# Report of the GEO-2 Planning Meeting with UNEP's GEO Collaborating Centres

Beijing, China, 19 - 23 May 1997







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Beijing, China, 19 - 23 May 1997

hosted by the National Environmental Protection Agency of China







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# CONTENTS

| INT | RODUC | TION   | 1  |
|-----|-------|--|----|
| 1   | OPE   | NING OF THE MEETING  | 3  |
|     | 1.1   | Opening speech by Mr Xie Zghenghua   | 3  |
|     | 1.2   | Summary of introductory remarks, Dr V. Vandeweerd                          | 4  |
|     | 1.3   | Introduction of participants   | 5  |
|     | 1.0   | in out of participants   |    |
| 2   | INTI  | RODUCTION TO THE GEO-2 REPORT  | 6  |
|     | 1.1   | Overall table of content of the GEO-2 report                               | 6  |
|     | 1.2   | The red line throughout the GEO-2 report                                   | 6  |
|     | 1.3   | Time-frame   | 6  |
| 3   |       | SOE CHAPTER and LONG TERM SOE DATA AND                                     |    |
|     | INFO  | DRMATION ACTIVITIES  | 7  |
|     | 3.1   | Introduction   | 7  |
|     | 3.2   | Structure of the chapter (125 pages)                                       | 7  |
|     | 3.3   | Analytical framework for the analysis of interactions between              |    |
|     |       | "driving forces, environmental conditions and trends"                      | 8  |
|     | 3.4   | Data tables  | 10 |
|     | 3.5   | Illustrations and spin-off products (see also Annex VII)                   | 10 |
| 4   | REV   | IEW OF CURRENT ENVIRONMENTAL POLICIES                                      | 11 |
|     | 4.1   | Introduction   | 11 |
|     | 4.2   | Structure of the chapter (75 pages)  | 11 |
|     | 4.3   | Analytical framework and checklist for the regional policy review sections | 12 |
|     | 4.4   | Illustrations and spin-off products  | 12 |
| 5   | REV   | IEW OF INTERNATIONAL ENVIRONMENTAL AGREEMENTS                              |    |
|     |       | THEIR IMPACTS  | 16 |
|     | 5.1   | Introduction   | 16 |
|     | 5.2   | The structure of the chapter (45 pages)                                    |    |
|     | 5.3   | Analytical framework and checklists for the                                |    |
|     |       | analysis conducted in the subsections                                      | 18 |
|     | 5.4   | Illustrations  | 18 |
|     |       | continued  | /- |

| 6          |        | ON SPECIFIC, FORWARD LOOKING STUDIES OF ALTERNATIVE CY OPTIONS                                | 23 |
|------------|--------|---|----|
|            | 6.1    | Introduction  | 23 |
|            | 6.2    | Structure of the chapter (55 pages)   | 23 |
|            | 6.3    | Analytical framework  | 24 |
|            | 6.4    | The global chapeau of the alternative policy section  | 24 |
|            | 6.5    | Illustrations and spin-off products   | 25 |
| 7          | NEWI   | LY EMERGING ISSUES  | 26 |
|            | 7.1    | Introduction  | 26 |
|            | 7.2    | Structure of the chapter (30 pages)   | 26 |
|            | 7.3    | Analytical framework for the emerging issues section  | 26 |
|            | 7.4    | Illustrations and spin-off products   | 27 |
|            |        |   |    |
| A 3-73-787 | N. T   |   |    |
| ANNE       | XI     | Agenda  |    |
| ANNE       | X II   | List of Participants  |    |
| ANNE       | X III  | Prototype Project Document for GE0-2 Agreements<br>between GEO Collaborating Centres and UNEP |    |
| ANNE       | X IV   | GEO-2 Production Time Frames  |    |
| ANNE       | X V    | Regional Breakdown  |    |
| ANNE       | X VI   | Data Tables   |    |
| ANNE       | x vii  | Initial Note on GEO-2 Layout and Illustrations  |    |
| ANNE       | x viii | Acronyms  |    |

#### INTRODUCTION

The second major GEO-2 Planning meeting, held in Beijing, China, from 19-23 May, was hosted by the National Environmental Protection Agency (NEPA), China, and attended by representatives from all GEO Collaborating Centres and selected external experts (35 participants in total). The meeting was chaired by Mr. Cheng Weixue, deputy-director of the NEPA Department of International Co-operation, and Dr. Leena Srivastava, TERI, India. In his opening speech, the Administrator of NEPA, Mr. Xie Zghenhua, was very supportive both of GEO and the GEO process and of UNEP in general.

The meeting addressed two major items:

- outline, workplan and timeschedule of the different GEO-2 chapters and long-term data and information activities (detailed in sections 2, 3, 4. 5. 6 and 7 of the report):
- the regional and collaborating centres implementation of the GEO-2 production process detailed in section 8 of the report.

The meeting covered much ground mainly due to the very enthusiastic and committed participation of all the collaborating centres. The two main objectives of the meeting were fully met and the GEO team is confident that the production of GEO-2 is now well underway.

UNEP - GEO-2 Collaborating Centres project documents were discussed with the representatives of all Collaborating Centres and will be completed as soon as possible after the meeting. A prototype project document is contained in Annex III.

The report of the Beijing meeting aims at providing a comprehensive guideline for the GEO 2 production process and the associated long-term data and information activities and capacity building efforts. As such the report not only builds on the deliberations at Beijing but also draws, where relevant, from the deliberations at the Groningen meeting, correspondence with GEO-2 Collaborating Centres and background documentation prepared for the Beijing meeting. The guidelines will also be available as a separate document.

#### 1 OPENING OF THE MEETING

# 1.1. Opening speech by Mr Xie Zghenghua, Administrator NEPA

"Ladies and Gentlemen:

Good morning. On behalf of National Environmental Protection Agency of China, I welcome the experts of the Collaborating Centers of Global Environment Outlook to gather in Beijing and discuss the issues related to GEO. May is the best time in Beijing during the year and I wish every expert a pleasant stay in Beijing this week.

The first edition of Global Environment Outlook was a result of arduous work of more than 20 Collaborating Centers and of coordination and organization of the United Nations Environment Programme. We are pleased to see that GEO I has immediately received extensively positive comments once it was issued a few months ago. The delegations attending the 19th Session of UNEP Governing Council early this year gave a high opinion of GEO I. It was on the basis of GEO I that the Fifth Meeting of the United Nations Commission on Sustainable Development, which was just concluded last month, made the assessment of the state of global environment since the Rio Conference in 1992. UNEP will also present GEO I to the Special Session of the United Nations General Assembly in June this year. All this indicates that compilation of Global Environment Outlook is fairly necessary. And the GEO itself is authoritative, which is closely related to the effective work of everyone involved.

I would like to take this opportunity to emphasize that the United Nations Environment Programme is an authority within the system of the United Nations for coordinating and promoting global environmental affairs and plays an active role in coordinating global environmental affairs and promoting sustainable development of the world. UNEP has also done tremendous effective work in international environmental legislation. It enhanced the conclusion of the Vienna Convention for the Protection of Ozone Layer, the Montreal Protocol on Substances that Deplete Ozone Layer, the Basel Convention, the Convention on Biological Diversity, the United Nations Framework Convention on Climate Change, the United Nations Convention to Combat Desertification and other international environmental documents. The success of the above work and GEO indicates that no other international organization can replace UNEP's function. We hope that restructured UNEP will be full of energy and play a greater role in promoting the global environmental protection.

As we can see from the GEO, since 1992, the international community, governments and relevant international organizations have given a high priority to environmental issues and adopted legal, policy and economic instruments to prevent the further worsening of the environment and achieved considerable accomplishments in this field. Despite this, the trend of environmental worsening is not controlled and environmental problems are still serious. The GEO put the environmental problems of all regions of the world before the decision makers, reminding them that if the governments reverse the environmental worsening, they shall fulfill their obligations and commitment in practical ways and take an active attitude towards the regional and global environmental protection.

The Chinese government attaches great importance to environmental issues. Since the Rio Conference in 1992, China has issued A Ten-point Strategy for Environment and Development and launched China Agenda 21, having incorporated all this into the national plan for social and economic development. As its economy grows, China has been constantly improving its laws and

regulations. In 1996, the State Council approved the Ninth Five-year Plan for Environmental Protection and the Long-term Program for 2010, including the Plan for Total-amount Control of Main Pollutants. During the Ninth Five-year Plan Period and China Trans-century Green Projects Plan (First Phase), which has practically incorporated the strategy of sustainable development into the master plan for social and economic development. In addition, China ratified a number of international environmental conventions and is very serious in implementing all these conventions. However, we are quite aware that the environmental problems we face now are still very serious. In 1995 and 1996, the Chinese government closed down more than sixty thousand small factories of 15 heavily polluting sectors and effectively controlled the total amount of pollutants, which shows our determination and efforts in pollution control. We are now focusing our efforts in pollution control in three rivers and three lakes, which aim at improving the environmental quality in some regions and river basins. We will make persistent efforts in improving the environment, which we hope will win more support and assistance from the international community.

China has actively participated in all the activities related to the GEO. For this, China has established the Collaborating Center for GEO. We launched the first edition of GEO in Beijing together with the Asia-Pacific Regional Office of the United Nations Environment Programme. To make the decision makers and environmental workers in China know in detail the GEO, we will publish the Chinese edition of GEO through working with UNEP.

This meeting will discuss in depth the specific content of GEO II, such as emerging environmental issues, the state of environment, system of indicators, analysis of environmental policies. We hope GEO II will be improved based on the experience of GEO I, which will reflect more practically the state of the environment and environmental issues in all the regions of the world. It will aim at providing policy making basis for policy makers and information on the state of world environment timely and accurately. We are looking forward to a fruitful meeting.

Ladies and Gentlemen, the GEO II will be launched right before the year 2000, which makes GEO II endowed with greater significance because the year 2000 is not just a centennial transition, it is a beginning of a new millennium, a new centennial and a new decade. We hope the GEO will arouse the attention to environmental issues and urge the governments to adopt more practical actions to curb the environmental worsening through the efforts of all human beings, bringing a cleaner planet into the new century.

I wish a complete success to the meeting."

# 1.2. Summary of introductory remarks, Dr V. Vandeweerd, UNEP

Dr V. Vandeweerd welcomed the participants to the meeting on behalf of UNEP and expressed UNEP's appreciation to NEPA for hosting the meeting. She conveyed to Mr Xie Zjhenhua the UNEP's Executive Director's appreciation and thanks for his opening address and personal interest in the GEO project. She welcomed Dr Fu Chen Lo to the meeting and expressed UNEP's wish for close co-operation between UNU and the GEO project.

A short review of major developments since the Groningen meeting was given, including an account on the intersessional CSD briefing meeting on GEO, the UNEP in-house consultation, the informal consultation with Governments at the occasion of CSD 5 and a review of the major reactions to and use of the first GEO report, including those for the preparation of UNGASS.

The participants were also briefed on planned GEO-associated products, including the publications which will be derived from the first GEO report - GEO for the Youth and a publication on Key Environmental Facts, and possibly a publication on Key Environmental Graphs. Reports associated with the second GEO report include the sub-regional GEO reports under discussion with the European Community for the South Pacific, the Caribbean and the Indian Ocean regions, and the regional products that will be produced by the Collaborating Centres and regional co-ordination offices. A short review of major financial contributions under discussion to the GEO project was provided, including the discussions with the European Community, the Czeck Government, the Russian Federation. A review of major planned GEO-2 meetings was also given.

Dr Vandeweerd concluded her opening remarks by thanking the Dutch Development Co-operation (DGIS) once again for the generous support to the GEO project and this meeting in particular and by thanking the participants for their continuing support and contributions to the GEO project.

# 1.3. Introduction of participants

The participants briefly introduced themselves during a short 'tour de table', after which the opening session was closed by Mr. Cheng Weixue, deputy director of NEPA's Department of International organizations and chairperson of the first day morning session.

