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International environmental governance

International environmental governance

Addendum

Towards a UNEP Environment Watch system: updated proposal

Report by the Executive Director

Summary

The present report responds to paragraph 9 of section II of Governing Council decision 23/1, which called upon the Executive Director to update the Environment Watch proposal, to submit the updated version to Governments for comments and report thereon to the Governing Council/Global Ministerial Environment Forum at its ninth special session. Those comments, as summarized in document UNEP/GCSS.IX/3, formed the basis for the Executive Director's completion of the present updated proposal. The report presents an introduction to the proposal, the updated proposal itself and sets forth proposals for further action.

The principal objective of the Environment Watch is to promote collective and concerted actions by Governments and partners for keeping the environment under review. The system will build on existing assessment processes, such as the Global Environment Outlook, and information networks, such as current national and regional networks, and will include capacity-building in Member States upon request. It will draw from and interact with scientific programmes and global observing systems, including the Global Earth Observation System of Systems. It will also support many decision-making forums and stakeholders at many levels.

The Executive Director suggests that the system would set the long-term priorities for, and be implemented in phases, through the relevant parts of the biennial programmes of work. Such an approach would, among other things, ensure its synergy with the Bali Strategic Plan for Technology Support and Capacity-building. The Governing Council would oversee the administrative and budgetary implications of the evolution of the system from one biennium to the next, and review its orientation as needed. The Executive Director would develop and implement the system in close cooperation with Governments and partners, and call upon the support of ad hoc advisory and expert groups as necessary. It is envisaged that the proposed architecture of the system would be subject to further consideration by Governments and stakeholders and be considered for adoption at the twenty-fourth session of the Council/Forum.

* Reissued for technical reasons.

** UNEP/GCSS.IX/1.

Contents

| | |
|--|----|
| Introduction..... | 3 |
| A. Strengthening the scientific base of UNEP | 3 |
| B. Orientation of the updated proposal | 3 |
| I. Proposed architecture of the Environment Watch system | 4 |
| A. Introduction..... | 4 |
| B. Objective | 4 |
| C. Expected long-term outputs | 5 |
| D. Components of the Environment Watch system | 5 |
| E. Relationship between the Environment Watch system and other initiatives | 12 |
| F. Governing the evolution of the Environment Watch system..... | 13 |
| II. Proposed further action..... | 13 |
| Annex..... | 15 |
| GEO-4 conceptual approach..... | 15 |

Introduction

A. Strengthening the scientific base of UNEP

1. UNEP, under its mandate for keeping under review the world environmental situation,¹ has undertaken a wide range of collaborative processes for monitoring, observing, networking, managing data, developing indicators, carrying out assessments and providing early warning. The mandate is a formidable challenge which requires actions beyond those undertaken by the Executive Director alone. This was recognized in the continuing multi-stakeholder consultative process on strengthening the scientific base of UNEP (the Science Initiative),² under the International Environmental Governance initiative.

2. The fifth phase of the Science Initiative began with the twenty-third session of the Governing Council/Global Ministerial Environment Forum, which in paragraph 9 of its decision 23/1 of 25 February 2005 called upon the Executive Director to update the Environment Watch proposal,³

“...taking into account the recommendations of the intergovernmental consultation on strengthening the scientific base of the United Nations Environment Programme held in January 2004⁴ and also the outcome of the intergovernmental and multi-stakeholder consultation on the fourth Global Environment Outlook of February 2005,⁵ and to submit that update to Governments, for their views, so as to enable submission of a report to the Governing Council at its ninth special session”.

3. In response to this decision, the Executive Director updated, revised and restructured the proposal from a conceptual framework into an integrated system. The focus of the original proposal was to be sharpened, improved in its organization and translated into action. Calls were made for clarification of its relationship to existing initiatives such as the Global Environment Outlook (GEO), to national and regional environmental information networks, to the Global Earth Observation System of Systems (GEOSS), and to the Bali Strategic Plan for Technology Support and Capacity-building.

4. In August 2005, the updated proposal was translated into the six United Nations official languages and circulated to all Governments and other stakeholders, including members of the Global Civil Society Forum, other United Nations organizations, scientific institutions, focal points for major multilateral environmental agreements and various non-governmental organizations. In addition, a situation analysis and capacity-building needs assessment questionnaire was circulated to Governments to determine which elements of Environment Watch were already in place worldwide and to identify where capacities needed to be strengthened. As of 15 December 2005, 48 Governments and 37 other institutional stakeholders had responded. This process and the comments received are summarized in document UNEP/GCSS.IX/3.

B. Orientation of the updated proposal

5. The comments on the updated proposed Environment Watch system, as summarized in document UNEP/GCSS.IX/3, generally supported the proposal. Nevertheless, a number of comments pointed to the need to consider further how the system would be implemented, and how it would relate to current national and regional capacities, to the scientific community, to the global observing systems and to policy and decision-making forums on many scales. The comments stressed that the system would have to be based on existing processes; reduce duplication and avoid leading to the establishment of new bodies; be distributed and flexible to allow for regionally and nationally customized priorities; and be developed in an incremental manner through further consultations.

6. The comments received formed the basis for the Executive Directors' completion of the updated Environment Watch proposal. The consideration of an advance, unedited copy of the present report by joint subcommittees 1 and 2 of the Committee of Permanent Representatives on 13 December 2005 is also reflected in the present document. It became clear that the Council/Forum would initially have to consider the architecture of the system and that the system itself would evolve over time. The proposal now seeks to respond to the key consensus points which have emerged from almost three years of consultations on how to strengthen the scientific base of UNEP.

¹ General Assembly resolution 2997(XXVII) (1972)

² See <http://science.unep.org>.

³ Documents UNEP/GC.23/3 and UNEP/GC.23/INF/18.

⁴ UNEP/SI/IGC/3. See also document UNEP/GCSS.VIII/5/Add.4.

⁵ UNEP/DEWA/GEO/IGC.1/2.

