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**Policy issues:      International environmental governance**

**STATUS OF IMPLEMENTATION OF THE MILLENNIUM ECOSYSTEM ASSESSMENT**

**Note by the Executive Director**

The present note contains information on the status of implementation of the Millennium Ecosystem Assessment. The content of this note has been reproduced without formal editing.

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## **Contents**

Overview

Framework for Assessment and Action

Utility for Policymakers

Progress in Implementation

## Overview

1. The Millennium Ecosystem Assessment (MA) is a 4-year international assessment, launched in 2001, that is designed to meet the needs of decision-makers for scientific information on the links between ecosystem change and human well-being. More specifically, the MA is interacting closely with the Parties to the Convention for Biological Diversity (CBD), the Convention to Combat Desertification (CCD), and the Ramsar Wetlands Convention (Ramsar Convention) in order to contribute to the fulfillment of their assessment needs. Each of these bodies has approved the involvement of their Executive Secretary and the Chair of their Scientific and Technical Subsidiary Body on the Board of the MA and has requested specific information from the MA. A defining feature of the MA design is its emphasis on responding to assessment needs identified by these conventions, with some parallels to the role of the Intergovernmental Panel on Climate Change (IPCC) in responding to assessment needs of the Framework Convention on Climate Change (FCCC). It is anticipated that some continuing capability for carrying out integrated multiscale assessments of the consequences of ecosystem change for human well-being and responding to the needs of these conventions is needed. Any mechanisms to this effect should be considered in light of the success of the MA and new developments in the field such as the outcome of the considerations on the establishment of an Intergovernmental Panel on Global Environmental Change. Information on the MA is available at <http://www.millenniumassessment.org>.

2. The MA focuses on how changes in ecosystem services have affected human well-being, how ecosystem changes may affect people in future decades, and what types of responses can be adopted at local, national, or global scales to improve ecosystem management and so contribute to human well-being and poverty alleviation. The MA is closely coordinated with other international assessments that focus in greater depth on particular sectors or drivers of change, such as the IPCC and the Global International Waters Assessment (GIWA). Scientific assessments such as these directly meet decision-makers needs and help to underpin reports such as *Global Environmental Outlook*, *World Resources Report*, *Human Development Report*, and *World Development Report*.

3. The MA will provide policy-makers with a targeted overview of the state of knowledge (incorporating both scientific knowledge and traditional knowledge) bearing on critical questions confronting decision-makers in the context of environmental treaties, sustainable development planning, and national environmental policy, such as:

- What strategies for environmental management can best contribute to poverty alleviation?
- What strategies are most promising to significantly reduce the rate of biodiversity loss in the next fifteen years?
- What will be the ecological and human-health consequences of further increases in human contributions to the world's nitrogen and phosphorous cycles?
- How might changes in ecosystems in the coming decades affect human health?
- What is the state of the art for determining the economic values of various ecosystem services?

4. The MA will also train individuals in both developed and developing countries to enhance their ability to conduct integrated ecosystem assessments. And, through assessments now being conducted at "sub-global" scales (communities, nations, regions), the MA will both contribute to development planning at those scales and to strengthening institutional capacity within these regions to carry out integrated assessments.

5. The MA was featured as a priority action in the report by UN Secretary General Kofi Annan to the 2000 General Assembly (*We the Peoples: The Role of the United Nations in the 21st Century*, April 3, 2000) which stated: "it is impossible to devise effective environmental policy unless it is based on sound scientific information. While major advances in data collection have been made in many areas, large gaps in our knowledge remain. In particular, there has never been a comprehensive global assessment of the world's major ecosystems." "The Millennium Ecosystem Assessment is an outstanding example of the sort of

international scientific and political cooperation that is needed to further the cause of sustainable development.”

6. The MA findings, to be released in 2004, are well-timed to contribute to the follow-up to the World Summit on Sustainable Development (WSSD). The WSSD Plan of Implementation endorses the role of assessments like the MA. Moreover, the MA is already assessing the science related to the role of ecosystems in meeting the targets and goals agreed on at the WSSD, including, for example, eradicating extreme poverty and hunger; reducing child mortality; improving maternal health; combating malaria and other diseases; ensuring environmental sustainability; increasing access to safe drinking water; and, restoring fisheries.