#### 2 INTRODUCTION TO THE GEO-2 REPORT

#### 2.1 Overall table of content of the GEO-2 report (working titles; tentative number of pages)

| Front matter (logos, foreword, table of contents etc.) |  | 10 pages  |
|--|--|-----------|
| Executive su   | mmary and major conclusions                        | 15 pages  |
| Chapter 1  | State of the Environment                           | 125 pages |
|  | Global review and analysis                         | 15 pages  |
|  | Regional reviews & analysis *                      | 110 pages |
| Chapter 2  | Review of current policy responses                 | 75 pages  |
|  | Global review and analysis                         | 15 pages  |
|  | Regional review and analysis *                     | 60 pages  |
|  |  |           |
| Chapter 3  | Review of international agreements & their impacts | 45 pages  |
| Chapter 4  | Alternative policies options for the future        | 55 pages  |
| Chapter 5  | New emerging environmental issues                  | 30 pages  |
| Annexes (Ac  | knowledgements, acronyms,)                         | 10 pages  |
| Index  |  | 5 pages   |
|  | * = including polar regions and deep oceans        | 7 7       |

# 2.2 The red line throughout the GEO -2 report

The overall questions GEO-2 seeks to answer are: How have we done this century? On what course are we entering the next millennium? And, therefore, what are the enhanced policies that need to be in place before 2015?" GEO-2 aims at providing concrete guidance for international environmental action planning, policy setting and resource allocation for the next 15 years, based on a sound global analysis of the state of and trends in the world's environment.

The SOE chapter will set the scientific background to the report, identifying the major past, current and emerging (continuation of trends in the near future) environmental issues at global and regional level. The policy chapters will enlarge on current policy responses, impacts of international agreements, and alternative policy responses to major environmental issues. The concluding chapter will focus on new emerging issues, drawing on the preceding chapters and analysing from a scientific, institutional and social perspective, new emerging issues that the global community should address and areas that require further research. Throughout the report data and information requirements and gaps to guide international environmental policy setting will be highlighted.

#### 2.3 Time-frame

The overall (very tight) time-frame for the GEO-2 production is given in Annex IV, together with more specific time-frames for the various planned sections for GEO-2 (as described in the next sections). The guidelines below are a "first approximation". An up-dated version will be produced early September 1997 when more detailed guidance can be given for instance on rating systems for the review of current policies and international environmental agreements. A final version will then come out around November 1997.

# 3 THE SOE CHAPTER and LONG TERM SOE DATA AND INFORMATION ACTIVITIES

#### 3.1 Introduction

Accurate assessing and up-to-date reporting on the state of the world's environment is a fundamental mandate of UNEP and a major goal of the GEO report series. GEO-1 set the ball rolling with a regionally-focussed, qualitative appraisal of key environmental issues and trends and relevant socio-economic driving forces. Building on chapter 2 of GEO-1, and using a similar structure (land, forest, biodiversity etc), the GEO-2 chapter will forward a globally harmonized comprehensive SOE reporting process at sub-regional, regional and global levels and an analysis of how underlying causes (societal developments) impact on the environment.

The SOE Part has to be viewed within the overall context of the GEO-2 report. This is: to illustrate the priority environmental conditions and trends underpinning the subsequent chapters which contain the policies analysis.

The focus of the chapter is on analysis (narrative). GEO is not a data report. Regions/CC may wish to produce technical reports associated with the chapter though, e.g reflecting the national data tables as used in the analysis of GEO-2. In addition, all CC and Regions will set up a

reference library containing relevant SOE-related documents, this also keeping the longer-term GEO process and capacity building efforts in mind.

# 3.2 Structure of the chapter (125 pages)

The chapter will be composed of eight sections

A global overview, to be produced after completion of the regional sections (15 pages):

- a global analysis by environmental resource (land, water etc.) of the regional sections and a comprehensive regional overview, using a selected set of indicators;
- a description and analysis of the global environment (planetary issues) such as climate change, ozone, etc, and the impact of major global development patterns.

SOE Africa

SOE Asia and the Pacific

SOE Europe and Central Asia

SOE Latin America and the Caribbean

SOE North America

SOE West Asia

Polar Regions and the deep oceans

The regional sections will contain 16 plus or minus 2 pages and will be preceded by a one page methodological introduction.

The regional analysis will be structured as ONE consolidated analysis for each region. GEO-2 will not systematically report at the sub-regional level, even if the preparatory work will involve sub-regional analyses. Sub-regional details will only be highlighted when and where warranted (e.g because sub-regional differences are significant). Annex V contains the sub-regional breakdown used, which should be regarded as a working tool only.

Each regional section will be composed of eight sub-sections

The dynamic socio-economic context (2 pages with sub-regional detail where necessary), including mega-trends and major inter-regional and global interactions

Land (and food)

Forest

Biodiversity

Water

Marine and Coastal Environment

Atmosphere

Built-up areas (urban and industrial areas, including issues of waste, human resources, ....)

For each environmental resource (land, forest, ....) four topics will be addressed

Topic 1 major environmental developments over the past 100 years (1/2 page)

Topic 2 major environmental developments and trends for the past 10 years (1 page)

Topic 3 major environmental developments foreseen till 2010 (1/2 page)

Topic 4 conclusion (1 paragraph)

# 3.3 Analytical framework for the analysis of interactions between "driving forces, environmental conditions and trends"

For the narrative on major conditions and trends in different environmental resources (land, forest, biodiversity, ....) and their relation with major socio-economic driving forces, the following analytical framework is drafted (see also the table below):

The entry points (headings) in the framework are the environmental resources, following the same groupings as appeared in GEO-1. For each environmental resource relations with major societal developments will be analysed. The first group of societal developments (10 entries) relate to (economic) sectors of the society. The next group are cross-cutting critical regional or national developments. Societal developments that were addressed in GEO-1 and might be picked up again in GEO-2 include equity, technology, structural adjustment programmes, and institutional capabilities. Regions can add additional societal developments if the analysis of the resource or issue so require. Entries in the analytical framework (see table below) can feature in more than one column, indicating the dynamic nature between resources, societal development and issues.

One or two key issues associated with each (or several) environmental resources will be enlarged upon. Key issues relate to the impact of environmental conditions and trends on ecosystem functioning and/or sustainability of services the environment provides. Possible issues include eutrophication, acidification, climate change, competition for scarce resources and conflict, environmental refugees, food security and the like. For the narrative on issues a **Pressure** (= societal developments) / **State** (conditions and trends of the environmental resource) / **Impact** (the issue) logical framework will be used. Critical issues can be defined and reported upon at the sub-regional level if so required. Issues can be linked to one or several pressures listed under the social development list and to one or several environmental resources. For example: if soil degradation is identified as a critical issue, in the discussion it may have to be linked to agricultural and forestry practices, land tenure systems, subsidies etc. Issues will be addressed again in the policy chapters.

In the analysis of causal relations between observed environmental conditions and trends for the different resources and societal developments, regions are NOT required to address all societal developments listed; only those that are most relevant to the priorities identified for the resource under consideration. In setting priorities it is important to reflect the perceptions of different stakeholder groups as well as the available scientific knowledge.

Indicators will be developed that will be associated with the issues. Indicators will be carefully selected to be able to monitor progress in a policy sense. Indicators could be (i) data entries of the data tables (see below); or (ii) a combined set of individual data entries from the data tables; or (iii) other indicators as appropriate for the regional priority issue (not yet reflected in the data tables). Indicator selection will be done in parallel with the writing of the narrative SOE part and added to the text at a later drafting stage.

When preparing the draft (sub-)regional input to the SOE chapter, it is important to keep the boundary conditions in mind: these are the length of the regional sections (around 16 pages) and the time available to produce the input (2 to 3 months). Longer term SOE activities (see below) should be clearly separated from the short term objectives (produce regional input for GEO-2).

| RESOURCES                | SOCIETAL DEVELOPMENT  | ISSUES | INDICATORS |
|--------------------------|---|--------|------------|
| Land                     | manufacturing industry energy mining industry service industry agriculture forestry fisheries/aquaculture transportation households (consumers) informal sector |        |            |
|                          | tourism trade urbanization investment employment financing inter-regional developments & transactions global-regional interactions                              |        |            |
| Forest                   | G   | *      |            |
| Biodiversity             |   |        |            |
| Freshwater               |   | - 10   |            |
| Marine & coastal areas * | the tile of any   | 1 42   | 7 7 7      |
| Atmosphere               |   |        |            |
| Built-up areas **        |   |        |            |

including deep oceans

#### 3.4 Data tables

#### Purpose of the data tables

The purpose of the data tables for GEO-2 is to: (i) provide a quantitative underpinning of the narrative analysis in the regional sections; (ii) provide the basic material to illustrate the resource sections with one or two representative diagrams illustrating priority conditions or major trends or issues in each region; and (iii) to allow a quantitative cross-regional analysis in the executive summary. The data table format is reproduced in Annex VI. In GEO-2 individual (national) data tables will not be reported. Only (sub-)regional aggregates will be given.

The longer term purpose of the data tables is to improve the quality and availability of globally harmonized datasets that are validated by countries and in line with regionally available datasets. These datasets will enable a set-up where consecutive GEO reports become gradually more quantitative, using data accepted by countries, and they will provide the basis of decadal UNEP State of the Environment reports.

human population and settlements

# Compilation of the data tables

Data tables will be compiled for all countries at once central point, following the outline agreed at the Beijing meeting and subsequently amended by correspondence. Existing, officially published international data sources will be used for the initial completion of the tables. The tables will then be distributed to the CC for forwarding to national governments or checking against officially published, (sub-) regional, government-approved databases. Cells in the data tables might well stay empty during the first round of data compilation, for a number of countries and, consequently and subsequently, in the regional aggregates reported in GEO-2.

# 3.5 Illustrations and spin-off products (see also Annex VII)

#### Boxes

Region-specific data and indicator programmes can be reported upon in boxes. Examples:

- LAC: GIS based indicator work of the CIAT/UNEP project, and/or INPE (Brazil) work;
- Asia and the Pacific: ongoing SOE reporting activities, the ESCAP regional SOE report;
- Europe and Central Asia: work by EEA, UN/ECE, OECD, GRID Arendal
- North America: GRID Sioux Falls activities (remote sensing)
- •

# Graphs and diagrams

For every region, graphs or diagrams will illustrate major environmental conditions and trends in each resource (land, forests, biodiversity etc.) addressed. Initial instructions on style and format are included in Annex VII. More detailed specifications will be prepared in the third quarter of 1997.

# GEO-2 technical background reports

Region-specific data and indicator programmes may also be elaborated in more detail in GEO-2 associated technical background reports.

#### 4 REVIEW OF CURRENT ENVIRONMENTAL POLICIES

#### 4.1 Introduction

Policy relevance is one of the red lines running through the GEO report series. In GEO-2 a systematic regional appraisal of national and regional environmental policies will be conducted, including their environmental impacts, an analysis of factors contributing to successes or failures, and barriers to implementation.

To do so, all cells of the table below will be addressed and the checklist on environmental policy responses below will be used as a guide. In the longer-term, CC's and RC's will strive at setting up a systematic (sub-) regional compilation and analysis mechanism of environmental policy responses. This will include: (i) collecting relevant documents and reports; and (ii) other active information gathering efforts, e.g through questionnaires or networking.

# 4.2 Structure of the chapter (75 pages)

The chapter will be composed of eight sections

- A global overview, to be completed after completion of the regional sections (15 pages):
  - a global analysis of the regional sections;
  - review of global developments in environmental policies (e.g introduction of the concept of common but differentiated responsibilities).
- Policy review Africa
- Policy review Asia and the Pacific
- Policy review Europe and Central Asia
- Policy review Latin America and the Caribbean
- Policy review North America
- Policy review West Asia
- · Policy review Polar regions and deep oceans

Each regional section will be 8 pages each plus or minus 2 pages.

Each regional section will be composed of two sub-sections

**Sub-section 1**: a description of current environmental policies and trends (4 pages). In this sub-section current environmental policies and trends will be described in general terms. Focus will be on new developments in the last 10 years and on regional trends in policy formulation foreseen for the next 10 years (where is the region moving in terms of environmental policy). The following policy response clusters as they relate to the environment will be considered:

- laws and institutions:
- economic instruments;
- cleaner production processes (industries) and (new) technologies;
- (national and international) finance and capital flows:
- social policies:
- public participation; and
- environmental information and education.