7. The proposed architecture of the Environment Watch system is presented in section II of the present report in a form which could be considered for adoption by the Council/Forum. The Executive Director is, however, of the view that the proposal would merit further consideration through consultations with Governments and partners, possibly including negotiations during the intersessional period and during the twenty-fourth session itself, and that it might better be considered for adoption at the twenty-fourth session of the Council/Forum.

8. It should be noted that the Executive Director, in this updated version, proposes that the architecture would set the long-term priorities for the biennial programmes of work. The Council/Forum would oversee the administrative and budgetary implications of the phased evolution of the system from one biennium to the next and review its orientation as needed. The Executive Director would develop and implement the system in close cooperation with Governments and partners. As a result, no new global institutional structure would be required.

9. Chapter III of the present report advances proposals for further actions to ensure an incremental and iterative development and implementation of the proposed Environment Watch system.

I. Proposed architecture of the Environment Watch system

A. Introduction

10. Human activities are increasingly changing the environment and its ability to provide services to society in support of human well-being. Timely and reliable environmental information and scientific knowledge is needed to mitigate and adapt to environmental change. Information is required for action at national and regional levels, for mainstreaming environmental concerns into sectoral activities, and for implementing and monitoring multilateral environmental agreements and the development goals and objectives agreed at the major United Nations conferences and summits, including those agreed at the Millennium Summit that are described as the Millennium Development Goals, in particular Goal 7 on ensuring environmental sustainability.

11. The above needs are addressed by many processes, but the availability of environmental information and scientific knowledge is inadequate and the information and data are often scattered. A call for a more integrated structure for scientific discussion to underpin international environmental governance was made by the United Nations Secretary-General in 2005.⁶ Subsequently, the 2005 World Summit recognized the role of environmental science and technology for development.⁷ It also recognized the need for more efficient environmental activities within the United Nations system, including strengthened scientific knowledge, assessment and cooperation, and it agreed to explore the possibility of a more coherent institutional framework to address that need.⁸

12. The needs identified by the Summit represent a key challenge for UNEP, which is assigned overall responsibility for keeping the world environmental situation under review.⁹ Also, there is a need to address the findings of the consultative process on strengthening the scientific base of UNEP¹⁰ in a manner which goes beyond the biennial planning process of the United Nations and outlines the long-term vision for international cooperation in this field. A system based on existing national and international capacities is needed which can fill the gaps and meet needs related to keeping critical environmental issues under review without duplicating existing institutions and creating new global structures. The Environment Watch system is a response to the challenge of meeting those long-term needs, based on the convening power of UNEP and its demonstrated areas of comparative advantage.

B. Objective

13. The principal objective of the proposed Environment Watch system is to promote collective and concerted action by Governments and partners:

(a) To keep under review the world environmental situation in order to ensure that emerging environmental problems of wide international significance receive appropriate and adequate consideration by Governments;

⁶ A/59/2005, para. 212.

⁷ General Assembly resolution 60/1, para. 60.

⁸ Ibid., para. 169.

⁹ General Assembly resolution 2997 (XXVII).

¹⁰ UNEP/SI/IGC/3.

(b) To promote international cooperation and the contribution of relevant international scientific and other professional communities to the acquisition, assessment and exchange of environmental knowledge and information;

(c) To provide developing countries and countries with economies in transition with technology support and capacity-building for undertaking national processes and engaging in international processes for keeping the environment under review.

C. Expected long-term outputs

14. The expected long-term outputs of the proposed Environment Watch system include:

(a) A dynamic and flexible conceptual framework which will foster enhanced collective understanding by Governments and stakeholders of approaches for analysing the interactions between environment and society. The framework will identify thematically and geographically defined modules which will represent priority areas for activities under the system;

(b) A global information network composed of existing and, where needed, new national, regional and thematic networks which will foster enhanced access to and improved exchange of timely, accurate, relevant and reliable environmental data, information and early warnings within and between national, regional and global levels. The network will facilitate the distribution of global data to regional and national-level partners. It will also facilitate the compilation of information and the identification of capacities for use in compiling and conducting internationally agreed indicators and assessments, in a manner which reduces national reporting burdens and tracks progress towards internationally agreed environmental instruments and development goals. It will promote the collection of long-term time-series data for indicators and provide a framework for cooperation in providing technology support and meeting capacity-building needs;

(c) An assessment compact of existing and, where needed, new partnerships which will foster strengthened and more dynamic interactions between environmental science and policy-making at global, regional and national levels. The compact will undertake scientifically credible and politically relevant and legitimate independent and critical, peer-reviewed assessments of the state of knowledge on complex issues defined by decision-makers. It will map the assessment landscape and improve compatibility and complementarity between assessments with differing thematic, geographic and temporal coverage. It will offer processes for transforming information on environmental change into knowledge held by managers and scientists at various levels. It will help set priorities for environmental research, monitoring and decision-making and for mainstreaming environmental considerations into social and economic sectoral development policies;

(d) A capacity-building programme and toolbox compatible with the Bali Strategic Plan, which will foster improved access to tools and methodologies, and increased capacities on the part of developing countries and countries with economies in transition for undertaking national processes and engaging in international processes for keeping the environment under review. Strengthened national scientific capacity will strengthen the foundations for national, regional and global environmental institutions, for national technological adaptation and innovation, and for national disaster preparedness and emergency response.

D. Components of the Environment Watch system

15. The Environment Watch system will be a coherent, flexible and distributed system for keeping the environment under review. It is based on partnership between national environmental authorities and other stakeholders active in the field. Those partnerships will ensure that the system builds on existing networks, assessments and capacity-building initiatives. The system will mobilize experts and information from scientific programmes and global observing systems. It will interact with many decision-making forums, such as the conferences of parties to multilateral environmental agreements and their subsidiary bodies, regional ministerial forums and Governments (see figure 1 below). The components under the system are to be developed in an iterative and incremental manner.

