ^{xxiv}											
UNEP	499	39	50			168	42	23	35		40	--
- EF & regular ^{xxv}	97	15	17				9	5	13		22	
- Trust & earm. ^{xxvi}	120	24	13				19	18	22		18	
- GEF portfolio ^{xxvii}	90	21	34	4	16		7					7
- MLF ^{xxviii}	165					165						
- MEAs	37		20 ^{xxix}			3 ^{xxx}	14 ^{xxxi}					1 ^{xxxii}
Ramsar convent.	7 ^{xxxiii}		7									
UNFCCC	86 ^{xxxiv}	86										
CDM^{xxxv}	2 000 ^{xxxvi}	2 000										
UNCCD	11 ^{xxxvii}			11							4	
FAO												
- GEF portfolio												
UNIDO												
- GEF portfolio												
IFAD												
- GEF portfolio												
UN secretariat												
IMO	5 ^{xxxviii}		3					1				3
ICAO												
ILO												
UNCTAD												
UNESCO												
UNHABITAT	4 ^{xxxix}	4										
UNITAR												
UNU												
UNWTO												
WHO												
WMO												
WTO												
UNECA												
UNECE												
UNECLAC												
UNESCAP												
UNESCWA												
Reg. Dev. Banks												
- GEF portfolio ^{xl}	75											

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- ⁱ Estimation of funds are based on judgement by providers and budget processes of different institutions and no common criteria for the different areas have been established for this mapping exercise. Funds may overlap between areas and be from different years within and between rows and columns. Estimates are rounded to nearest million US\$ and expenditures under 0.5US\$ are not included.
- ⁱⁱ Based on an average from 2007 and 2008 from the OECD DAC report “Aid in support of the environment”, (April 2010)
- ⁱⁱⁱ Based on 2007 data from the OECD DAC report “Measuring aid targeting the objectives of the Rio Conventions” (May 2009). The report notes that data on biodiversity, climate change and desertification should not be added up as this risk double counting.
- ^{iv} Ibid 3
- ^v Ibid 3
- ^{vi} Based on pledges from the fifth replenishment of GEF, approved at the GEF Assembly in May 2010, with a total of \$4.2 billion USD pledged over 4 years. Thematic figures do not include other “corporate programmes”.
- ^{vii} Based on Trustee report to 11th AFB meeting (AFB/EFC.2/5), reporting on financial status of the fund as of July 2010 (and representing less than one year of actual operation).
- ^{viii} UNFCCC Least Developed Countries Fund. Figures based on total values averaged over four years of actual operation since 2007. GEF/LDCF.SCCF.8/Inf.3
- ^{ix} UNFCCC Special Climate Change Fund. Figures based on total values averaged over four years of actual operation since 2007. GEF/LDCF.SCCF.8/Inf.3
- ^x ENRM portfolio includes projects with at least one or more of the Environment and Natural Resources Management (ENRM) sub-themes. There are seven ENRM sub-themes: Biodiversity, climate change, environmental policies and institutions, land administration and management, pollution management and environmental health, water resources management, and other environment and natural resources management. Data for thematic areas are as of April 26, 2010. Bank Fiscal Year 2010 (FY10) is from July 2009 to June 2010. Figures do not include Trust Fund/partnership activities (excluding Canadian POPs TF). Total is from 2008 (see endnote 10)
- ^{xi} Data from 2008: http://www.thegef.org/gef/sites/thegef.org/files/documents/OPS4-Executive%20Version_ENGLISH.pdf Data as of April 26, 2010. Bank Fiscal Year 2010 (FY10) is from July 2009 to June 2010. Figures does not include Trust Fund/partnership activities (excluding Canadian POPs TF).
- ^{xii} Montreal Protocol database; excluding PRP projects and CPG projects, plus World Bank Business Warehouse database; Includes commitments allocated to pollution management and environmental health sub-theme, as well as World Bank SAP; including project supervision costs
- ^{xiii} The Global Facility for Disaster Reduction and Recovery (GFDRR) is a partnership of the International Strategy for Disaster Reduction (ISDR) system to support the implementation of the Hyogo Framework for Action (HFA). The GFDRR is managed by the World Bank on behalf of the participating donor partners and other partnering stakeholders. The GFDRR provides technical and financial assistance to high risk low- and middle-income countries to mainstream disaster reduction in national development strategies and plans to achieve the Millennium Development Goals (MDGs)
- ^{xiv} Carbon Offset, GEF, IBRD/IDA. Recipient Executed Activities
- ^{xv} "Science" for the World Bank is interpreted as Advisory and Analytical Activities (AAA). AAA include economic and sector work (ESW) and nonlending technical assistance (TA)
- ^{xvi} World Bank Business Warehouse database; Includes commitments allocated to environmental policies and institutions sub-theme
- ^{xvii} Climate Investment Fund and Clean Technology Fund
- ^{xviii} UNDP's 2009 disbursements which are reported according to the key result areas and outcomes in UNDP's Strategic Plan 2008-2013. These categories do not correspond with the categories of this table. However, disbursements in some of these categories can be extracted/estimated and are reflected in the table. All figures rounded to the nearest \$1 million
- ^{xix} Includes disbursements for both climate change mitigation and climate change adaptation. GEF, SCCF, LCDF, core funds, bilateral donors
- ^{xx} Calculated as 36% of total environmental disbursements based on the share GEF disbursements for biodiversity conservation and sustainable land management. GEF, core funds, bilateral donors
- ^{xxi} Includes the multilateral fund (MLF), GEF, core funds, bilateral donors
- ^{xxii} Includes UNDP's total disbursements for disasters and conflicts in 2009. Detailed information about the environment-related share is not available.
- ^{xxiii} Includes GEF, core funds, bilateral donors
- ^{xxiv} Pledges from Norway and Spain for 2010. Jointly implemented by FAO, UNDP and UNEP. Source: <http://www.un-redd.org/AboutUNREDDProgramme/tabid/583/Default.aspx>
- ^{xxv} For the biennium 2010-2011 the appropriation from the Environment Fund (EF) is US\$ 180 million, while the annual projected use of resources from the regular budget was 13.797 million. Total budget includes in addition to the thematic components a fund programme reserve component and a support budget component. Source: working document UNEP/GC.25/12
- ^{xxvi} Estimated trust funds and earmarked contributions for the biennium 2010-2011. The trust funds do not include trust funds and earmarked contributions related to multilateral environmental agreements, including the Multilateral Fund for the