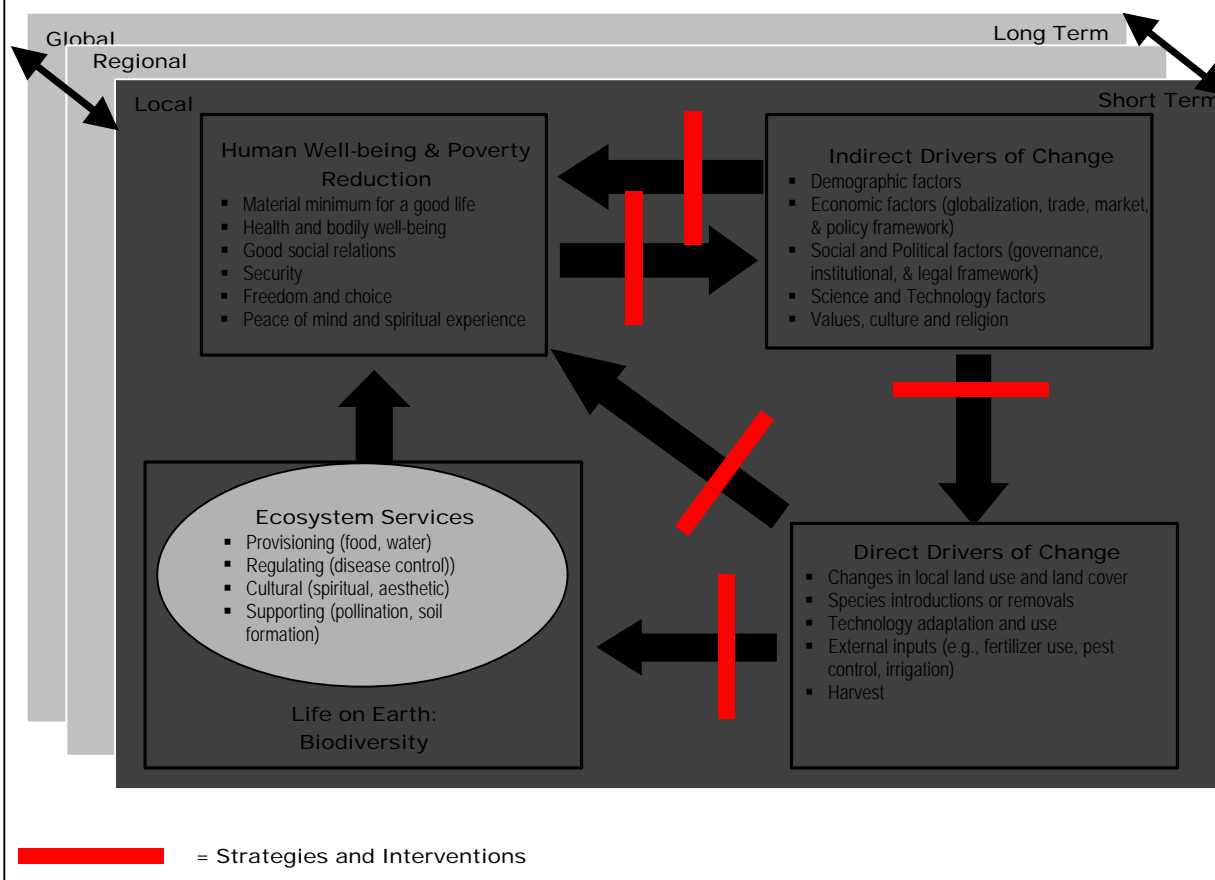
### **Framework for Assessment and Action**