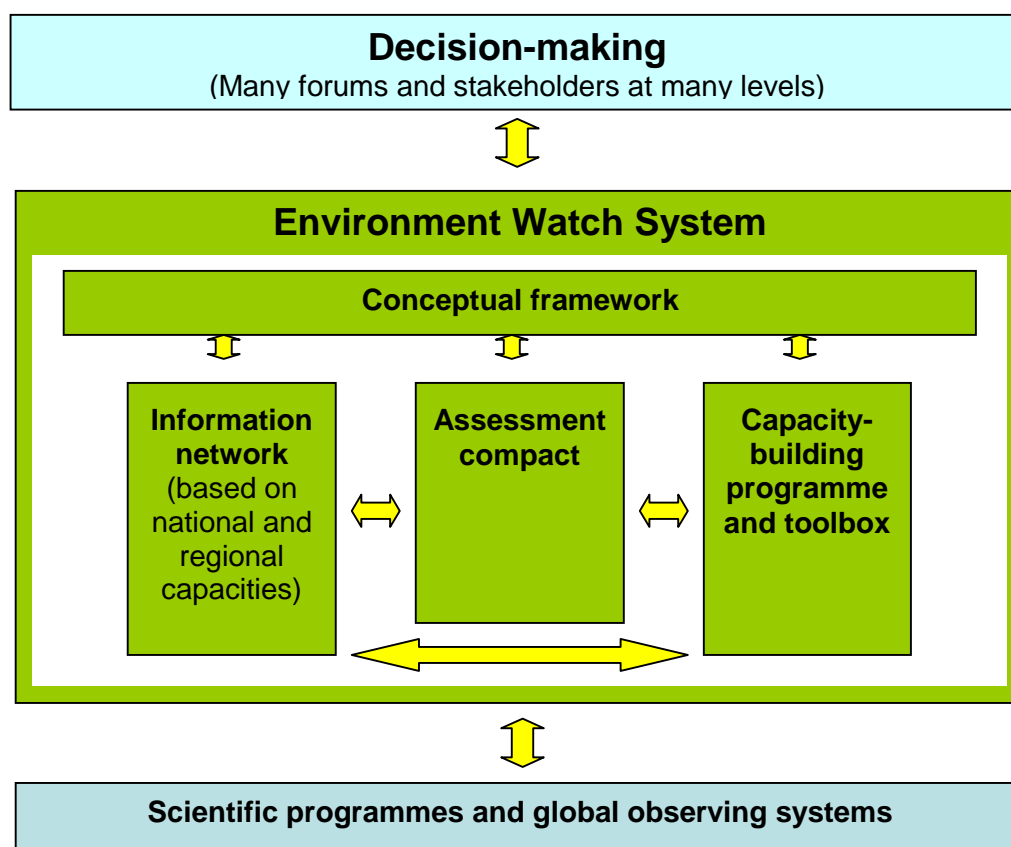


Figure 1. The components of the updated Environment Watch system and its relationship to decision-making, scientific and observing systems

1. Environment Watch conceptual framework

16. The conceptual framework is a pragmatic and flexible approach for promoting coherence, complementarity, compatibility and interoperability between the various processes under the system. It consists of the two mutually supportive approaches outlined below.

(a) Analytical approach

17. The analytical approach of the Environment Watch system reflects the leading recent conceptual developments in assessment, networking and cooperation, including those applied in the comprehensive Global Environment Outlook. It is regularly updated as new ideas and insights emerge (for the latest version see annex I to the present report). The approach is generic and flexible, and recognizes that a specific thematic and geographic focus may require a specific and customized approach. The analytical approach is characterized by being:

- (a) Universally applicable on various scales in time and space and across differing scientific and policy processes, and built on and able to integrate existing concepts, perspectives and approaches so that it reflects current environmental challenges and the linkages between them;
- (b) Able to integrate human, i.e., social and economic, and environmental considerations and reflect the contribution of environment to development in an objective, value and ideology-neutral manner;
- (c) Policy-relevant and intuitively easy to grasp and communicate, while at the same time being scientifically relevant and able to support and compile highly complex information and dynamics.