**Sub-section 2**: impact of environmental policies on natural resources and environmental issues (4 pages). In this sub-section focus will be on the impact of environmental policies on natural resources and issues identified in the SOE chapter. Alternatively focus could be restricted to the priority issues that will come out of the analysis in the SOE section. The clusters to be addressed:

- analysis of the impact of (combined) policies (see the seven response clusters listed above)
  on environmental resources and/or issues covered in the SOE chapter (land, forest,
  biodiversity, .....);
- identification, in generic terms, of factors contributing to success and failure of certain
  policies (institutional strengths and weaknesses, policy and market successes and failures,
  barriers to implementation, contradicting or mutually enforcing policies);
- identification of critical gaps in knowledge and information; and
- conclusion (1 page) on the overall impact of the sum of policy responses on each resource (land, forest, biodiversity, ....). For instance: despite all forest related policies, forest cover continues to decline at a rate of x % a year).

# 4.3 Analytical framework and checklist for the regional policy review sections

The table below provides the analytical framework for the regional sections. In sub-section 1 'policies' (the seven clusters above) are the entry points, in sub-section 2 'the environmental resources' are the entry points (see SOE chapter, thus linking the policy chapter with the SOE chapter). The matrix facilitates the linking of the two sub-sections (current policies and their impacts).

For both sub-sections the analysis will be conducted at regional or sub-regional level as required. Reporting in the draft chapter will be at the regional level with sub-regional differentiation when and where sub-regional differences are significant.

To conduct the analysis existing material and knowledge will be used, e.g through reviewing existing (sub-) regional policy studies, small expert meetings, networking and/or questionnaires. additional thought will have to be devoted over the next few months to the actual rating system that will be used, and to a way to achieve a harmonized approach within and across regions.

# 4.4 Illustrations and spin-off products

#### **Boxes**

Boxes will highlight success stories, best practices and/or barriers to implementation. Boxes might also list major regional policy initiatives.

#### **Tables**

Some regions might be able to include a table depicting the overall status and trends of environmental policy responses in the region, along the lines of the table and checklist below.

Review current policies (+ barriers, case studies and tracking progress)

| POLICIES                        | · ·                 |       | ECONOMIC -           | ECONOMIC - see check-list below         |   | NON                 | -ECONOMIC            | NON-ECONOMIC - see check-list below | W      |
|---------------------------------|---------------------|-------|----------------------|---|---|---------------------|----------------------|-------------------------------------|--------|
| SECTORS                         | Laws & Institutions | Trade | Economic Instruments | Industries<br>and (New)<br>Technologies | (Nat. & Int.)<br>Finance and<br>Capital flows | Voluntary<br>action | Public participation | Environment information & education | Social |
| Land                            |                     |       |                      |   |   |                     |                      |                                     |        |
| Forest                          |                     |       |                      |   |   |                     |                      | •                                   | 50     |
| Water                           |                     |       |                      |   |   |                     |                      | *                                   |        |
| Atmosphere                      |                     |       |                      |   |   |                     |                      |                                     |        |
| Biodiversity                    | 34                  |       |                      |   |   |                     |                      |                                     |        |
| Marine & Coastal<br>Environment |                     |       |                      | 10.0                                    |   | #ss                 | E                    |                                     |        |
| Urban &<br>Industrial Env.      | 77                  |       |                      |   |   |                     |                      |                                     |        |

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# Check list of policy responses for the description of current environmental policies and their trends

#### ECONOMIC POLICIES

# 1 Laws and Institutions

#### a) National

- (Environment in national) Constitutions
- Environment institutions (national & sectoral)
- Environment Action Plans
  - national (NEPA)
  - local (Local Agenda 21)
  - sectoral (biodiversity, desertification, climate etc)
  - national goals and targets (where available)
- · Environment legislation including obligatory need for EIA
- Mechanism for monitoring and enforcing legislation
- Non-binding environment guidelines, voluntary codes of conduct
- Environment training (of government officials & other personnel)
- Greening (government) operations
- Environment litigation and judicial interventions (e.g number of court cases)
- Mechanisms for tracking impact and progress (environment performance)

#### b) Regional

- Bilateral and multilateral agreements
- Regional environment/sustainable development bodies and organisations
- Ratification/implementation international agreements
- · Financial mechanisms
- Transboundary environment law
- Trade policies
- Trade barriers
- · Trade agreements

#### 2 Economic Instruments (see GEO-1 p.133)

- Property rights
- Market creation (tradeable permits etc)
- Fiscal instruments (taxes and subsidies)
- Charge systems (user fees etc)
- Liability systems
- Financial instruments (loans, for environment funds etc)
- Bond-deposit and refund systems
- Standards, bans/limits, permits (command and control measures (end of pipe measures)
- · Pricing structure

# 3 Industries and (new) technologies

- Cleaner production/BAT
- Cleaner products
- Cleaner services
- Resource intensity reductions
- Environment Research and Development
- Environment Employment
- Waste reduction/handling
- Demand side management
- Environmental auditing/reporting by companies
- · Pollution release inventories
- Public information

# 4 (National and international) finance and capital flows

- New and additional resources
- Green accounting
- ODA (environment)
- Direct (environment) investment
- Environment aid and technical assistance
- Trade barriers/agreements
- AIJ
- Transferable permits
- · Pollution abatement and control expenditure
- Micro-credit
- SWAP
- Environment-related investment strategy (% national budget spent on environment)

#### NON-ECONOMIC POLICIES

#### 5 Voluntary action

- Code of conducts
- Voluntary actions by different sectors of society
- ISO 14000
- Responsible Care
- Information on best practices
- Role by different actors in society (Governments, Private sector, NGO's, Academia, etc)

# 6 Public participation

- Environment policies addressing poverty, equity etc
- NGO's
- consultation with the public/polls
- Openness of environment policy
- Implementation of common but differentiated responsibilities
- · Traditional forms of environmental dispute setting, arbitrage

#### 7 Environment information / education

- Demonstration projects
- Centres of expertise
- Eco-Labelling
- Environment press
- Newsletters and manuals
- Videos
- Conferences and seminars
- Environmental education (environmental issues in course curricula)
- Information networking / databases (national & regional)
- Environmental monitoring (national and regional)
- Environmental reporting (national and regional)
- Policies on openness environmental information, public right to know

#### 8 Social Policies

Environment policies addressing poverty, equity etc

# 5 REVIEW OF MULTILATERAL ENVIRONMENTAL AGREEMENTS AND THEIR IMPACTS

#### 5.1 Introduction

In GEO-2 a start will be made in reviewing and assessing, in a qualitative manner, the combined impact of the implementation of multilateral environmental agreements. The scope of the assessment will include regional and global conventions, soft laws, environmental funding mechanisms and other international environmental mechanisms and bodies as appropriate. This chapter will be produced in close co-operation with the Convention Secretariats and relevant UNEP units (law, policy, regional offices, .....).

Using the analytical framework detailed below, CCs will strive to systematically collect data and information at national and regional level, eg. through networking with Convention Secretariats, consultations etc. This information will be compiled and analysed at sub-regional, regional and global levels. For the longer term systematic questionnaires will be developed.

# 5.2 The structure of the chapter (45 pages)

The chapter will be composed of eight sections:

- A global section, to be drafted by a UNEP/Steering group :
  - Historical review of trends in international environmental agreements (9 pages)
  - Global synthesis and analysis of regional parts (4 pages)
- International agreements in Africa
- International agreements in Asia and Pacific
- International agreements in Europe and Central Asia
- International agreements in Latin America and Caribbean
- International agreements in North America
- International agreements in West Asia
- International agreements for Polar Regions and Deep Oceans

Global section - the historical review: will give a broad brush panorama of major trends over the past 20 years rather than making a convention-by-convention analysis. There may be a typology of conventions (hard, soft, voluntary; global-regional) as well. The text will include:

- an historical review of the emergence of international environmental agreements, their content and scope, demonstrating global trends and changes in international environmental co-operation over time. Certain benchmarks such as RIO will be mentioned. The section will examine a limited number of conventions as a means of demonstrating their changing nature and the different "eras" in international agreements;
- an analysis of the current trends in international environmental agreements, particularly any
  moves towards the interlinkages between different agreements/conventions, environmental
  cost internalisation and other new concepts and principles.
- a review of the impact of development issues and socio-economic factors (e.g. trade patterns technology transfer) associated with the implementation of international agreements. This may also include reviews of linkages with other international agreements that are having an impact on the environment (e.g. WTO).

Global section - synthesis and analysis: a synthesis covering regional implementation and compliance, overall trends, overall impacts and effectiveness of multilateral environmental agreements in the protection of the environment, barriers, and items for policy actions; and an analysis of the different priorities and emphasis placed on the different conventions adopted in the regions, as well as the overall numbers of conventions adopted in the separate regions over time.

Regional sections (to be drafted by Ccs): for each region there will be three sub-sections:

Sub-section 1: Addressing a common and an optional set of "hard" multilateral env.agreements

common set: climate, biodiv., desertification, ozone, Basel, ..... (1 page)

optional set: CITES, RAMSAR, PIC, Oceans, CMS, ..... (1 page)

Sub-section 2: Addressing one or a set of regionally selected other (soft?) international

environmental agreements/mechanisms such as CSD, GEF, WTO, Agenda

21 (1/2-1 page)

Sub-section 3: Addressing a set of regionally specific agreements such as trans-boundary

airpollution, BAMAKO, UNEP Regional Seas agreements, ..... (2 pages)

#### Each sub-section will address:

- Implementation and Compliance: The analysis of the implementation of agreements will include the review of responses to international environmental agreements at the regional level (with national trends aggregated to the regional level). Some national case studies may be provided (e.g. in boxes). The analysis will focus on the measures adopted (policy responses) for the implementation and effective compliance with the provision of international agreements (see also 4.3 below);
- Overall Trends: the analysis will NOT address convention by convention, but focus on overall global and regional trends, highlighting new developments and new concepts;
- Overall Impacts/ effectiveness of multilateral environmental agreements in the protection of the environment: Due to complexity of assessing the environmental impact of conventions and agreements on a quantitative basis, the assessment will be undertaken on a more qualitative basis using expert judgement and narrative based on existing studies in sectoral areas. As mechanisms for assessing the impact of global environmental conventions are still in the early stages of development, this assessment will be fairly ad hoc (with guidance from Convention Secretariats).
- Overall Barriers to implementation (finance, technology transfer, development and equity issues): Availability of financial resources are a key to the success or failure of most international agreements. The section will review in general terms whether countries (both developed and developing) have fulfilled their commitment under the various conventions and Agenda 21 to provide new and additional resources to support the implementation of conventions at the national and regional levels. A brief review will also be made as to the scope for further technology transfer to developing countries to enable them to better fulfil their obligations under international agreements. Other issues, such as equity, the development of adequate legal and institutional capacity, and training will also be addressed;

• Items for policy action: Innovative guidance to the international community on how to improve, from a regional perspective, implementation of environmental agreements.

# 5.3. Analytical framework and checklists for the analysis conducted in the subsections

Emphasis of the chapter will be on aggregated analysis, providing new insights and not so much on data and information reporting. To facilitate the narrative on the status of implementation of international agreements three checklist will be used. The tables will be filled in with an estimated ranking (from 0-5) representing the degree of compliance and implementation as it relates to the column heading. For example, if all countries within the sub-region have signed and ratified the ozone convention, then a "5" can be entered into the box. If none have signed and ratified a "0" can be entered. If there are ongoing discussions for signature or half the countries in the region have signed while others are yet to sign, then a number between 0 and 5 would be entered. The estimates entered into the tables will be backed up with corresponding text in the narrative section. This ranking will require some additional thought over the next few months to ensure the best possible harmonization within and across regions.

#### 5.4 Illustrations

A box will be included with a review of the latest literature on international environmental agreements and their implementation, also providing readers with reference to major information sources, including internet sources and UNEP publications. Other boxes could detail sectoral or case studies conducted at a regional and or global level, e.g. the study on financing the Biodiversity Convention done by Bird Life International, studies of the results of funds provided by the Multilateral fund to various countries, as well as evolving concepts (inter-generation equity, common but differentiated responsibilities and the like).

#### Notes for checklists below

**Signature, ratification and accession**: high rates of signature, ratification and accession are proof of the political acceptance of the convention; status of the participation in technical annexes to the agreements, if applicable.

Awareness building and public information: awareness among decision-makers and the public on the issues dealt with in agreements and measures already taken to raise such awareness (e.g. such awareness may be reflected in the priority given in the national policy or public support for the need to take action).