7. Human well-being depends on ecosystems. Ecosystems provide the goods and services that sustain development. But while demands for various ecosystem services such as food and clean water are growing, humans are at the same time diminishing the capability of many ecosystems to meet these demands. The demand for ecosystem services is now so great that trade-offs among goods and services have become the rule. At the same time, human impact on the world's ecosystems has grown rapidly during the past century; altering the biological, physical, and chemical features of the planet as never before. Sound policy and management interventions can often reverse ecosystem degradation and enhance their contributions to human well-being, but knowing when and how to intervene requires substantial understanding of both the ecological and social systems involved. Better information cannot guarantee improved decisions, but it is a prerequisite for sound decision-making. The MA will help provide the knowledge base for improved decisions and help build capacity for analyzing and acting on this information

8. Ecosystem-related problems have historically been approached on an issue-by-issue basis: for example, either increasing food production or protecting biodiversity or reducing water pollution but not seeking to achieve all goals simultaneously. These approaches have not fully stood the test of time. Progress made towards one objective such as food production have often resulted in unacceptable costs for other objectives such as biodiversity conservation or water quality. The framework developed for the MA provides a more integrated approach for asking questions and analyzing options that can be applied to decision-making needs at scales from local communities to international conventions.

9. The MA framework combines: a) a focus on the goods and services provided by ecosystems and how changes in those services affect human well-being; b) an integrated look at systems such as agriculture, forests, water, and coastal zones that are often assessed in isolation; c) a multi-scale approach; d) an examination of both the direct and indirect drivers influencing ecosystem services; e) an interdisciplinary approach; and f) an emphasis on considerations of the distributional impacts of ecosystem changes and responses.

**Millennium Ecosystem Assessment Conceptual Framework.** As synthesized in this diagram, the MA examines the drivers of ecosystem change, their impact on the condition and future prospects of ecosystems to sustain human well-being and the responses that human beings can develop and select in the face of ecosystem change. Changes in factors that indirectly affect ecosystems such as population, technology, and lifestyle (upper right corner) can lead to changes in factors directly affecting ecosystems such as the harvest of fisheries or the application of fertilizers to increase food production (lower right corner). The resulting changes in the ecosystem (lower left corner) cause the ecosystem services to change and thereby affect human well-being and poverty. These interactions can take place at more than one scale and can cross scales. For example, a global market may lead to regional loss of forest cover which increases flood magnitude along a local stretch of a river. Similarly, the interactions can take place across different time scales. Actions can be taken either to respond to negative changes or to enhance positive changes at almost all points in this framework (cross-bars).



10. The approach that the MA is using for the assessment will be published early in 2003 in the report *"People and Ecosystems: A framework for Assessment and Action."* This report was prepared by 60 authors from 19 countries and is now undergoing peer review by the focal points of the CBD, CCD, Ramsar and UNFCCC, and by fifteen National Academies of Sciences as well as a number of experts. Figure 1 above provides an overview of the MA framework.

11. Five overarching questions, along with the detailed lists of user needs provided by the Convention secretariats and the private sector, guide the issues being assessed:

- What is the current condition of ecosystems and the associated human well-being?
  - What ecosystems provide what contributions to human well-being?
  - How have ecosystems changed in the past and how has this increased or reduced their capacity to contribute to human well-being?
    - What thresholds, regime shifts or irreversible changes have been observed?
    - What were the most critical factors affecting the observed changes?
  - What are the costs, benefits, risks of the observed changes in ecosystems and how have

- these costs, benefits, and risks affected different sectors of society and different regions?
- 2. What are the plausible future changes in ecosystems and in the supply of, and demand for, goods and services and the consequent changes in health, employment, security and other constituents of well-being?
  - Under what circumstances are thresholds, regime shifts or irreversible changes likely to occur?
  - What are the most critical drivers and factors affecting future changes?
  - What are the costs, benefits, risks and of plausible future human induced changes in ecosystems and how have these costs, benefits, and risks affected different sectors of society and different regions?
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- 3. What can be done about it? What response options and processes can be used to realize or avoid specific futures?
  - What are the trade-off implications of the response options?
  - How does inertia in the social and natural systems impact management decisions?
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- 4. What are the most robust findings and key uncertainties that affect provision of goods and services (including the consequent changes in health, employment, security) and other, management decisions and policy formulation?
- 5. What tools and methodologies developed and used in the MA can strengthen capacity to assess ecosystems, the goods and services they provide, their impacts on human well-being, and the implications of response options?