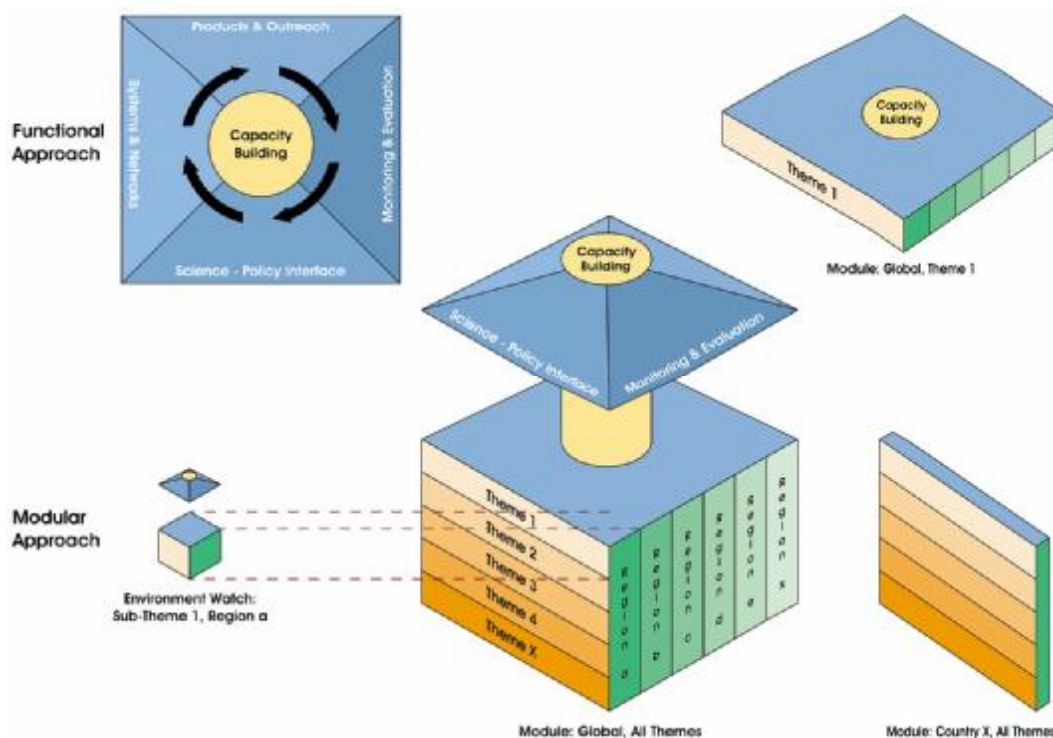


Figure 2. The modular approach of the Environment Watch conceptual framework

(b) Modular approach

18. The modular approach identifies priority modules under the Environment Watch system characterized by their thematic and geographic coverage (as illustrated in figure 2 above). The approach is in principle infinitely flexible and modules may vary from covering all environmental aspects of the globe to a specific theme for a country. A set of Environment Watch modules will be developed and annexed to the system and kept under review as necessary. Each module will also embrace the functional approach illustrated by the pyramid in figure 2. The functional approach comprises the following five components:

- (a) *Science and policy interface*, which includes processes such as assessments, indicators and early warning, for identifying and responding to policy needs and transforming information and scientific knowledge into knowledge for decision-making;
- (b) *Systems and networks*, which cover the technical infrastructure needed to facilitate access to and exchange of data and information generated through the monitoring and observing systems which underpin assessment and indicators;
- (c) *Products and outreach*, which cover the presentation and dissemination of data, information and knowledge in the form of products such as graphics and reports to decision-makers and a wide range of user groups;
- (d) *Monitoring and evaluation* at relevant intervals, to stimulate continuous learning, cost-efficiency and effectiveness;
- (e) *Capacity-building*, which provides support for the functions listed above.

2. Environment Watch information network

19. Information-sharing through networking is recognized as a key productivity-enhancing activity in efforts for keeping the environment under review. The rapid developments in information technology are offering increased and new opportunities. Networks are important for vertical and horizontal exchange and distribution of information for assessments, indicators and early warning of environmental problems by countries, international agencies and other stakeholders.

20. The proposed information network is a network of networks, built on existing and where needed new networks linked together through a distributed set of focal points reflecting the various modules of the conceptual framework. The network will be developed in an incremental manner and consist of the elements described below.

(a) National networks and focal points

21. The basic building block of the information network is the national environmental information network, comprising thematic and functional focal points. Thematic focal points will include, for example, information focal points for the multilateral environmental agreements. A government-designated national focal point will be responsible for contacts with the global information network, often through regional information networks (see figure 3 below). The Executive Director, in cooperation with relevant partners, will facilitate the establishment and strengthening of national environmental information networks upon request, subject to the availability of resources.

(b) Regional networks and focal points

22. The information network will also, where feasible, through regional focal points, be organized into regional environmental information networks consisting of national environmental information network and national focal points (see figure 3 below). For example, the European Environmental Information and Observation Network (EIONET) will be the regional environmental information network and the European Environment Agency (EEA) will be the regional focal point for EEA member countries.¹¹

23. Additional regional networks will be incrementally established where feasible with the support of UNEP and partners. In Africa, for example, the Africa Environment Information Network (AEIN) under the African Ministerial Conference on Environment (AMCEN) will be expanded to include all African countries.¹² The Executive Director, in cooperation with relevant partners, will facilitate the establishment of additional regional environmental information networks and regional focal points, subject to the availability of resources.

(c) Thematic and functional networks and focal points

24. The information network will also, as appropriate, link relevant parts of existing thematic and functional networks such as the UNEP Global Resource Information Database (GRID) and Global Environmental Information Exchange Network (Infoterra) and the Food and Agriculture Organization of the United Nations (FAO) and UNEP joint coordinated Global Land Cover Network (GLCN). The Executive Director, in cooperation with relevant partners, including the private sector, will facilitate the establishment of thematic and functional networks and focal points corresponding to the agreed modules, subject to the availability of resources.

¹¹ EEA has communicated to the Executive Director that its national focal points have requested it to coordinate activities relating to Environment Watch for the EEA member and collaborating countries.

¹² The current pilot phase of AEIN was developed with the support of UNEP through guidelines, manuals and capacity-building workshops and has already strengthened national, subregional and regional assessment processes.