Montreal Protocol on Substances that Deplete the Ozone Layer, or the Global Environment Facility. Source: working document UNEP/GC.25/12

^{xxvii} GEF portfolio is averaged over GEF-4 period. Source: UNEP ADDIS Database. Does not include Adaptation funds. Thematic divisions calculated using average percentage of portfolio in GEF-4.

^{xxviii} The Multilateral Fund for the implementation of the Montreal Protocol (MLF). Annual portion of a 2009-2011 budget on 490,000,000. Source: <http://www.multilateralfund.org/>

^{xxix} Convention on Biological Diversity Core (CBD), Programme Budget for 2009-2010 of 23,747,000 (<http://www.cbd.int/decision/cop/?id=11677>). Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), Trust Fund for CITES for 2009-2011 of 15,482,175 (<http://www.cites.org/eng/res/14/14-01.shtml#a1>). Convention on Conservation of Migratory Species of Wild Animals (CMS, includes Agreement on Conservation of African-Eurasian Migratory Waterbirds, Agreement on Conservation of Populations of European Bats, and Agreement on Conservation of Small Cetaceans of Baltic and North Seas.) Budget Estimates for 2009-2011 of 8,692,765 (EUR = 6943086 USD rate conversion on 05/06/2010) (http://www.cms.int/bodies/COP/cop9/Report%20COP9/Res&Recs/E/Res_9_14_Fin&Admn_Matters_En.pdf).

^{xxx} Rounded to nearest million. Based on 2008-2009 budget for the Montreal protocol of 4,435,850 and the Vienna Convention of 667,976. Source http://ozone.unep.org/Meeting_Documents/mop/21mop/MOP-21-4-Add-1E.pdf

^{xxxi} Basel Convention on the control of Transboundary Movements of Hazardous and their Disposal, General Trust Fund Technical Trust Fund to Assist Developing Countries and Other Countries in Need of Assistance totalling for 2009-2010 6,849,564 (<http://www.basel.int/convention/contributions/fsBC2008.pdf>). Stockholm Convention on Persistent Organic Pollutants (POPs), Operational budget under the General Trust Fund for 2010-2011 of 11,677,850

(<http://chm.pops.int/Convention/COP/DecisionsRecommendations/tabid/208/language/en-US/Default.aspx>). Rotterdam Convention on the Prior Informed Consent, Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, Operational budget under the General Trust Fund for 2010-2011 of 8,906,654 (<http://www.pic.int/COPS/COP4/V23add1%29/English/K0841353-23%20ADD1%20FINAL.pdf>)

^{xxxii} Technical Trust Fund to Assist Developing Countries and Other Countries in Need of Assistance

^{xxxiii} The Ramsar convention, which is not administered by UNEP, has a 2010 budget of CHF 6 721 300 which is approximately US\$ 6.9 million

^{xxxiv} The total expenditure of the secretariat in the biennium 2008 - 2009 under all trust funds administered by the secretariat was \$171,841,000. At present, it is too early to provide an estimate for the biennium 2010-2011, primarily because 60% of the secretariat's budget is sourced through voluntary contributions and fees. The secretariat do however anticipate that the figure will be similar to that of the 2008-2009 biennium.

^{xxxv} The Clean Development Mechanism (CDM) established pursuant to article 12 of the Kyoto protocol under UNFCCC. The total transaction value of the carbon market reached about US\$126 billion at the end of 2008, doubling its 2007 value. Approximately US\$92 billion of this overall value is accounted for by transactions of allowances and derivatives under the EU Emissions Trading Scheme (EU ETS) for compliance, risk management, arbitrage, raising cash and profit-taking purposes.

^{xxxvi} Over the 2001 to 2012 period, CDM projects could raise \$18 billion (\$15 billion to \$24 billion) in direct carbon revenues for developing countries. Actual revenues will depend on the price of carbon. World Bank (2010). "[World Development Report 2010: Development and Climate Change](#)"

^{xxxvii} The core budget for 2010-2011 for the secretariat and the global mechanism is 16,364.800 euros, which amounts to approximately US\$ 21 million. Source: UNCCD decision 9/COP.9

^{xxxviii} Indicative Budget for 2010-2011 including Euromed Co-Operation on Maritime Safety and Prevention of Pollution from Ships (SAFEMED) Project II is EC – IMO – REMPEC Project. Marine Electronic Highway (MEH) Project is a GEF – World Bank – IMO Project. GloBallast Project is a GEF – UNDP – IMO Project.

^{xxxix} Data from 2007 – 2012. Includes also less than 0.5 million US\$ also to ecosystem management, disasters and conflict and resource efficiency as per communication from the UN Habitat secretariat.

^{xl} RDB figures (ADB, AfDB, EBRD and IADB) for GEF portfolio are based on Trustee Report. GEF/R.5/Inf.24, assuming only GEF-4 and averaged.