### Utility for Policymakers

12. The MA is designed to provide decision-makers with information to manage ecosystems in a more sustainable manner that will enhance human livelihoods through actions that conserve and sustainably utilize ecosystems and their services. The core products of the MA will be a set of four 400-800 page Assessment Reports and short Summaries for Decision-Makers (SDMs) that will be released in 2004 along with the Assessment Reports of the Sub-Global Assessment:

- Condition and Trends Assessment Report (~800 pp.)
- Scenarios Assessment Report (~300 pp)
- Response Options Assessment Report (~600 pp)
- Sub-Global Assessment Synthesis (~250pp)
- Summaries for Decision-Makers (three 30-page summaries of each assessment report)
- Synthesis Reports addressing specific audiences or issues (40 pages)
  - Biodiversity
  - Desertification
  - Wetlands
  - Private Sector
  - Ecosystems and Human Well-being
- Sub-Global Assessment Reports
  - Each MA sub-global assessment will release a set of reports and products designed to meet the needs of their users at the scale at which they are conducted
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13. The Assessment Reports form the foundation of scientific credibility on which the MA outreach is built. The primary printed outreach products are the SDMs and five short synthesis reports targeting the needs of specific decision-makers. The summary and synthesis reports will be translated into the six UN languages. All of the MA products will undergo two rounds of peer review, involving both governments and hundreds of other experts. An independent Board of Review Editors has been established to ensure that the review comments are adequately addressed by the MA authors. Each of the MA sub-global assessments will also release a set of printed products targeting the needs of the stakeholders of their assessments. For

example, the Southern Africa Assessment has already released its first product, *Nature Serving People*, summarizing the findings of its pilot assessment. (This report is available on the MA website.)

14. More specifically, the MA products and outputs can be used by policy-makers in the following ways:

- a. The MA will provide information from the scientific community focused on decisions that policy-makers are confronting concerning ecosystems and people. For example, the MA will address such issues as: a) how can ecosystem management better contribute to the alleviation of poverty? b) how can priorities for biodiversity conservation best be set at local, national, and global scales? c) how can countries better factor the economic benefits of non-marketed ecosystem services into national planning and decision-making?
- b. The MA will provide policy-makers with information about issues that may deserve greater attention in national planning. For example, the MA will detail what is (and isn't) known about the potential consequences of changes to global nitrogen and phosphorous cycles for ecosystems and human well-being thereby assisting governments determine the priority that this issue should receive in national and international planning and policy-making.
- c. The MA will assess the science related to the role of ecosystems in underpinning progress toward a number of the targets and goals agreed on at the WSSD. For example, the MA findings will help to inform actions needed to eradicate extreme poverty and hunger; reduce child mortality; improve maternal health; combat malaria and other diseases; ensure environmental sustainability; increase access to safe drinking water; reduce the rate of biodiversity loss; and, restore fisheries.
- d. The MA will provide data and indicators (and facilitate access to data and indicators) that will aid governments and other users in assessing and managing ecosystems. All of the MA datasets will be publicly available and archived to serve as a year 2000 baseline dataset for future comparisons. Moreover, the United States, through the National Aeronautics and Space Administration (NASA) and the U.S. Geological Survey (USGS) is making available through the MA and UNEP an orthorectified Landsat-7 dataset of the world for the year 2000. This high resolution dataset can be used to accurately measure and monitor land cover changes. Finally, the MA is developing an interactive web-site enabling users to readily find information from any of the Assessment volumes and explore the scenarios and indicators developed through the assessment. For example, the users will be able to modify assumptions behind the scenarios (e.g., rates of economic growth) to see how that might affect outcomes in 20-40 years. Similarly, the user will be able to view global indicators and statistics, then click on a particular region to examine those same indicators for that region.
- e. The MA is designed to strengthen the capacity of people and institutions to conduct integrated assessments and to act on their findings. Approximately half of the experts involved in the MA will be from developing countries. The majority of the sub-global assessments are located in developing countries. All of the MA experts will gain experience in integrated assessments and strengthen their own personal networks with scientists and decision-makers around the world. In addition, the MA will:
  - Train 30-40 young scientists in integrated assessment approaches. The MA has established a fellowship program for scientists within 5 years of receiving their PhDs. These young scientists will be involved as full participants and authors in the MA process.
  - Strengthen 10-15 institutions in developing countries to carry out integrated assessments. The selection of the locations for the MA sub-global assessments is based, in part, on the identification of an institution that has the capability to carry out