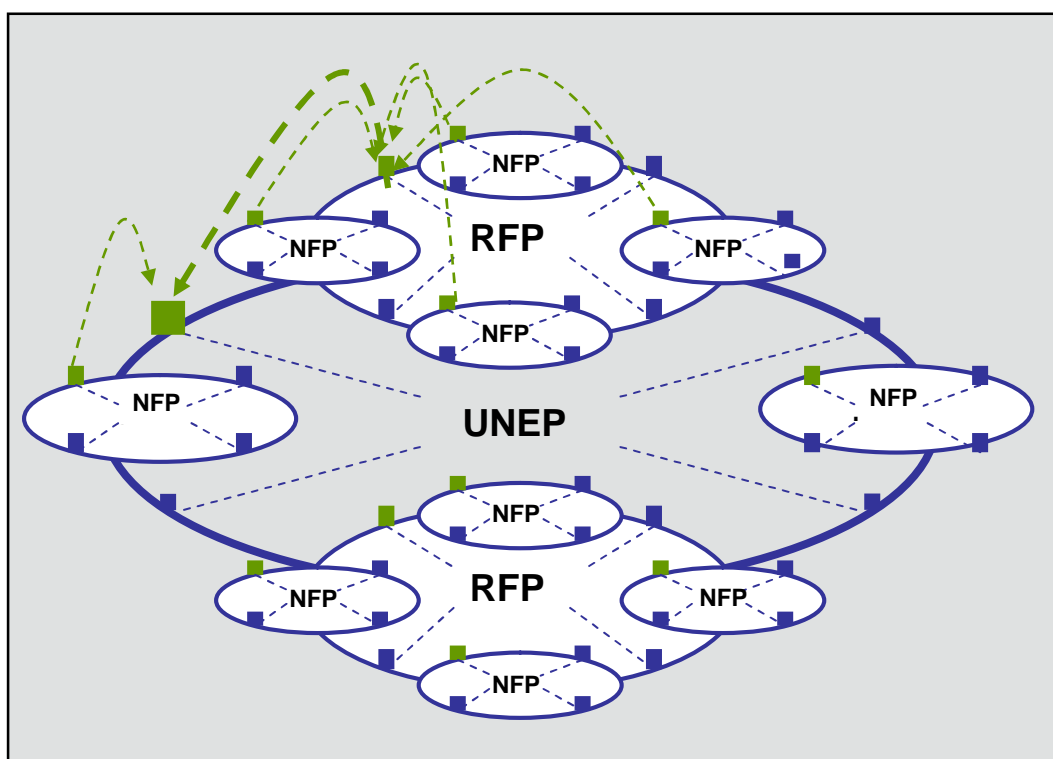


Figure 3. The Environment Watch information network will consist of national focal points (NFPs) central to national environmental networks linked together in regional and or subregional networks coordinated by regional focal points (RFPs) as appropriate. Thematic and functional focal points would also link together as indicated by the arrows and constitute associated thematic and functional networks.

(d) Guidelines for the operation of and connectivity within the network

25. A set of generic guidelines for the operations of the network will be developed through consultations. The guidelines will outline the roles and responsibilities of national, regional, functional and thematic focal points and set forth criteria for environmental country profiles and data portals. They will also define the necessary requirements for metadata and for standardization, classification and interoperability of data sets by using existing standards and classification systems such as the global land cover classification system.¹³ The guidelines will be based on existing experiences and practice and allow for customized approaches in different regions. The question of de-identifying the country of origin of potentially sensitive national data will be addressed.

26. The guidelines will also reflect the agreed modules of the Environment Watch system, including a set of environmental indicators. It will set the stage for the collection of reliable time-series data at the national and international levels, which again will facilitate early warning, policy formulation, planning, priority-setting, reporting and measurement of environmental performance.

27. An electronic system of internet list servers will be established by the Executive Director to maintain communications with focal points and national networks. Information held by the network in electronic form will be accessible through an open web-service-based discovery tool interoperating with information services worldwide, using best-practice, non-proprietary standards and protocols promulgated in conjunction with the Internet Engineering Task Force, the World Wide Web Consortium, the Open Geospatial Consortium and the Organization for the Advancement of Structured Information Standards.

3. Environment Watch assessment compact

28. Environmental assessments are recognized as key vehicles for promoting the interaction between science processes and the various stages of the policy and decision-making cycle. They underpin decision-making by the Governing Council, multilateral environmental agreements, regional ministerial environmental forums, the private sector and national and local authorities. Assessments are fundamentally communication processes, not simply reports, which share many similar features,

¹³ The objective of the FAO/UNEP joint coordinated Global Land Cover Network (GLCN) is to achieve a global harmonized database on land cover, the most fundamental database for monitoring environment and sustainable development.

regardless of their scope, as defined in box 1 below. Many assessments are undertaken at global, regional, national and local levels. There are significant opportunities for increased effectiveness by promoting cooperation between stakeholders for enhanced methodological, thematic, geographic and temporal compatibility and complementarity between the assessments.

29. The assessment compact will draw on information and capacities provided by the information network at all scales. It will be carried forward by the UNEP GEO assessment process and other assessment processes undertaken by UNEP in partnership with other agencies, including the Global Environment Facility (GEF). The compact will be built on existing and, where needed, new partnerships with collaborating centres, scientific institutions and experts, Government experts, intergovernmental organizations, non-governmental organizations and the private sector. The Executive Director will facilitate consultations between partners on developing a set of principles and assessment methodologies which will guide the compact, reduce duplication of efforts and promote complementarity and compatibility between assessments corresponding to the agreed modules of the Environment Watch system. The assessment compact will consist of the components described below.

(a) GEO assessment process

30. The comprehensive GEO assessment analyses other assessments, scientific knowledge, information and data from the subglobal and global levels with the involvement of a broad range of partners including Government experts, collaborating centres, scientific institutions and experts, intergovernmental organizations, non-governmental organizations and the private sector. It responds to assessment needs identified by decision-makers and provides the Council/Forum and other relevant bodies with in-depth assessments of critical environmental issues as a basis for their actions, including for setting United Nations-wide programmatic directions in the area of the environment. The partnership underpinning the comprehensive GEO assessment will form the core of the assessment compact. The compact will operate through the GEO consultative process managed by the Executive Director, which includes targeted intergovernmental and multi-stakeholder consultations and collaboration with expanded networks of expertise. GEO will interact with the other components of the compact outlined below.

31. The GEO Yearbook is an annual report by the Executive Director prepared in cooperation with key members of the assessment compact and based on the latest up-to-date environmental data. It presents emerging environmental issues, key environmental indicators and other issues which the Executive Director is mandated to bring to the attention of the Council/Forum and of Governments, stakeholders and the wider public.

(b) Thematic assessment processes

32. UNEP is either the leading or a collaborating partner in a number of thematic recurrent assessments¹⁴ and non-recurrent assessments,¹⁵ of which some of the latter are undertaken by UNEP in its role as a GEF implementing agency. They respond to the needs of a variety of international instruments. The partnerships underpinning these assessments will complement the GEO partnerships in constituting thematic components of the assessment compact. Within UNEP assessment activities, priority will be given to working incrementally through thematic assessment compacts reflecting the modules under the Environment Watch system.