Adoption of national legislative and regulatory measures and their enforcement: including use of legislation; licensing, approval or authorisation by national authorities for the use and management of certain substances or polluting activities; experience in dealing with non-compliance with the provisions of agreements at the national and regional levels.

Development of national and regional institutional agreements and bodies: including coordination of relevant ministries and other government bodies; establishment of local and regional sustainable development committees; bilateral or sub-regional consultation/co-operation procedures and mechanisms to deal with transboundary issues related to agreements Other measures for the implementation of conventions: including use of economic instruments (e.g. subsidies and taxes); tradable permits; debt for nature swaps, and other measures for internalisation of environmental costs.

Monitoring and Reporting: Monitoring of compliance by parties with the provisions of the agreements (whether procedures/measures have been established and are operational) and reporting by the Parties envisaged under the agreements on the programmes/measures adopted for the implementation of the respective agreements; monitoring of pollution provided for in the provisions of the agreements;

Capacity building and technology transfer: Activities to enhance capacity of governments to implement the requirements set out in the agreements, including financial and human resources; programmes and measures to ensure the use of best available technology and/or best environmental practices; access to relevant information/expertise, including technical and/or scientific assistance and co-operation or the provision of technical assistance to the Parties concerned; government experience in the transfer of relevant technology; development of programmes/ measures for establishing common practices and criteria for environmental quality standards.

Checklist of hard multilateral environmental agreements and mechanisms

|   | Signature,<br>Ratification,<br>& Accession | Awareness<br>building,<br>Public | Adoption of national legislation,   | Development of national & regional | Other impl. measures of int.agreements:                        | Monitoring and<br>Reporting<br>Compliance | Financing | Capacity<br>building and<br>technology |
|---|--|----------------------------------|---|------------------------------------|--|---|-----------|--|
| Intern.<br>Agreements                                     |  | пгогланоп                        | regulatory<br>measures & their<br>enforcement   | agreements & bodies                | Economic instru-<br>ments; Subsidies/<br>Taxes; Permit<br>etc. |   |           | uansier                                |
| 1. Core Global Se   | t of hard multilat                         | eral environment                 | 1. Core Global Set of hard multilateral environmental agreements (to be completed by all) | completed by all)                  |  | +   |           |  |
|   |  |                                  | 8   |                                    |  |   |           |  |
| - Climate   |  |                                  |   |                                    | A  |   | 17.       |  |
| - Biodiversity  |  |                                  |   |                                    |  |   |           |  |
| - Desertification   |  | 3                                |   |                                    |  |   |           | 341                                    |
| - Ozone   |  |                                  |   |                                    | .70  |   |           |  |
| - Basel   |  |                                  |   |                                    | 9  |   |           | £2                                     |
| 2. Optional Global Set of hard multilateral environmental | l Set of hard mul                          | tilateral environn               | nental agreements   |                                    |  |   |           |  |
| - CITES   |  |                                  |   |                                    |  |   |           | 7                                      |
| - RAMSAR  |  |                                  |   |                                    |  |   |           |  |
| - Forest  |  |                                  |   |                                    | 10/4-  |   | -         | 100 (100 (100 (100 (100 (100 (100 (100 |
| - PIC   |  |                                  |   |                                    | ē  | - 20                                      |           |  |
| - CMS   |  |                                  |   |                                    |  |   |           | ATT LES                                |
|   |  |                                  |   |                                    |  |   | A P       |  |

Checklist of other (soft) multilateral environmental agreements and mechanisms

| Capacity building and technology transfer   |  |             |       |       |       |     |   |   |
|---|--|-------------|-------|-------|-------|-----|---|---|
| Financing   |  |             |       |       |       |     |   |   |
| Monitoring and<br>Reporting<br>Compliance   | he list below)   | 14          |       |       |       |     |   |   |
| Other implementation measures of international agreements: Economic Instru ments; Subsidies/ Taxes; Permit etc. | 1. Core Global Set of other (soft) multilateral environmental agreements (choice from any combination of the list below) |             |       |       |       |     |   |   |
| Development of national & regional institutional bodies & agreements  | nts (choice from ar  |             | *     |       |       |     |   |   |
| Adoption of national legislation, regulatory measures & their enforcement                                       | ironmental agreeme   | -           | 4)    |       |       |     |   |   |
| Awareness<br>building,<br>Public<br>Information   | multilateral env   |             |       |       |       |     |   |   |
| Signature, Ratification, & Accession  | Set of other (soft)  |             |       |       |       |     |   |   |
| Intern.<br>Mechanisms   | 1. Core Global !   | - Agenda 21 | - CSD | - GEF | - WTO | are | 1 | t |

Checklist of regional environmental agreements and mechanisms

| Capacity building and technology transfer  |                 |  |  |   |  | ** |
|--|-----------------|--|--|---|--|----|
| Financing  |                 |  |  | 7 |  |    |
| Monitoring and<br>Reporting<br>Compliance  |                 |  |  |   |  |    |
| Other implementation measures of international agreements: Economic Instruments; Subsidies/ Taxes; Permit etc. |                 |  |  |   |  |    |
| Development of national & regional institutional agreements & bodies   |                 |  |  |   |  |    |
| Adoption of national legislation, regulatory measures & their enforcement                                      |                 |  |  |   |  |    |
| Awareness<br>building,<br>Public<br>Information  |                 |  |  |   |  |    |
| Signature, Ratification, & Accession   |                 |  |  |   |  |    |
| Intern.<br>Agreements  | 1. Regional Set |  |  |   |  |    |

# 6 REGION SPECIFIC, FORWARD LOOKING STUDIES OF ALTERNATIVE POLICY OPTIONS

#### 6.1 Introduction

This chapter aims to provide concrete guidance to the international environmental community on priority action to be taken. The chapter will explore alternative environmental developments and the associated policy packages that need to be put in place to develop towards more desirable/sustainable futures. In other words this chapter aims at answering the following questions:

- Where are we heading to?
- Where are current policies leading us to?
- Where do we want to head to?
- What is the most promising policy packages that will set us on the desired road?
- What will be the impact of these policy packages on the overall environment?

The time required to conduct the studies is estimated at 2 to 3 months in 1997 for drafting each study and 1 months in 1998 for consultations, review, and amendments. This time frame does not allow for primary research. Most inputs will be derived from existing material and ongoing studies. Emphasis is on the interpretation of the material in light of the questions above and on the integrated, global context in which the material from the various regions will be assessed.

The resolution of the regional studies will be at the level where a decisions can be taken in a meaningful manner, e.g where the policy packages have relevance to a group of countries with similar socio-economic or environmental conditions. For GEO-2 the regional policy studies will not yet be fully integrative. Rather the studies will focus on selected issues.

In the longer term these studies will become more complex and integrated, addressing not only selected issues but also looking at the interactions between issues, overall development patterns and inter-regional and global socio-economic, environmental and institutional trends. Linkages and interactions will be further quantified using integrated assessment models and the future options will be explored using structured scenario development tools. The GEO-2 policy relevant studies are a first step in a process to gradually build regional capacity of region-specific, forward-looking studies of alternative policy options.

#### 6.2 Structure of the chapter (55 pages)

Given the research-orientation of this chapter the structure of the chapter can only be defined in very general terms at this moment in time. Regional (and probably global) technical reports will accompany this chapter enlarging in detail the regional (and global) policy relevant studies undertaken in the framework of GEO-2.

This chapter will be composed of **eight sections**:

- A global overview containing:
  - an analysis of inter-regional interactions as they relate to the regional and global environments, the interactions between global mega-trends (globalization, liberalization and technological developments) and the regional environments, and impacts of regional developments on global environmental trends;
  - a synthesis of the major findings of the regional studies and putting these findings into an overarching global framework.

- African studies or study
- Asian and the Pacific studies or study
- European and Central Asia studies or study
- Latin America and Caribbean studies or study
- North American studies or study
- West Asia studies or study
- (Maybe a Polar Regions and deep oceans study)

# 6.3 Analytical framework

Each region will select one, two or more study topics. These study topics will relate to the issues identified in the SOE chapter (see the analytical framework of SOE chapter). A preliminary selection of issues by regions will be finalized by September 1998 and will be further refined in the process of preparing the chapter.

For each of these issue the region will:

- Examine current development patterns to gain insight into what may happen in the future
  in relation to the specific issue = extrapolation of current trends (e.g in region Y water
  scarcity will be X due to projected trends in population growth, economic development and
  demands by different users groups.) Thus, the current understanding of the development of
  environmental trends related to the issue will be examined into the future.
- Identify (using chapter 2) the current policy packages that if implemented till 2015 will lead
  to the "crisis" situation (e.g if current policies with regard to forest use are not altered now,
  it is foreseen that by the year 2040 the Asian and Pacific region will be devoid of forests.)
  This is: identify the effects of existing or in-the-pipeline legislation and other measures on
  the future unfolding of the critical issue.
- Outline alternative development patterns (scenarios, broader framework for policy packages)
  that will be required to better address the critical issues (e.g. different allocation system of
  water e.g. mainly for industrial purposes).
- Outline realistic, alternative policy packages that would be required to set society upon the
  alternative development routes outlined (water pricing, taxes, subsidies to certain
  stakeholders groups, ....)
- Assess the impact of these alternative policy packages in an integrated study that examines
  not only the primary resource affected by the issue but also the other resources (projected
  cross-sectoral impacts, e.g. impact on water resources may affect agriculture, urbanization
  etc). This will then provide the policy makers with several options to choose from.

# 6.4 The global chapeau of the alternative policy section

Focussing the regional studies on issues derived from the SOE chapter means that a number of global mega trends and their interaction with the regional environments are not covered. For example the impacts on regional environments of structural adjustment programmes, international capital flows, and international trade regimes; the impacts of the information revolution, the opening of labor markets and increased human mobility, including migration and refugees.

Focussing on regional studies will also mean that the impact of a number of regional developments on other regions or the globe are not covered. For example the impact on other regions of European agricultural policy (estimated to produce a food surplus of 48 million tons by the year 2005) or of alternative energy pricing or increased female participation in the labor force in the US.

Other material that might fall between the cracks concerns the reporting on the innovative work of groups such as the Global Scenario group, the global modelling forum. UNEP Head Quarters will develop a proposal on how to deal with these issues in GEO-2 by end September 1997.

# 6.5 Illustrations and spin-off products

Boxes, diagrammes and tables will highlight salient features or findings of the regional or global studies. In addition, technical reports will be produced to substantiate the summaries of the studies as they will appear in GEO-2. This material will be published in the GEO-2 associated technical report series.

#### 7 NEWLY EMERGING ISSUES

#### 7.1 Introduction

One of the major UNEP assessment mandates is to identify emerging environmental issues that require international attention. The purpose of this chapter is to implement this mandate within the GEO context through reporting, from a regional and global perspective, on emerging environmental issues in order to:

- raise awareness:
- initiate timely policy and management action; and
- guide environmental research and data and information collection.

The GEO-2 chapter will be prepared in parallel and coordinated with a much more elaborate SCOPE-UNEP millennium publication on newly emerging environmental issues.

In addition, during the production of the SOE and policy chapters of GEO-2, trends/issues will emerge that require strengthened international attention, research or policy action. These trends/issues will mainly emerge from the sections that address projected environmental trends in the years ahead (part of the SOE chapter) and the region-specific forward looking studies on alternative policy options. These key emerging issues, after being discussed at the regional policy consultations, will also be summarised in the emerging issues chapter, together with the major findings of the UNEP-SCOPE millennium publication.

Probably no more than 10 global key emerging problems will be reported upon in GEO-2, complemented by a limited set of region-specific issues. These issues will be selected by distillation from all the above mentioned material (rather than filtration).

# 7.2 Structure of the chapter (30 pages)

The chapter will be about 30 pages long and will present the key emerging environmental issues in a concise, policy-relevant synthesis. The detailed structure of the chapter will be decided when the production of GEO 2 and the SCOPE-UNEP millennium publication are sufficiently advanced for the issues to be distilled from them.

# 7.3 Analytical framework for the emerging issues section

#### Criteria for inclusion of 'emerging issues'

The coverage of issues will not be restricted to scientific environmental emerging issues but will also include emerging issues as perceived by public sectors and regions which may be related to political, social, economic, institutional, financial and technological developments. Examples of these broader issues include new technological advances in crop production, the emergence of new economies, the changing attitudes of the business community, the unprecedented increase in global tourism, etc.