the assessment but that also can gain significant capacity through involvement in the MA process. More generally, each of these sub-global assessments will enhance the ability of networks of scientists and decision-makers in these regions to carry out integrated assessments and to act on their findings.

15. Finally, each of the MA sub-global assessments will provide many of these same benefits to the 'users' of the assessments at the scale where they are being conducted. In some cases these assessments are being conducted by and for local communities, while in other cases they are being done for nations or regional bodies.

16. A defining feature of the MA is its focus on meeting the needs of policy-makers and other users. The initial exploration of the desirability to establish the Millennium Assessment was undertaken by a Steering Committee comprised of UNEP, FAO, UNDP, UNESCO, CBD, CCD, World Bank, World Council for Science (ICSU), Consultative Group on International Agricultural Research (CGIAR), World Business Council on Sustainable Development (WBCSD), World Resources Institute (WRI), World Conservation Union (IUCN), and the Global Environment Facility (GEF). Based on feedback from the potential users of the assessment that indicated a strong demand for such a process, this Steering Committee recommended in 1999 that the MA be established and that it seek to further engage relevant public and private institutions, in particular the ecosystem-related conventions, national governments, local agencies and communities, relevant United Nations agencies and other intergovernmental organizations, non-governmental organizations (NGOs), and the private sector. Decisions reflecting the demand for the MA and formalizing the involvement of the conventions in the MA process were reached in 1999 and 2000. In May 2000, CBD COP-5 (Decisions V/20 and V/21) requested the Subsidiary Body on Scientific, Technical, and Technological Advice to undertake a limited number of pilot scientific assessment projects, in preparation for the 6th meeting of the COP, and to invite, among others, the Millennium ecosystem Assessment to work closely together with the SBSTTA in this area (Decision V/20/III); requested the SBSTTA to identify opportunities for collaboration with the Millennium Ecosystem Assessment in contributing to the assessment needs of the Conventions; and accepted the invitation of the Millennium Ecosystem Assessment to be represented in the MA Board and Executive Committee. Similarly, in Decision SC25-12, the Ramsar Standing Committee endorsed the Ramsar Bureau's participation in the development and implementation of the Millennium Ecosystem Assessment. And, at the fifth meeting of the CCD Committee on Science and Technology in 1999, the CST concluded that the MA "was fully supported by CST and the Parties recommended continuation of the activities of the Millennium Assessment in collaboration with the CCD Secretariat."

17. Following the guidance of these decisions, over the last four years the MA has interacted extensively with the CBD, the Ramsar Convention, and the CCD. A briefing on the MA was provided to COP-7 of the Ramsar Convention (May 1999) and information needs from the MA were discussed at the tenth Ramsar STRP meeting (June 2001) and at COP-8 (November 2002). The MA has been discussed at CBD SBSTTA-4 (March 1999), SBSTTA-5 (October 1999), SBSTTA-6 (March 2001), and SBSTTA-7 (November 2001) as well as at CBD COP-5 (May 2000) and COP-6 (December 2001). The MA has been discussed at COP-3 of the CCD (November 1999), the Committee on Science and Technology (CST) Bureau (August 2001), and the CCD CST and COP at both COP-4 (December 2000) and COP-5 (October 2001). Each of these conventions has provided specific guidance to the MA regarding information needs, and appointed their Executive Secretary and the Chair of their scientific subsidiary body to serve on the MA Board and Executive Committee. The conventions have also had the opportunity to review and comment on the MA design and outlines. For example, CBD COP-6 "welcomed the outline for the assessment reports," "encouraged parties to support the involvement of experts in the Millennium Ecosystem Assessment process and provide assistance to developing countries and countries with economies in transition that are interested in undertaking national and regional assessments within the framework of the MA," and "requested the SBSTTA to review the findings of the MA and provide recommendations to the COP based on that review." (Decision VI/7).