(c) Subglobal assessment processes

33. UNEP is either the leading or collaborating partner in, or provides support to, a number of recurrent¹⁶ or non-recurrent subglobal assessments. These include subglobal components of global assessments and regional and subregional assessments under regional and subregional ministerial forums. These activities also include providing support for carrying out national assessments and assessments of cities, ecosystems, social and economic sectors, and projects. The partnerships underpinning these assessments will incrementally become regional and subregional components of the assessment compacts reflecting the modules under the Environment Watch system.

¹⁴ These include the Intergovernmental Panel on Climate Change (IPCC), the Global Marine Assessment (GMA), the Ozone Assessments, the World Water Development Report (WWDR), the Global Biodiversity Outlook (GBO) and the World Resources Report.

¹⁵ These include the Global Biodiversity Assessment (GBA), the Millennium Ecosystem Assessment, the Global International Waters Assessment (GIWA), the International Assessment on Agricultural Science and Technology for Development (IAASTD) and the Land Degradation Assessment in Drylands (LADA).

¹⁶ These include the Africa Environment Outlook and GEO Latin America and the Caribbean: Environment Outlook.

Box 1. Definition of an environmental assessment

- It is a critical, peer-reviewed evaluation of information, for purposes of guiding decisions on a complex public issue, following a well-defined process.
- The scope (topic under consideration) is defined by multiple stakeholders, who are typically decision-makers. Findings are policy-relevant but not prescriptive, and reflect, for example, an “if ... then ...” approach
- It is conducted by a credible group of experts with a broad range of disciplinary and geographical experience and representation, in a balanced and transparent manner
- It reduces complexity but adds value by summarizing, synthesizing and building scenarios, and identifies consensus by sorting out what is known and widely accepted from what is not known or not agreed
- It raises the awareness of scientific communities to policy needs and of the policy community to the scientific basis for action

(d) Mapping the assessment landscape

34. The assessment compact will be supported by a regular process for mapping the assessment landscape. The objectives of the mapping exercise are to provide a definitive baseline overview of the thematic and geographic coverage and scope of environmental assessments, to assess the strengths and weaknesses of selected key assessment processes and to form a basis for prioritization of future assessment needs.¹⁷

4. Capacity-building programme and toolbox

35. The Environment Watch system builds on national capacities for assessment, early warning, monitoring, data collection, data management, information exchange and networking. A potential obstacle for its effective implementation is the difference in national capacities for participating in such a system. Nevertheless, significant opportunities do exist for providing technology support and capacity-building in developing countries and countries with economies in transition within the coherent and distributed structure of the Environment Watch system.

36. The capacity-building programme and toolbox will contribute to implementing the Bali Strategic Plan for Technology Support and Capacity-building. It will respond to the relevant objectives and components of the Bali Strategic Plan by setting forth the long-term priorities for the UNEP biennial programme of work.

(a) Long-term priorities for technology support and capacity-building

37. The capacity-building programme and toolbox will operate within the wider framework of the Bali Strategic Plan. It will be directed in support of the national and regional environmental information networks, national focal points, environmental information systems and assessment compacts in regions with developing countries and countries with economies in transition. The following long-term priorities will guide technology support and capacity-building in developing countries and countries with economies in transition under the Environment Watch system:

(a) Identification, through, among other things, questionnaires and needs assessments, of national and regional individual and collective needs for technology support and capacity-building for activities falling under the Environment Watch system;

(b) Facilitation of cooperation between Governments and partners, including South-South cooperation, including through the clearing house of the Bali Strategic Plan, based on identified needs, continuing activities and available resources for activities under the Environment Watch system;

(c) Maintenance of a toolbox in support of the Environment Watch system (see subsection (b) below);

(d) Facilitation of training of practitioners and trainers in the use of the tools in the toolbox, and missions to countries and regions, upon request, in support of national activities;

(e) Facilitation of national and regional access to global environmental data, including remote-sensing data;

¹⁷ See www.unep.org/pearl to view activities currently under way.

(f) Facilitation of the participation of experts from developing countries and countries with economies in transition in international assessments and processes under the Environment Watch system, including through provision of fellowships.

(b) Toolbox

38. The toolbox will provide a coherent set of quality tested tools to support the Environment Watch system. It will help ensure the scientific credibility and the political legitimacy and relevance of Environment Watch system processes and products, and also their compatibility and complementarity. Significant opportunities for increased efficiency exist by enhancing the access to existing tools¹⁸ and by facilitating further development of tools in a systematic and coherent manner.

39. The toolbox will be managed by the Executive Director in cooperation with partners active in the field. It will consist of an inventory of manuals, procedures, guidelines, training materials, best practices, and necessary standards and technologies for monitoring, assessment, networking and exchange of data and information. The toolbox would include information on which tools should be used where, when and for what. It will collect and review tools which could be included in the toolbox. Tools would be subject to customization, evaluation and revision as required. The toolbox would be available on the internet.

E. Relationship between the Environment Watch system and other initiatives

40. The Environment Watch system will be based on a partnership approach, will be built on existing assessments and networks and will incrementally strengthen partnerships, assessments and networks where they are currently weak. Through these partnerships, the system will directly or indirectly connect with initiatives of other organizations. The Environment Watch system will contribute to and draw from those initiatives in accordance with its objectives and long-term expected outputs. Its will have relationships with, among others, the following initiatives.

1. Global Earth Observation System of Systems (GEOSS)

41. The Group on Earth Observations is an established intergovernmental mechanism operating under an agreed 10-year implementation plan for the purpose of building a coordinated, comprehensive and sustained Global Earth Observation System of Systems (GEOSS). GEOSS focuses on nine social benefit areas from a coordinated global observation system.¹⁹ Environment Watch will make use of the data and services provided by the observing systems,²⁰ including GEOSS. It will interact and co-evolve with GEOSS in areas such as the development of the technical architecture of observing systems, methodologies, identification of global observation needs and capacity-building. Environment Watch will facilitate the distribution of global data from GEOSS to the regional and national levels. It will also provide GEOSS with access to environmental assessments and compiled environmental data.