For the purposes of these publications emerging environmental issues are defined as:

- new findings that are critical and provide new insights (such as potential impacts of releasing genetically engineered species, new findings on endocrine disrupters, impacts of trade globalisation and associated industrial relocation, nutrition deficiencies resulting from the 'green revolution'); or
- complete surprises (such as ozone in the 1980s) (if such a thing can be flagged?!); or
- issues that result, or are anticipated, from a "breaking point" or sudden change in the rate or direction of trends (= non-uniform trends)( such as the impact of the explosion of information technology, more rapid than expected degradation of coastal zones due to the synergy of different impacting factors).

In addition, for a particular issue to be included, there must be an expectation that it will have a substantial impact on the environment of the region and/or the globe. In view of these defining criteria, all the emerging issues identified will require new responses.

Disasters and emergencies will NOT be addressed in the publications except in so far as they qualify under the criteria above. Projections of ongoing trends will also NOT be included, except where they qualify under criterion iii) above or are not adequately addressed by current policy agendas (see GEO-2 Chapter below).

#### **Process for Identifying Emerging Issues**

Inputs will be solicited from a large variety of stakeholders through a questionnaire. Upon analysis of the responses to the questionnaire and of relevant existing studies -including regional studies provided by the CCs and RCs - more detailed studies or exposés might well be prepared for the SCOPE UNEP publication, focussing on those emerging issues that, through the participatory and consultative process, have emerged as key or priority.

The Groningen meeting had discussed the importance of socio-economic and political inputs to the selection of emerging issues as well as purely scientific ones. SCOPE has agreed not to restrict its analysis to its normal scientific community and the CCs will be asked to solicit the views of scientists, sociologists, economists and politicians in their sub-regions.

Other inputs will come, for example, from the IGBP, which will include a session on emerging environmental problems in its December 1997 conference, and a UNEP Industry and Environment conference to be held in October 1997 on emerging industrial environmental problems.

As an overall guideline: the process of identifying emerging trends will be broad-based and not restrictive at the onset. The issues which are distilled during the process will be those on which there is overall consensus that they are indeed major emerging issues that require to be put on the international environmental agenda, including the research agenda.

# 7.4 Illustrations and spin-off products

#### **Boxes**

Boxes in the chapter will provide sharp insights from learned individuals and relevant case studies.

# SCOPE-UNEP Millennium Publication on Emerging Issues.

The SCOPE/UNEP Millennium Publication will be prepared on a parallel but integrated track, with the support of the Czech Government. Given the traditional expertise of SCOPE this publication will focus on environmental emerging issues as identified by the scientific community but will be supplemented with environment-related emerging issues likely to occur through observed and projected social, institutional, financial, economic, technological and political developments and with issues identified by Ccs and RCs from a regional perspective.

#### THURSDAY, 22ND MAY

09.00

Summarizing discussion on sections discussed so far

GEO-2 Contents - Policy Section - Session III-a Region specific studies on forward looking alternative policy options (doc. 7)

10.30 Introduction by UNEP

17.00 Presentation of the LAC scenario experience

Presentation of OECD Linkages Project

Presentation of Chinese experience with Millennium Institute Threshold 21 Comments by participants on presentations and on background material.

Plenary discussion on how to approach region specific, forward looking, alternative policy option analyses for practical issues, considering the examples sent around and any other inputs available. Followed by informal Regional Meetings.

Lunch break from 12.15-14:00 hrs.

#### FRIDAY, 23RD MAY

GEO-2 Contents - Policy Section - Session III-b
Region specific studies on forward looking alternative policy options (doc. 7)

09:00 Plenary to summarize discussions so far, followed by regional meetings.

12.15 Lunch

GEO-2 Contents - Policy Section - Session III-c Region specific studies on forward looking alternative policy options (doc. 7)

14.00 Reports of the regional groups on ideas about the studies, workplans, etc.

Final plenary discussion on the region specific studies.

15:00 Tea break

#### Closing session

15:30 Adoption of the preliminary meeting report.

Final round of comments.

16.30 Closing of the meeting by Mr. Ye Ruqin, Deputy Administrator, NEPA and by UNEP,

followed by happy hour drinks.

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# ANNEX III: Prototype Project Document for GEO-2 Agreements between GEO Collaborating Centres and UNEP

# UNITED NATIONS ENVIRONMENT PROGRAMME PROJECT PROPOSAL

Total cost of the project:

#### SECTION 1 PROJECT IDENTIFICATION

| 1.1 | Title of Sub-programme:   | Global and regional servicing and su<br>Assessment  | pport: Environmenta     |
|-----|---|---|-------------------------|
| 1.2 | Title of the project:   | Global Environment Outlook: Collaborati             | ng Centre Participation |
| 1.3 | Project Number:   |   |                         |
| 1.4 | Geographical Scope:   | (dependent upon location of institute)              |                         |
| 1.5 | Implementation:   | Collaborating Centre)                               |                         |
| 1.6 | Duration of the Project: 18 m   | onths   |                         |
|     | Commencing:<br>Completion:  | 1 July 1997<br>31 December 1998                     |                         |
| 1.7 | Cost of Project:  |   |                         |
|     | - Cost to the Fund of U   | ntribution (DGIS): US\$                             | ole - 1998              |
| ba  | <ul> <li>Supporting Organisati</li> <li>In kind contribution C</li> </ul> | 맛있던 것 (MAT) 이 1 전 1 전 1 전 1 전 1 전 1 전 1 전 1 전 1 전 1 | ole - 1998              |

US\$

| For UNEP:                        | For Supporting Institute: |
|----------------------------------|---------------------------|
|                                  |                           |
| E. Ortega                        | Name                      |
| Acting Chief                     | Position                  |
| Fund Programme Management Branch | Name of Institute         |
| Date:                            | Date:                     |

# SECTION 2 BACKGROUND AND PROJECT CONTRIBUTION TO OVERALL SUB-PROGRAMME IMPLEMENTATION

#### 2.1 Background

In January 1997, UNEP released the first report in the biennial Global Environment Outlook (GEO) series. The GEO series was initiated in response to the environmental reporting requirements of Agenda 21 and to a UNEP Governing Council decision of May 1995 (decision 18/27c) which requested production of the first in a new, comprehensive State of the Environment Report series in time for the next UNEP Governing Council in January 1997.

GEO 1 was produced using a regional and participatory approach. Input was solicited from an extensive array of sources throughout the world: twenty regional Collaborating Centres, United Nations organisations, and independent experts. Draft chapters were reviewed in regional consultations organised by the UNEP Regional Offices, ensuring that the assessment was geared towards the goal of policy-setting.

The production process for GEO 1 was as important as the actual publication of the report. Emphasis was placed on putting in place the global participatory assessment and consensus building process, including a global network of Collaborating Centres. The GEO Collaborating Centre network is made up of more than twenty institutes of excellence from around the world. All Collaborating Centres are multi-disclipinary in scope, work at the interface between science and policy and have extensive networks of other sectoral centres and experts in the regions. The 19th session of UNEP's Governing Council commended not only the GEO report, but also the participatory assessment process that had been initiated to produce the report, particularly noting the role of the Collaborating Centre network.

This project is one of several GEO projects supported by the Government of the Netherlands (DGIS). It is designed to continue the global participatory environmental assessment process begun with GEO 1, to build capacity in the Collaborating Centres for integrated policy relevant assessments and supporting the further development of the Collaborating Centre network through the production of integrated environmental assessment and forecasting studies and making contributions to GEO 2. The project, focuses on:

- strengthening the institutional capacity of the Collaborating Centres in developing countries and countries with economies in transition;
- strengthening the capacity of the Collaborating Centres, and through them regional capacities, to carry out integrated environmental assessment and forecasting at the regional and global levels (learning by doing);
- ensuring the full participation of Collaborating Centres in the GEO process including their conclusion of concrete regional studies in support of regional sustainable development planning.

The project will help to establish the Collaborating Centre network, enabling it to be an integral part of the GEO 2 process. In GEO 1, the inputs of each centre concentrated on ensuring regional views and priorities were adequately reflected in the report. For GEO 2, the regional inputs will be strengthened and the centres will be asked to draw more widely on the work of sectoral and national institutes so that the most accurate and up-to-date information is included from the regional level.

#### 2.2 Project contribution to overall sub-programme implementation.

This project contributes to the overall GEO project which is in direct response to Agenda 21 and the UNEP 1996-1997 Environment Fund programme: 5.1.1.2: Global Environment Outlook. The overall GEO project closely links with other assessment activities conducted by UNEP, projects carried out by the Regional Offices, as well as with activities conducted in the Division of Environmental Information and Assessment of UNEP.

The project also implements the UNEP Governing Council 19 decision (19/3) which approved the continuation of the GEO process, and requested UNEP's Executive Director to submit GEO 2 to the next regular session of the Governing Council (GC 20) in May 1999.

事を与りを取りが

Finally, the project is part of the work funded by the Government of the Netherlands (DGIS) on "Capacity building in Integrated Modelling and Assessment to Support Regional Environmental Policy Setting Processes and Global Environment Outlooks."

#### SECTION 3 NEEDS AND RESULTS

BANK TIPE

#### 3.1 Needs

There is a need to:

- better reflect and incorporate regional perspectives and priorities in international environmental policy setting;
- build up the capacity of regional organisations to carry out policy-relevant integrated assessments (capacity building);
- facilitate the introduction of tools for environmental assessments and forecasting and their use by the Collaborating Centres in regional studies (technology transfer);
- support regional dialogue between policy-makers and scientists (networking);
- support the production process of GEO reports (global environmental agenda setting);
- have all regions as equal partners setting the international environmental agenda.

#### 3.2 Results

Collaborating Centre input (writing and review) to regional integrated assessments (including GEO 2), ensuring comprehensive regional analysis of the state of the region's environment, policy responses and emerging issues using appropriate regional sources and methods as well as ensuring priorities for policy setting and action planning are derived.

Strengthened institutional capacity and increased knowledge of Collaborating Centres for carrying out integrated policy-relevant assessments at regional and global levels.

Increased inter and intra regional cooperation (through the Collaborating Centre network) in carrying out integrated environmental assessments in support of regional and global sustainable development planning.

#### 3.3 Assumptions to achieve results

- Timely delivery of substantive input into GEO 2 by the collaborating institutions.
- Full co-operation of relevant UNEP units (e.g. ENRIN and GRID), Divisions and Regional Offices.
- Timely and predictable availability of the necessary financial and human resources to implement the overall GEO project.
- Potential capacity of the Collaborating Centre exists to network in the region with sectoral institutes
  of excellence and relevant regional and national level (inter)governmental institutions.

#### SECTION 4 OUTPUTS, ACTIVITIES, WORKPLAN & TIMETABLE, BUDGET & FOLLOW-UP

#### 4.1 Outputs

#### Short term - GEO 2 related work - upto mid 1998

- 1. Integrated environmental assessment and forecasting reports and reviews for GEO 2 including:
  - Draft paper containing policy-relevant review of the State of the Environment in Collaborating Centre's region, including the use of indicators;
  - Draft paper containing an analysis of the status and trends of current policy responses to environmental issues in the Collaborating Centre's region;
  - Draft study of alternative policy options to address current and emerging priority environmental concerns in the Collaborating Centre's region;
  - If applicable (see attached Beijing report): a compilation of sub-regional inputs into one overall regional draft section for GEO 2
  - Reviewed draft reports on regional impacts of international environmental agreements (including substantive inputs);
  - Reviewed draft reports on emerging environmental issues (including substantive inputs);
  - Reviewed draft reports on global state of the environment and policy recommendations (including substantive inputs).
- 2. List and full details (e.g. address) of the <u>senior staff/researchers</u> at the Collaborating Centre and any external experts used who <u>drafted</u> the above
- 3. List and full details of the <u>senior staff/researches</u> at the Collaborating Centre and any external experts used who <u>reviewed</u> the above
- 4. Copies of Collaborating Centre publications, reports, studies which are a direct result or by-product of the integrated environmental assessment/GEO process
- List and compilation of national and regional documents used in the regional assessments, following a standard format (to be provided later).