18. Recognizing that the information being provided by the MA could help meet assessment needs of other international bodies, steps have been taken to inform other conventions about the MA process. At its September 2002 meeting, the Convention on Migratory Species COP noted that the MA is "broadly relevant



to CMS because migratory species are components of the ecosystems and regions under assessment” and, *inter alia*, invited “the MA to integrate, within the limits of its conceptual design, migratory species and their habitats into the further design and execution of the Assessment, taking into consideration the importance of the migratory range approach” and invited “the MA to collaborate with the Scientific Council to examine more closely how the MA could benefit the Convention and the Parties.”

19. User engagement in the design and execution of the MA takes place through various means. Early in the process, an assessment of user needs was conducted, and a draft of the needs that were identified was made widely available through the MA website in August 2001. This document is being updated on an ongoing basis and the working groups are charged with responding to the defined user needs to the greatest extent possible in their work. In addition, sectoral dialogues and briefings have been organized for the private sector, governments, indigenous organizations, the scientific community and non-governmental organizations. The MA interacts with other environmental and sectoral assessment processes including IPCC, the Global International Waters Assessment (GIWA), the Global Environment Outlook (GEO), the Forest Resources Assessment (FRA), the Land Degradation Assessment (LADA), etc. to ensure that it adds value to activities already underway or planned.

20. The MA has established a group of “Affiliated Scientific Organizations and National Academies of Sciences” to facilitate the involvement of scientists from a number of countries and to provide a mechanism for the dissemination of MA findings through scientists within those countries. Academies that are currently members of this group include: Argentina, Bosnia and Herzegovina, Cameroon, China, Chinese Taipei/Taiwan, Colombia, Guatemala, Indonesia, Kenya, Malaysia, Philippines, Slovenia, South Africa, Sweden, Uganda, United Kingdom, as well as the African Academy of Sciences.

21. The MA is engaging with stakeholders at the national level, organizing processes of dialogue to receive their input and ensure a broader dissemination of MA outputs. Processes of this nature are being organized in 24 countries, and more are expected to join in the near future.

22. Particularly important features of the MA that enhance its utility for decision-makers are:

- a. The MA addresses needs of its users, in particular needs identified by the CBD, CCD, and Ramsar Conventions. It is actively interacting with these conventions. Through decisions of the parties to the conventions, the secretariats of these conventions and the chairs of their technical subsidiary bodies are represented on the Board of the MA. The MA fills a need for these conventions with some parallels to the role of the IPCC in meeting needs under the FCCC. (Unlike the IPCC, however, the MA is only one of a number of mechanisms for assessment input into these conventions.)
- b. The MA focuses on: a) the entire range of ecosystem goods and services; and, b) links between ecosystems and people. The value added of the MA is its ability to examine links between the environment and development in a holistic manner. Increasingly, the greatest environment/development challenges involve trade-offs among various benefits provided by ecosystems. Existing sectoral assessments play critical roles and must be maintained and strengthened, but a process is needed that enables decision-makers to obtain this more holistic information about overall costs and benefits and the trade-off involved in different policy and management approaches. Importantly, the MA does not focus only on biophysical features of the environment but examines the linkages between the environment and human well-being including health, economic and social considerations.
- c. The MA is multi-scale. While there are benefits in periodic global assessments in their own right, the MA seeks to multiply these benefits by conducting a ‘global’ assessment through a number of sub-global and global components. The sub-global components play a direct role in decision-making at the scales where they are conducted and greatly strengthen the global findings. The global components meet needs of their own while strengthening the sub-global process.