2. International scientific programmes

42. International scientific programmes, including those operating under the International Council for Science (ICSU) set the strategic direction of research in a number of environment-related areas. Through the assessment compact, Environment Watch will draw upon the information and knowledge generated by such programmes and make it available to regions and nations through the information network. The assessment compact will also facilitate interactions between scientists and decision-makers which will contribute to informed decisions by scientists and scientific institutions on priorities for further scientific programmes and research initiatives.

3. Earthwatch

43. Earthwatch was established by the Stockholm Conference on the Human Environment in 1972 and subsequently strengthened by several United Nations General Assembly resolutions as an inter-agency cooperation mechanism in the area of environmental assessment, early warning, data and

¹⁸ Examples of existing tools include the GEO training manual for integrated environmental assessment, the Millennium Ecosystem Assessment methods manual and the scale- and user-independent Land Cover Classification System (LCCS) of the FAO/UNEP joint coordinated GLCN.

¹⁹ The nine social benefit areas are warning and mitigation of natural and human-induced disasters; environmental factors affecting human health and well-being; management of energy resources; climate variability and change; the water cycle; weather information, forecasting, and warning; protection of terrestrial, coastal, and marine ecosystems; sustainable agriculture and combating desertification; and biodiversity

²⁰ Including the Global Climate Observing System, the Global Ocean Observing System and the Global Terrestrial Observing System.

information. Environment Watch would build upon the inter-agency partnership which Earthwatch represents, and contribute to its further strengthening and revitalization.

F. Governing the evolution of the Environment Watch system

44. The Governing Council/Global Ministerial Environment Forum will be responsible for the overall governance of the Environment Watch system. In keeping with the incremental approach, the Environment Watch system will be developed and implemented in phases through the UNEP biennial programmes of work, as is also the case for the Bali Strategic Plan. This will ensure practical coordination between the implementation of these two long-term and mutually supportive initiatives. The administrative and financial implications of the Environment Watch system will be subject to approval by the Council/Forum in accordance with the regular results-based planning, programming and reporting cycle of the United Nations.

45. The Council/Forum will invite Governments, institutions and experts to partner UNEP in developing and implementing the Environment Watch system. The Executive Director will develop and implement the system in close cooperation with Governments and partners. In so doing, the Executive Director will call upon the support of ad hoc advisory and expert groups as necessary.

46. The Council/Forum will regularly consider the findings provided by the Environment Watch system as a basis for its decisions, including those regarding the orientation of the biennial programme of work. It will call upon other decision-making forums to do the same as needed. The Council/Forum will also, on the basis of internal and external evaluations and results-based reports by the Executive Director, review the orientation of the system as needed.

II. Proposed further action

47. The updated Environment Watch proposal seeks to address the key consensus points that have emerged from almost three years of consultations on how to strengthen the scientific base of UNEP. The proposed architecture described in chapter II above is presented in a form in which it could be considered for adoption by the Council/Forum and could set the long-term directions for the relevant parts of the UNEP biennial programmes of work. The Executive Director is, however, of the view that the proposal merits further consideration through consultations with Governments and partners before it is considered for adoption by the Council/Forum.

48. It is proposed that the system should be developed and implemented in phases through the biennial programmes of work. The financial and administrative implications of the system would then be considered at the regular sessions of the Council/Forum in the context of the development and approval of the biennial budget and programme of work.

49. The Executive Director believes that further consideration of the proposal is needed and that further preparatory work must take place during the consultative period. The orientation of subprogramme 1, Environmental Assessment and Early Warning, for 2006–2007 allows for such activities to take place. Extrabudgetary resources have been mobilized in support of such activities. The following actions are planned:

(a) Depending on the considerations of the Council/Forum at its ninth special session, to undertake further consultations with Governments and partners on the proposed architecture of the Environment Watch system with a view to allowing for the development and implementation of phase 1 of the system in the programme of work for 2008–2009 and the possible adoption of the architecture by the twenty-fourth session of the Council/Forum, possibly based on the outcome of negotiations during the intersessional period or during the session;

(b) To continue to solicit comments on the situation analysis and capacity-building needs assessment questionnaire from Governments, to consider the implications of the system at national level and to undertake pilot projects in countries upon request to determine which elements of Environment Watch are already in place worldwide and to identify where capacities need to be strengthened, and to consider the overall financial and administrative implications of a phased establishment of the system;

(c) To undertake consultations for the development of thematically and geographically defined modules covering, for example, air, land, water, biodiversity, chemicals and wastes;

(d) To undertake consultations with a view to preparing a first draft of the guidelines for the information network, building on experience from existing networks; to move forward with the development of the information architecture of the system and an open, web-based system for accessing that information; and to liaise with existing networks, regional bodies and international institutions which may serve as regional, functional and thematic focal points in the information network;

(e) To continue exploring ways to strengthen the partnerships making up the assessment compact through the GEO-4 consultative process and other thematic and subglobal assessments, and to continue the current process for mapping the assessment landscape;

(f) To continue to undertake the capacity-building activities outlined in the 2006–2007 programme of work in support of the Bali Strategic Plan, which will contribute to strengthening the foundations for the proposed Environment Watch system, bearing in mind that in subparagraph 7 (b) of its decision 23/6 the Council/Forum called upon Governments to undertake national networking for data collection and dissemination and provide data of high quality and credibility.

Annex

GEO-4 conceptual approach

The proposed analytical approach for Environment Watch is the GEO-4 analytical approach based on the human-environment interaction as expressed through the driver, pressure, state, impact, response (DPSIR) framework and enriched with ideas from the Millennium Ecosystem Assessment conceptual framework and vulnerability considerations (figure 4). It may be further refined as the GEO-4 process evolves.