#### Longer term work

- 6. Brief report (3-4 pages) on :
  - ongoing efforts related to collection and analysis of regional information gathering regarding SOE, policy responses, emerging issues, impacts of international environmental agreements, studies done on alternative policy options and development patterns into the future.
  - ongoing efforts to strengthen regional networking with sectoral or integrated environmental assessment institutes and policy bodies in the region, such as regional commissions, regional banks, regional offices of FAO, UNDP, WHO etc.
- 7. Brief reports on (sub-) regional expert meetings, training workshops and consultations held as and when required.

8. Brief evaluation report on the Collaborating Centre network operations as implemented during GEO 2 preparations, giving frank recommendations on aspects that need improvement or need to be added or abandoned, on additional attention that is required, etc.

#### 4.2 Activities

#### Short term - GEO 2 related activities - upto mid 1998

- Carry out integrated environmental assessment and forecasting studies and reviews (in conjunction with the other regional Collaborating Centres, UNEP's Regional offices and UNEP HQ) based on readily available material and existing contacts. Main subjects:
  - State of the Environment in the region (including indicator based analysis);
  - · status and trends of current policy responses in the region;
  - · regional impacts of international environmental agreements;
  - · alternative policy options to address priority environmental concerns in the region;
  - emerging environmental issues;
  - global state of the environment and policy recommendations
- Review consecutive drafts for parts of GEO 2 as produced by other CCs and/or other partners in GEO 2 as well as the full drafts of GEO 2:
  - The review will be carried out by senior staff at the Collaborating Centre;
  - Coordination of review by other regional experts, as necessary (the collaborating institute will
    use its own regional network for inputs and review of technical materials).

#### Longer term ongoing activities

- Compile, analyse and list national and regional documents for the integrated assessments (i.e. regional information on priority environmental concerns, their root causes, current and alternative policy responses, emerging issues and responses to international agreements and alternative development patterns into the future).
- 4. Initiate and/or further develop (depending on the intitutional capacity of the CC) a systematic system for collection and analysis of relevant data and information for reporting on SOE, current and alternative policy responses and emerging issues (eg. through harmonized data tables and questionnaires, checklists and matrix tables and the like).
- 5. Participate in and contribute to regional policy consultation meetings on GEO 2.
- 6. In close coordination with UNEP's Assessment Division Regional Coordinators, undertake regional networking with both scientific and policy bodies involved with environmental assessment and policy making. Networking should include informing and updating regional policy-makers about the GEO project, its scope and objectives as well as consulting them and other stakeholders as required.

#### 4.3 Workplan and timetable

Workplan: see Beijing Report for operational details/breakdown of responsibilities

Timetable: see Annex IV

#### 4.4 Budget

[to be completed - see the last pages for standard budget lines]

#### 4.5 Cash Advance Requirement

[RL complete] A paragraph to be added along the following lines:

An initial payment of US\$ 14,000 will be made upon signature of the project document. A second payment of US\$ ...... will be made two months later once the second tranch of the DGIS funds have been received by UNEP. Final payment of US\$ ...... will be made upon completion of the project.

#### 4.6 Follow-up

Follow-up to the project will be dependent on: (i) the outcome of the UNGASS deliberations; (ii) UNEP GC 20; and (iii) the brief evaluation reports about the CC network operations (see 4.1.8).

The long term aim is to strengthen the regional Collaborating Centres in conducting policy oriented environmental assessment studies and to make them regional reference assessment centres for integrated assessments. The capacity of the Collaborating Centres network will gradually be strengthened for improved integrated environmental assessment for policy making and action planning at regional and global levels. Such centres could service both their Governments and other national / sub-regional constituencies, and at the same time work with / for international organizations like UNEP.

#### SECTION 5 INSTITUTIONAL FRAMEWORK AND EVALUATION

#### 5.1 Institutional Framework

The project will be implemented by (name of collaborating institute) in co-operation with UNEP/DEIA (both at HQ and in the regions), UNEP regional offices, and the possible regional lead institutes for the Chapters of GEO 2. For the breakdown of responsibilities and specific guidance on methodology, see GEO-2 guidelines.

#### 5.2 Evaluation

GC 19 was the first evaluation of GEO, and it received both the GEO-1 report and the GEO process very favourably (see GC 19/3 decision). The next major evaluation of the GEO process will be GC 20 which will determine if the project will be continued, discontinued, amended or revised. More specifically, the DEIA Programme Officers will monitor the quality and timely delivery of outputs as specified in the Project Document. Interim evaluation will be communicated to the Collaborating Centre if required, in which (potential) problems can be flagged.

#### SECTION 6: MONITORING AND REPORTING

#### 6.2 Terminal Reports

Within 60 days of the completion of the project, (collaborating institute) will submit to the Assistant Executive Director of the Division of Environmental Information and Assessment and to the Chief, Fund Programme Management Branch a terminal report, using the format in Appendix III.

#### 6.3 Financial reporting

#### (a) Project Expenditure Accounts

- (collaborating institute) will submit a final statement of project expenditures as at 31/12/98
  in line with the budget codes set out on pages 9-10 of this Annex and following the format
  in Appendix II. The expenditure account, certified by a duly authorised official, should be
  dispatched to UNEP by 31 January 1999.
- ii) Within 90 days of the completion of the project, (collaborating institute) will supply UNEP with a final statement of account in the same format as at 31 December 1998, certified by an authorised official of the Government confirming that:
  - 1. Proper books of account and records have been maintained;
  - 2. All project expenditures are supported by vouchers and adequate documentation;
  - Expenditures have been incurred in accordance with the objectives outlined in the project document.

If requested, (collaborating institute) shall facilitate an audit (by the United Nations Board of Auditors and/or the Audit Service) of the accounts of the project.

iii) Any portion of cash advanced remaining unspent or uncommitted by (collaborating institute) on completion of the project will be reimbursed to UNEP within one month of the presentation of the final statement of accounts. In the event that there is any delay in such disbursement, (collaborating institute) will be financially responsible for any adverse movement in the exchange rates.

#### (b) <u>Cash advances accounts</u>

A statement of advances of cash provided by UNEP will be submitted (in the format shown in Appendix I) as at 31 December.

#### 6.4 Terms and Conditions

#### 6.4.1 Non-Expendable Equipment

Not Applicable

#### 6.4.2 Responsibility for cost overruns

Any cost overrun (expenditure in excess of the amount budgeted in each budget subline) shall be met by the organisation responsible for authorising the expenditure, unless written agreements has been received by letter or cable, in advance, from UNEP. In cases where UNEP has indicated its agreement to a cost overrun in a budget subline, either to transfer funds from one subline to another, or to increase the total cost to UNEP, a revision to the project document amending the budget will be issued by UNEP.

#### 6.4.3 Claims by third parties against UNEP

(collaborating institute) shall be responsible for dealing with any claims which may be brought by third parties against UNEP and its staff, and shall hold UNEP and its staff non-liable in case of any claims or liabilities resulting from operations carried out by name under this project document, except where it is agreed by (collaborating institute) and UNEP that such claims or liabilities arise from gross negligence or wilful misconduct of the staff of UNEP.

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With copy to:

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and to the UNEP/GEO Regional Coordinator in the region

#### UNEP PROJECT DOCUMENT BUDGET FORMAT

| / | 10   | PROJECT PERSONNEL COMPONENT   |
|---|------|---|
|   | 1100 | Project Personnel (Title & Grade) 1101 1102   |
|   | 1200 | 1199 Total<br>Consultants<br>1201<br>1202<br>1220 Unspecified                         |
|   | 1300 | 1299 Total Administrative support (Title & Grade) 1301 1302 1320 Temporary assistance |
|   | 1600 | 1399 Total Travel on official business 1601 1602                                      |
|   |      | 1699 Total  |
|   | 1999 | Component total   |
|   | 20   | SUB-CONTRACT COMPONENT  |
|   | 2300 | Sub-contracts (with others)<br>2301<br>2302   |
|   |      | 2399 Total  |
|   | 2999 | Component Total   |
|   | 30   | TRAINING COMPONENT  |
|   | 3200 | Group training, meetings, ect 3201 3202   |
|   |      | 3299 Total  |
|   | 3999 | Component Total   |

# 50 MISCELLANEOUS COMPONENT 5200 Reporting Costs 5201 5202 5299 Total 5300 Sundry 5301 5302 5399 Total 5999 Component Total 99 GRAND TOTAL

#### ANNEX I: AGENDA

#### MONDAY, 19TH MAY

#### **Opening Session**

09:00 Welcome address by Mr. Xie Zghenghua, Administrator of NEPA.

09:20 Welcome address by Ms. Veerle Vandeweerd, Chief SOE Reporting Unit of UNEP.

Briefing on progress since the GEO-2 Groningen meeting, funding, products envisaged under GEO-2, and the overall GEO-2 strategic plan and objectives.

09.40 Introductions by participants

Adoption of the proposed agenda.

Selection of two chairs:

Mr. Cheng Weixue, Deputy Director, Department of International Organizations in NEPA and Ms. Leena Srivastava, Dean, Tata Energy Research Institute (TERI), India

10:00 Tea break

10.30 Reflections on GEO-2 and the GEO-Process (doc.2).

#### GEO-2 Contents - Emerging Issues (doc. 3)

11:00 Report by UNEP on progress made with the Emerging Issues section since the GEO-2 Groningen meeting and on plans to collaborate with the IGBP/HDP programme.

Brief discussion resulting in agreement on approach, workplan and time schedules.

12.15 Lunch

#### GEO-2 Contents - State of the Environment - Session I (doc. 4)

14:00 Introduction by UNEP.

Presentation by UNEP on dryland assessment and indicator work.

Initial reactions from participants on SOE draft papers and other ideas existing.

14:45 Discussion on SOE section with regard to:

- the focus (thematic?; past trends?; future trends?; linkages analysis....)
- the reporting framework
- the production process (workload for various actors; time schedule)
- 16:15 the SOE data table
- 17:00 Depart for dinner reception in the Summer Palace, hosted by Mr. Xie Zghenghua, Administrator of NEPA.

continued .../-

#### TUESDAY, 20TH MAY

#### GEO-2 Contents - State of the Environment - Session II (doc. 4)

09:00

Finalization of the discussion on the framework for the SOE section.

#### GEO-2 Contents - Policy Section - Session I

Status and trends analysis of existing policy responses (doc. 5)

10:00

Introduction by UNEP

Comments from participants on background material

Discussion

12:15

Lunch

#### GEO-2 Contents - Policy Section - Session II

Evaluation of impacts of international environmental agreements (doc. 6)

14.00

Introduction by UNEP (incl. ideas on impacts of global trends on the environment).

Comments from participants on background material.

Discussion

#### **GEO-2** Contents - Regional Meetings

Regional meetings to produce work plans for GEO sections discussed so far

16:30

Informal regional discussions to work on GEO-2 frameworks and on work plans for the various actors, including time schedules. If necessary informal continuation of these regional discussions into the evening.

The groups were also requested to provide the secretariat final comments on the new regional breakdown (doc. 8).