- d. The MA embraces both traditional and scientific knowledge. The MA has put in place procedures to enable the incorporation of traditional knowledge in the assessment process while guarding both the intellectual property rights of the holders of traditional knowledge and the credibility and technical integrity of the final product.
- e. The MA is a multi-stakeholder process which involves governments, international institutions, the private sector, civil society, and indigenous groups. The multi-stakeholder arrangement reflects the fact that all of these sectors and institutions are taking decisions influencing ecosystems and human well-being and all can benefit from a critical assessment of the science underpinning these decisions.
- f. The MA will contribute to the Plan of Implementation of the WSSD. Because of the dual focus of the MA on both people and ecosystems, it is well-suited to provide scientific information that can inform the design of actions to implement the Millennium Development Goals and carry out the Plan of Implementation of the WSSD.

### **Progress in Implementation**

23. The technical design phase of the Millennium Assessment was initiated in April 2001, and concluded in January 2002 with the Board approval of the design. Two technical design workshops (in the Netherlands and South Africa) and numerous consultations with the users of the Assessment have been undertaken as part of the design phase.

24. The Millennium Ecosystem Assessment is being undertaken at multiple scales. It consists of a global assessment as well as series of linked regional and national assessments. At the sub-global scale, Work is proceeding on eight 'approved' sub-global assessments in Western China, Norway, Sweden, India, Papua New Guinea, Southern Africa, Coastal British Columbia Canada as well as one 'cross-cutting' assessment – the Alternatives to Slash and Burn project of the CGIAR – being undertaken in a number of tropical forest sites around the world. In addition, several new "candidate" assessments have been approved. (Candidate assessments have agreed to follow the criteria established by the MA for inclusion as a sub-global assessment but are in preliminary stages of planning and fundraising.) In the Americas: the Chirripo basin of Costa Rica, the Colombian Andes coffee-growing region, the Vilcanota sub-region of Peru, and the Salar de Atacama in Chile. In Southeast Asia: Upstream Great Rivers in Yunnan, Downstream Mekong Wetlands of Vietnam, Forests of Southeast Asia, Laguna Basin in the Philippines, Indonesia, and the Arafura and Timor seas (a meeting was held in May in Kuala Lumpur to coordinate these various proposals for Southeast Asia). Elsewhere: the Western Ghats and Eastern Himalayas in India, the Altai-Sayan Ecoregion (Russia, Mongolia, Kazakhstan and China), Central Asia (the republics of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan), and the Sinai Peninsula of Egypt. In addition, proposals for an urban assessment of Sao Paulo, Brazil (the Sao Paulo Biosphere Reserve) and for several assessments in Saudi Arabia are expected.

25. The Millennium Assessment is being carried out through four expert working groups:

- a. The Sub-Global Working Group will present a generic methodology for conducting multi-scale assessments, and summarize the findings from each of the sub-global assessments associated with the MA. The sub-global components of the MA will directly meet the needs of decision-makers at those scales. In addition, the sub-global components of the MA will strengthen the global findings withground-truthing and inform the local findings with global perspectives, data, and models.
- b. The Condition Working Group will describe each major ecosystem service. The condition and geographical distribution and trends of the supply and demand for each service will be considered and the capacity of ecosystems to supply these services, and the impacts of the changes in ecosystems on their provision will be described. A description of the current extent,

condition and trends of ecosystems and options for trade-offs between the provision of the various services will be laid out. The final section of the product will assess the impacts of ecosystem change on human well being, covering indicators of human health, environmental security, cultural security, economic security and equity.

- c. The Scenarios Working Group will assess the findings of previous global scenario analyses concerning goods and services and develop a set of scenarios that will provide quantitative estimates of the consequences of various plausible changes in primary driving forces on proximate forces, ecosystem goods and services (including biodiversity), and the human well-being. The group will illustrate the connection of global changes in ecosystem services at every large scale (global to local) and the connection of ecosystem services to human well-being.
- d. The Responses Working Group will begin with an introduction to the conceptual framework and the typology of response options within categories of disciplinary tradition, social control, drivers and scale. Then there will be an assessment of past and current response options, which will provide the basis for practical recommendations, tools and guidelines for the various users through an evaluation of existing literature and the MA sub-global assessments. Finally, there will be a synthesis of the ingredients for successful responses, based on an evaluation of available policies and scenarios.