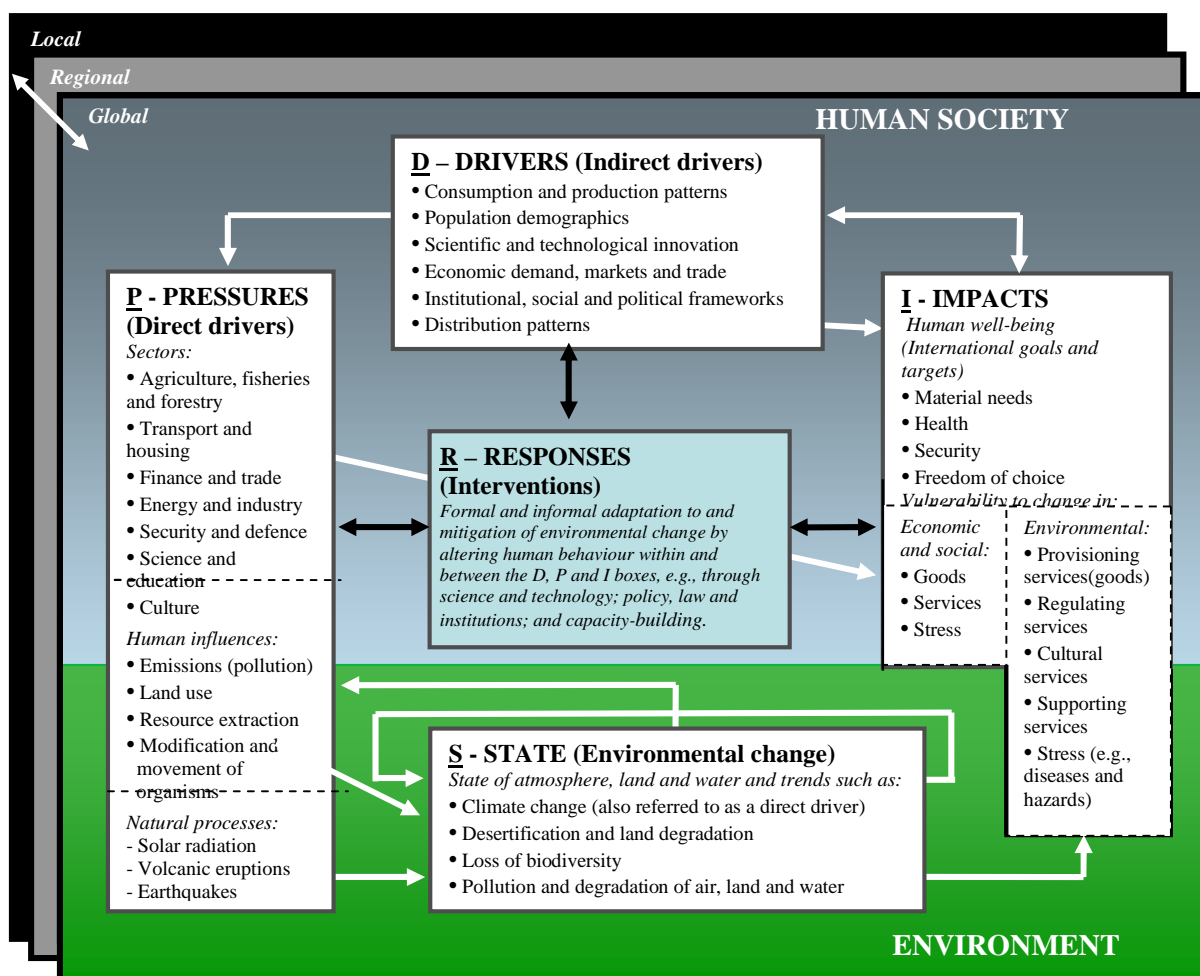


Figure 4. The UNEP human-environment interaction analytical approach is built on the driver, pressure, state, impact and response (DPSIR) framework, the Millennium Ecosystem Assessment conceptual framework and vulnerability considerations. It is multi-scalable and indicates generic cause-and-effect relations within and between:

Drivers: Sometimes referred to as indirect or underlying drivers or driving forces, they refer to fundamental processes in society which drive activities which have a direct impact on the environment.

Pressures: Sometimes referred to as direct drivers, as in the Millennium Ecosystem Assessment conceptual framework, they include the social and economic sectors of society (also sometimes considered as drivers). Human interventions may be directed towards causing a desired environmental change and may be subject to feedback in terms of environmental change, or could be intentional or unintentional by-products of other human activities (e.g., pollution).

State: Environmental state also includes trends, often referred to as environmental changes, which may be both or either natural and human induced. One form of change, such as climate change (referred to as a direct driver in the Millennium Ecosystem Assessment conceptual framework) may lead to other forms of change such as biodiversity loss (a secondary effect of greenhouse-gas emissions). Multiple pressures may leave the environment more vulnerable, leading to cumulative change and, in some cases, sudden and disruptive change.

Impacts: Environmental change may positively or negatively influence human well-being (as reflected in international goals and targets) through changes in ecological services and environmental stress. Impacts may be environmental, social and economic, and may contribute to human vulnerability. Vulnerability to change varies between groups of people depending on their geographic, economic and social circumstances, exposure to change and capacity to mitigate or adapt to change. Human well-being, vulnerability and coping capacity are dependent on access to social and economic goods and services and exposure to social and economic stress.

Responses: Responses (interventions in the Millennium Ecosystem Assessment conceptual framework) consist of elements from among the drivers, pressures and impacts which may be used for managing society so as to alter human/environment interactions. Drivers, pressures and impacts that can be altered by a decision-maker at a given scale are referred to as endogenous factors, while those that cannot are referred to as exogenous factors. Responses are at various levels: for example, environmental laws and institutions at the national level, and multilateral environmental agreements and institutions at the regional and international levels. Responses address issues of vulnerability of both people and the environment, and provide opportunities for enhancing human well-being.