#### WEDNESDAY, 21ST MAY

Visit to the Great Wall (morning) and the Forbidden City (afternoon). Departure from the hotel at 07.00 hrs, return around 18.00 hrs, followed by a dinner reception at 18.30 hrs. at the Beijing Xiyuan Hotel

continued .../-

| Ω  | GEO 2 - OVERALL TASKS AND MILESTONES   | 1997<br>J F M  | AMJ  | JASO | N O N | 1998<br>J F M A | C M J | JAS | NO | 1999<br>D J F | FMA         | M |
|----|--|--|--|------|-------|-----------------|-------|-----|----|---------------|-------------|---|
| -  | UNEP Regional Coordinators' Meeting  | •  |  |      | 2     |                 |       |     |    |               |             |   |
| 2  | Fund raising   |  |  |      |       |                 |       |     |    |               |             |   |
| m  | Inaugural Meeting of GEO Collaborating Centres, Groningen, Netherlands             | •  |  | *    |       |                 |       |     |    |               |             |   |
| 4  | GEO Framework Consultation (USA) & Communication with CPR (HQ)                     |  | essantuspas<br>essantuspas<br>essantuspas<br>essantuspas<br>essantuspas<br>essantuspas<br>essantuspas<br>essantuspas<br>essantuspas<br>essantuspas<br>essantuspas<br>essantuspas<br>essantuspas<br>essantuspas<br>essantuspas<br>essantuspas<br>essantuspas<br>essantuspas<br>essantuspas<br>essantuspas<br>essantuspas<br>essantuspas<br>essantuspas<br>essantuspas<br>essantuspas<br>essantuspas<br>essantuspas<br>essantuspas<br>essantuspas<br>essantuspas<br>essantuspas<br>essantuspas<br>essantuspas<br>essantuspas<br>essantuspas<br>essantuspas<br>essantuspas<br>essantuspas<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essantus<br>essant |      |       |                 |       |     |    |               | <u>_</u> \_ |   |
| 2  | Finalisation of GEO 2 Annotated Outline (CC, RC, HQ)                               |  | 1207   |      |       |                 |       |     |    |               | -           |   |
| 9  | Preparations for GEO 2 Planning Meeting, Beijing (HQ)                              | THE STATE OF THE S | ***************************************  |      |       |                 |       |     |    |               |             |   |
| 7  | GEO 2 Planning Meeting, Beijing  |  | •  |      |       |                 |       |     |    |               |             | _ |
| 00 | Preparation of SOE Chapter (CC, RC, EW, HQ)  |  |  |      |       |                 |       |     |    |               |             |   |
| 0  | Preparation of Existing Policy Review Chapter (CC, RC, EW, HQ)                     |  |  |      |       |                 |       |     |    |               |             |   |
| 유  | Preparation of Environmental Agreements Chapter (HQ, CC, EW)                       |  |  |      |       | -               |       |     | -  |               |             |   |
| =  | Preparation of Regional Pollcy Options Studies Chapter (CC, RC, EW, HQ)            |  |  |      |       |                 |       |     |    |               |             |   |
| 12 | Preparation of Emerging Issues Chapter (SCOPE, CC, RC, EW, HQ)                     | 0  |  |      |       |                 |       |     |    |               |             |   |
| 13 | Production specifications, contract tender etc. (HQ)                               |  |  |      |       |                 |       |     |    |               |             | _ |
| 14 | Compilation of 1st Draft (excluding global overviews) of GEO 2 (RC, HQ)            |  |  |      | E2323 |                 |       |     |    |               | e delinior  |   |
| 13 | 1st Draft of GEO 2 Ready   |  |  |      |       | •               |       |     |    |               |             |   |
| 16 | Regional consultations and chapter review (RO, RC, HQ, EW, CC)                     |  |  |      |       |                 |       |     |    |               |             |   |
| 17 | Revision & compilation of 2nd Draft (Including global overviews) of GEO 2 (CC, HQ) |  |  |      |       |                 |       |     |    |               | , s         |   |
| 8  | 2nd Draft of GEO 2 ready   |  |  |      |       |                 |       | •   |    |               | - 37 1114   |   |
| 9  | Limited second round of reviews and consultations (HQ)                             |  |  |      |       |                 | -     |     |    |               |             |   |
| 20 | Compilation of Final Draft of GEO 2, incorporating inputs/comments (HQ)            |  |  |      |       |                 | 2 72  |     |    |               |             |   |
| 21 | Final Draft of GEO 2 ready   |  | 24   |      |       | 33              | -     |     | •  |               | -           |   |
| 22 | GEO production, including final editing (Publisher, HQ)                            |  |  |      |       | 8               |       |     |    |               |             |   |
| 23 | Preparation of separate reports for publication in GEO Tech. Report Series (CC, HQ |  |  |      |       | -               |       |     |    |               |             |   |
| 24 | GEO 2 camera ready copy  |  |  |      |       |                 |       |     |    | •             |             |   |
| 25 | GEO 2 Book printed   |  |  |      |       |                 |       |     |    |               | •           |   |
| 56 | GEO 2 launch period (ED, HQ, RO)   |  | <u>/</u> #   |      |       |                 |       |     | _  |               |             |   |
| 27 | LINEP Governing Council 20   |  |  |      |       |                 |       |     |    |               |             | • |

ANNEX IV:

TIME FRAMES

|      |  | 1997                          |
|------|--|-------------------------------|
| 0    | SOE CHAPTER - NARRATIVE  | JFMAMJJASONDJFMAMJJASONDJFMAM |
| -    | Compile relevant information & identify institutions for inputs (CC)         |                               |
| 2    | Prepare working drafts of regional sections (CC)                             |                               |
| n    | Compile ideas for possible GEO-2 indicators (HQ, RC, CÇ, EW)                 |                               |
| 4    | Send working drafts of regional sections to RC and HQ (CC)                   | •                             |
| ω    | Review of working drafts (RC, HQ)  |                               |
| 9    | Return review comments to CC (RC, HQ)  | •                             |
| 7    | Revise working drafts of regional sections (CC)                              |                               |
| 00   | Send revised drafts of regional sections + Indicator ideas to RC and HQ (CC) | •                             |
| 6    | Compile documents for SoE chapter meeting (HQ)                               |                               |
| 9    | Meeting on SoE chapter, Prague   | •                             |
| =    | Finalise regional drafts (CC or RC)  |                               |
| 12   | Send final regional drafts to RC and HQ (CC or RC)                           | •                             |
| 43   | Compile 1st Draft (excluding global overviews) of GEO 2 (RC, HQ)             |                               |
| 14   | 1st Draft of GEO 2 ready   | •                             |
| 15   | Regional consultations and chapter review (RO, RC, HQ, EW, CC)               |                               |
| 16   | Revise and compile 2nd Draft (including global overviews) of GEO 2 (CC, HQ)  |                               |
| 17   | 2nd Draft of GEO 2 ready   | •                             |
| 18   | Limited second round of reviews and consultations (HQ)                       |                               |
| 19   | Compile Final Draft of GEO 2, incorporating inputs/comments (HQ)             |                               |
| 20   | Final Draft of GEO 2 ready   | •                             |
| . 21 | GEO 2 production, including final editing (Publisher, HQ)                    |                               |
| 22   | GEO 2 camera ready copy  | •                             |
| 23   | GEO 2 Book printed   |                               |
| 24   | GEO 2 launch period (ED, HQ, RO)   |                               |
| 25   | UNEP Governing Council 20  |                               |

|    |   | 1997      |        | 1998        |       |     |        | 1999 |   |     |
|----|---|-----------|--------|-------------|-------|-----|--------|------|---|-----|
| 0  | SOE CHAPTER - DATA TABLE  | JFMAMJJAS | JASOND | J F M A M J | J J A | 0 8 | o<br>z | -    | × | A   |
| -  | Prepare Data Table MoU (HQ)   |           | . [77] |             |       |     |        |      |   |     |
| 2  | Fill in Data Table (GRID/Bangkok - AIT)                             |           |        |             |       |     |        |      |   | -   |
| 8  | Send filled-in Data Table to HQ (RC - A/P)                          |           | •      |             |       |     |        |      |   |     |
| 4  | Check Data Table and sort by (sub)region (HQ)                       |           | -      |             |       |     |        |      |   | -   |
| 20 | Send (sub)regional Data Tables to RC and appropriate CC (HQ)        |           | •      |             |       |     |        |      |   |     |
| 9  | Send out Data Tables to countries (RC,CC)                           |           | •      |             |       |     |        |      |   |     |
| 7  | Check Data Tables and supplement with additional data (Governments) |           |        |             |       |     |        |      |   |     |
| 80 | Send reminder to Governments (RC)                                   |           | •      |             |       |     |        |      |   |     |
| 0  | Data Tables received back from Governments (RC, CC)                 |           | •      |             |       |     |        |      |   |     |
| 10 | Conduct (sub)regional analysis (CC)                                 |           | C3     |             |       |     |        |      |   | -10 |
| 7  | INPUTS THEN FEED INTO ACTIVITY 9 OF SOE NARRATIVE TIME FRAME        |           |        |             |       |     |        |      |   |     |

|    |   |         |       |       | 1998 |     |      | -     | 1999 | -   |
|----|---|---------|-------|-------|------|-----|------|-------|------|-----|
|    | POLICY - EXISTING POLICY REVIEW   | J F M A | r r W | ASOND | JFMA | U U | A S  | O N O | J F  | MAM |
|    | Compile information on existing policies (CC with input from RC & HQ)       |         |       |       |      |     |      |       |      |     |
| 2  | Prepare (10 page) working drafts of (sub)regional policy responses (CC)     |         |       |       |      | 7   |      |       |      |     |
| 8  | Send working drafts to RC and HQ (CC)                                       |         | -     | •     |      |     |      |       |      |     |
| 4  | Review working drafts (RC, HQ)  |         |       |       |      |     |      | -     |      |     |
| 22 | Return review comments to CC (RC, HQ)                                       |         |       | •     |      |     |      |       |      |     |
| 60 | Revise working drafts (CC with RC)  |         |       |       |      |     |      | -     |      |     |
| 7  | Send revised drafts to RC and HQ (CC)                                       |         | 100   | •     |      |     |      | -     |      |     |
| 80 | Global Policy Workshop - discuss revised drafts                             |         |       |       | •    |     |      |       |      |     |
| 6  | Compile 1st Draft (excluding global overviews) of GEO 2 (RC, HQ)            |         |       |       |      |     |      |       |      |     |
| 10 | 1st Draft of GEO 2 ready  |         |       |       | •    |     |      | -     |      |     |
| =  | Regional consultations and chapter review (RO, RC, HQ, EW, CC)              |         |       |       |      |     |      | -     |      |     |
| 12 | Revise and compile 2nd Draft (including global overviews) of GEO 2 (CC, HQ) |         |       |       |      |     | 1000 | -     |      |     |
| 5  | 2nd Draft of GEO 2 ready  |         |       |       |      |     | •    |       |      |     |
| 14 | Limited second round of reviews and consultations (HQ)                      |         |       |       |      |     |      |       |      |     |
| 15 | Compile Final Draft of GEO 2, incorporating inputs/comments (HQ)            |         |       |       |      |     |      |       |      |     |
| 16 | Final Draft of GEO 2 ready  |         | -     |       |      |     |      | •     |      |     |
| 17 | GEO 2 production, including final editing (Publisher, HQ)                   |         |       |       |      |     |      |       |      |     |
| 8  | GEO 2 camera ready copy   |         |       |       |      |     |      |       | •    |     |
| 10 | GEO 2 Book printed  |         |       |       |      |     | -100 |       |      | •   |
| 20 | GEO 2 launch period (ED, HQ, RO)  |         |       |       |      |     |      |       |      |     |
| 21 | UNEP Governing Council 20   |         |       |       |      |     |      |       | - (- | •   |