26. Nearly all of the Coordinating Lead Authors and most Lead Authors for the MA Assessment Reports have now been selected (about 110 authors). (In total, approximately 500 Coordinating Lead Authors and Lead Authors will be involved.) The first meeting of the Scenarios Working Group was held in Trinidad from April 14-17, 2002. This was followed by a 3-day meeting on biodiversity scenarios and a capacity building meeting on Caribbean Scenarios hosted by the Cropper Foundation. The second meeting of the Scenarios Working Group was held in Bangkok on October 7-11, 2002, hosted by the Thailand Development Research Institute (TDRI). The first meeting of the Condition Working Group was held from April 29 to May 3 in Frascati, Italy, hosted by FAO and the second meeting was held in Sao Carlos Brazil on November 11-16, 2002 hosted by the University of Sao Carlos. The Sub-Global Assessment Working Group held its first Working Group meeting in Panama on June 10-14 2002 hosted by the Smithsonian Tropical Research Institute (STRI). The Responses Working Group held its first Working Group meeting on May 28-31, 2002 in New Delhi.

27. As noted above, the report "*People and Ecosystems: A Framework for Assessment and Action*" is now undergoing its second round of review by the national focal points of the CBD, CCD, Ramsar Convention, and FCCC as well as by seventeen National Academies of Sciences and a number of other expert reviewers. The document will be reviewed by the MA Board and published early in 2003. In addition, a report summarizing the methods being used in each of the MA working groups is now available on the MA website.

28. All of the MA working groups will meet twice in 2003 to finalize the first drafts of their assessment reports. In addition, in June 2003 the MA will hold an international conference "*Linking Local Knowledge and Global Science*" to be held in conjunction with the second meeting of the Sub-Global Assessment Working Group in Kunming China. The conference will be hosted by the China Academy of Sciences and co-sponsored by ICSU. The MA Assessment reports will undergo two rounds of review by governments and experts in 2004 and will be published, along with the Summaries for Decision-makers and Synthesis reports, in late 2004.

29. The MA Board is multisectoral and representative of the many different users of information concerning ecosystems and human development. It includes the Secretariats and scientific subsidiary body chairs of three conventions (CBD, CCD, Ramsar), the Secretariats of five United Nations Agencies (UNDP, UNEP, FAO, WHO and UNESCO) and the Framework Convention on Climate Change, and representatives of the Global Environment Facility, UN Foundation, World Bank, CGIAR, The World Conservation Union (IUCN), and the International Council for Science (ICSU), together with 25 at-large members representing business, indigenous organizations, scientific unions and non-governmental organizations.

30. UNEP coordinates the distributed secretariat: the MA Director is based at the WorldFish Center (ICLARM, Malaysia); technical support units for the working groups are based at the Scientific Committee on Problems of the Environment (France), UNEP-World Conservation Monitoring Centre (United Kingdom), Institute for Economic Growth (India), and the World Fish Center. In addition, support is being provided by staff at RIVM in The Netherlands, University of Wisconsin in the US, FAO in Rome, and CIMMYT in Mexico. Engagement and outreach activities are supported through World Resources Institute and Meridian Institute (United States). UNEP, World Resources Institute, and the WorldFish Center administer funds for the assessment.

31. Major sponsors of the MA include GEF, UN Foundation, David and Lucile Packard Foundation, and the World Bank with additional financial and in kind support provided by the Government of Norway, CGIAR, UNEP, FAO, UNDP, UNESCO, WHO Rockefeller Foundation, U.S. National Aeronautics and Space Administration and others. A number of governments have provided either core-support to the MA, support to MA sub-global assessments within their (or other) countries, or support for the time or travel of their experts involved in the Assessment, including: China, Norway, Netherlands, Sweden, Germany, Czech Republic, Saudi Arabia, South Africa, United States, Japan, India, and Namibia.

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