|    |   | 1997  |   |     |     |     | 0      | 1998 |      |      |     |     | A STATE | 1999 |     |       |
|----|---|-------|---|-----|-----|-----|--------|------|------|------|-----|-----|---------|------|-----|-------|
| ₽  | POLICY - ENVIRONMENTAL AGREEMENTS   | 7     | M | N   | A L | 0 8 | O<br>Z | ш    | MAIN | , N  | A L | 0 8 | O<br>N  | 1    | MA  | Σ     |
| 4  | Compile (sub)regional information on international and regional agreements (CC, R |       |   |     |     |     |        |      |      |      |     |     |         |      |     |       |
| 2  | Meeting of the Convention Secretariats (HQ, CS)                                   |       |   |     | •   |     |        |      |      |      |     |     |         |      |     |       |
| 2  | Finalise annotated chapter outline (Steering Group)                               | ol ke |   |     |     | 7   |        |      |      |      |     |     |         |      |     | 1     |
| 4  | Compile information pack (HQ)   |       |   |     |     |     |        |      |      |      |     |     |         |      |     |       |
| S  | Send information pack to RC and CC (HQ)   |       |   |     | •   | (4) |        |      |      |      |     |     |         |      |     |       |
| 9  | Prepare draft global sections of the chapter (Steering Group)                     |       |   |     |     |     |        |      |      |      |     |     | -       |      | L   |       |
| 7  | Prepare and revise working drafts of regional sections of the chapter (CC)        | -     |   |     |     |     |        |      |      | -    |     | F   | -       |      |     |       |
| 00 | Send working drafts of regional sections to RC and HQ (CC)                        |       |   |     |     | •   |        |      |      | 11.0 |     | -   | -       |      | ļ., |       |
| 6  | Review working drafts of regional sections (RC, HQ)                               | -     |   |     |     |     |        | 1    |      |      |     | Ŀ   |         |      |     |       |
| 10 | Return review comments to CC (RC, HQ)   |       |   |     | 72  | •   |        |      |      |      |     |     |         |      |     | 7,115 |
| 11 | Send revised draft regional sections to RC and HQ (CC)                            |       |   |     | _   |     | •      |      |      |      |     |     |         | -    |     |       |
| 12 | Global Policy Workshop - discuss revised drafts                                   |       |   |     |     |     |        | •    |      |      |     |     |         | -    |     |       |
| 13 | Compile 1st Draft (excluding global overviews) of GEO 2 (RC, HQ)                  |       |   |     |     |     | COMP.  |      |      | -    |     | -   |         | -    |     |       |
| 14 | 1st Draft of GEO 2 ready  |       |   |     |     |     |        | •    | -    |      |     |     |         |      | -   |       |
| 5  | Regional consultations and chapter review (RO, RC, HQ, EW, CC)                    |       |   | -5  |     |     |        |      |      |      |     |     |         | -    | -   |       |
| 16 | Compile 2nd Draft (including global overviews) & incorporate inputs/comments (HQ) |       |   | -   |     |     | -      |      |      |      |     |     |         |      | -   | 1     |
| 17 | 2nd Draft of GEO 2 ready  |       |   |     |     |     |        |      | - 1  |      | •   |     |         | -    | L   | 1     |
| 18 | Limited second round of reviews and consultations (HQ)                            |       |   |     |     |     |        |      |      |      |     |     |         |      |     |       |
| 19 | Compile Final Draft of GEO 2, incorporating inputs/comments (HQ)                  | -10   |   |     |     |     |        |      |      |      |     |     |         | -    |     |       |
| 20 | Final Draft of GEO 2 ready  |       |   |     |     | 200 |        |      |      |      |     | •   | , : ·   |      | ļ., |       |
| 21 | GEO 2 production, including final editing (Publisher, HQ)                         |       |   |     |     |     |        | 7 1  |      |      |     |     |         |      |     | 1     |
| 22 | GEO 2 camera ready copy   | -     |   |     |     |     | 4.00   |      |      |      | -   |     |         | •    |     |       |
| 23 | GEO 2 Book printed  |       |   |     |     |     |        |      |      |      | -   |     |         | •    | 0   |       |
| 24 | GEO 2 launch period (ED, HO, RO)  |       |   | 100 |     |     |        |      |      |      |     |     |         |      |     | 5000  |
| 25 | LINEP Governing Council 20  | -     |   |     |     |     |        |      | 3    |      |     |     | ŀ       | F    |     | (     |

|    |  | 1997 |    |     |          |   |       |   |   | 1998   |    |      |        |       |   |   |   | 1999 |   |       |     |
|----|--|------|----|-----|----------|---|-------|---|---|--------|----|------|--------|-------|---|---|---|------|---|-------|-----|
| ₽  | POLICY - REGIONAL POLICY OPTIONS STUDIES   | ¬    | Σ  | A   | 7        | A | S     | 0 | 0 | ц<br>Э | MA | Σ    | ے<br>ب | A     | S | Z | 0 | 7    | 2 | A     | M   |
|    | Prepare annotated outline for the study (CC)   |      |    |     |          |   | 1222  | - |   |        |    |      |        | 11111 |   |   |   |      |   |       |     |
| 2  | Identify relevant existing regional studies & institutes with relevant expertise(CC) |      |    | -   |          |   | Eleca |   |   |        |    |      |        |       |   | - |   | -    |   |       |     |
| m  | Identify data and information requirements (CC)                                      |      |    |     |          |   | E2002 | - |   |        |    |      | -      | -     |   | - |   |      |   |       | -   |
| 4  | Identify research and capacity building needs (CC)                                   |      |    |     |          |   | tions |   | - |        |    |      | = 1    |       |   | - |   | -    |   | -     |     |
| ιΩ | Send 10-page study outlines and findings of 2, 3, & 4 to HQ (CC)                     | 20   | -  |     |          |   | •     | - | - |        | -  |      |        |       |   | - |   | -    |   | 1     | 100 |
| 9  | Review study outlines and arrange technical expertise (HQ, selected experts)         |      |    |     |          |   |       |   |   | -      |    |      | 1      |       |   | - |   | -    | - |       | +   |
| 7  | Regional Policy Options Studies Workshop   |      |    |     |          |   |       | • |   |        |    |      | 1      |       |   | - |   | -    |   |       | -   |
| 00 | Carry out policy options studies (CC)  |      |    |     |          |   |       |   |   |        | -  |      |        |       |   | - |   | -    |   |       | -   |
| 00 | Prepare draft policy options study summaries and conclusions (CC)                    |      |    |     | *******  | - |       |   |   | [222]  |    | -    |        |       |   | - |   | -    |   |       | -   |
| 10 | Global Policy Workshop - discuss draft study summaries and conclusions               |      |    |     |          |   |       |   |   | •      |    |      | =      |       |   |   |   |      |   | -     | -   |
| 11 | Compile 1st Draft (excluding global overviews) of GEO 2 (RC, HQ)                     |      |    | 111 |          |   |       |   | - |        |    |      | -      |       |   | - |   | -    |   |       | -   |
| 12 | 1st Draft of GEO 2 ready   | -    |    |     |          |   |       | - |   | •      | 0  | -    |        |       |   | - |   | -    |   |       | +   |
| 13 | Regional consultations and chapter review (RO, RC, HQ, EW, CC)                       |      |    | -   | ******** | - |       |   |   |        |    |      | -      |       | - | - |   | -    |   | -     | -   |
| 14 | Revise and compile 2nd Draft (including global overviews) of GEO 2 (CC, HQ)          |      |    | -   |          |   |       |   |   |        |    |      |        | E223  |   | - |   | -    |   |       | -   |
| 15 | 2nd Draft of GEO 2 ready   |      |    | - 0 |          |   | -     |   |   | -      |    |      | -      | •     |   | - |   | -    |   |       | -   |
| 16 | Limited second round of reviews and consultations (HQ)                               |      | -  |     |          |   |       |   |   |        |    |      |        |       |   | - |   | +-   |   | 10.00 | -   |
| 17 | Compile Final Draft of GEO 2, incorporating inputs/comments (HQ)                     |      | +  |     |          |   |       |   |   |        |    |      |        |       |   |   |   | -    |   | 1 3   | 1-  |
| 18 | Final Draft of GEO 2 ready   |      |    |     |          |   |       |   | - |        |    |      |        |       |   | • |   | -    |   |       | -   |
| 19 | GEO 2 production, including final editing (Publisher, HQ)                            |      | -1 |     |          |   |       |   |   |        |    | 1223 |        |       |   |   |   |      |   | -     | +   |
| 20 | Prepare policy study report(s) for publication in GEO Tech. Report Series (HQ, CC)   |      |    | -   |          |   |       |   |   |        |    |      |        |       |   |   |   |      |   |       | +   |
| 21 | GEO 2 camera ready copy  |      |    |     |          |   |       |   |   |        |    |      | (11    |       |   | - |   | •    | - |       | 1-  |
| 22 | GEO 2 Book printed   |      | -  |     |          |   |       |   |   |        |    |      |        |       | - | - |   | -    | • |       | +-  |
| 23 | GEO 2 launch period (ED, HQ, RO)   |      |    |     |          |   |       |   |   |        |    |      | -      |       | - | - |   | -    |   |       | -   |
| 24 | UNEP Governing Council 20  |      |    | -   |          |   |       |   |   |        |    |      |        |       |   | - |   | -    | - | -     | (1) |

|    |  | 1997 |   |        |   |   |     |       |   |       | 1998 | -22  |   |      |    |      |   |   |   | 16       | 1999 |          |     |      |
|----|--|------|---|--------|---|---|-----|-------|---|-------|------|------|---|------|----|------|---|---|---|----------|------|----------|-----|------|
| 0  | EMERGING ISSUES CHAPTER  | 7    | Σ | A      | N | ٦ | A   | 0 8   | Z | 0     | -    | F    | A | N    | -  | A    | S | 0 | Z | 0        | ш    | MA       | ×   | 1    |
| -  | Project Steering Committee Meeting (Steering Committee)                            |      |   |        | • | • |     |       | - |       | -    | -    |   |      |    |      |   |   | - | +        |      | -        | -   |      |
| 2  | Prepare, review and finalise questionnaire (SCOPE, HQ, CC, RC, EW)                 |      |   | -      | - |   |     | 4     | - |       |      |      |   |      | -  | -    |   |   | - | -        |      | -        |     | - 3  |
| 0  | Send questionnaire to CC, RC, EW and scientists (HQ, \$COPE)                       |      |   |        |   | • |     | -     |   |       |      | -    |   |      |    | -    |   |   | - | -        |      | 1        | -   | -    |
| 4  | Completion of questionnaire by respondents   |      |   | -      |   |   |     | £2220 | _ |       |      | -    |   |      | -  |      |   |   | - | -        |      | -        | -   | -    |
| 2  | Receipt of completed questionnaires (HQ, SCOPE)                                    |      |   |        | - |   |     | •     | _ |       |      |      |   |      |    | -    |   |   | - | -        |      | +-       | -   | -    |
| 9  | Target other selected groups for emerging issues input (HQ)                        |      |   |        | - |   |     | £2500 | - |       |      | -    |   |      | h  |      |   | 1 | 1 | -        | -    | -        |     | -    |
| 7  | Compile existing documentation on emerging issues (SCOPE, HQ, RC, CC, EW)          |      |   | -      |   |   |     |       | - |       | 1    | -    |   |      | -  |      |   |   | - | +        |      | -        |     |      |
| 00 | Input from UNEP IE Industry & Trade Associations Consultative Meeting              |      |   | -      |   |   | -   | •     |   |       | 1    | -    |   |      | 1. | 1    |   | 1 | t | -        |      | -        | -   |      |
| 6  | Quest. analysis/follow-up/prep. of working draft of emerging issues chapter (SCOPE | 7.5  |   | -      |   |   | -   | 12223 |   |       | -    | -    |   | 100  | -  | -    |   |   | H | +        |      | -        |     | -    |
| 10 | SCOPE Executive Committee Steering Meeting (SCOPE Ex.Comm., HQ)                    |      | 1 |        |   |   |     |       | • | Ī     | -    | -    |   |      | t  |      |   | T | - | +        | Ŀ    | -        | -   | 1.   |
| 11 | Input by IGBP during SAC V Meeting   | -    |   | 1 20   |   |   |     |       | - | •     |      | 1    |   | P    | -  |      |   |   | - | +        |      | -        |     | -    |
| 12 | Send working draft of chapter to HQ (SCOPE)  | l la |   | 10 223 |   |   |     | -     |   | •     | -    | - 15 |   |      |    |      |   | - | - | +        |      | -        | -   | -    |
| 13 | Review of working draft of chapter (HQ, RC, CC, EW)                                | -    |   |        |   |   |     |       |   |       | 1000 | ļ.,  | - |      | -  |      |   | - | + | +        |      | +        | -   | -    |
| 14 | SCOPE-GEO Workshop - discussion of draft chapter                                   | 300  |   |        | - |   |     | -     |   |       | •    |      |   | -    | -  |      |   | t | - | +        |      | -        | -   | -    |
| 15 | Compile 1st Draft (excluding global overviews) of GEO 2 (RC, HQ)                   |      |   | - 1    |   |   |     | -     | - | 60259 |      |      |   |      | H  |      |   |   | + | +        |      | -        | -   |      |
| 16 | 1st Draft of GEO 2 ready   |      |   |        |   |   |     |       |   |       |      | •    |   |      |    |      |   | - | - | $\vdash$ |      | -        |     |      |
| 17 | Regional consultations and chapter review (RO, RC, HQ, EW, CC)                     |      |   |        |   |   |     |       |   |       |      |      |   |      |    |      |   | - | - | +        |      | +        |     | 1    |
| 18 | Revise and compile 2nd Draft (including global overviews) of GEO 2 (CC, HQ)        |      |   |        |   |   |     |       |   |       |      |      |   |      |    | 5555 |   | 1 | 1 | +        |      | +        |     | 1122 |
| 19 | 2nd Draft of GEO 2 ready   |      |   |        |   |   |     |       |   | Г     |      |      | 1 |      | -  | (4)  |   | 1 | - | -        |      | -        |     | 1    |
| 20 | Limited second round of reviews and consultations (HQ)                             |      |   |        |   |   |     |       |   |       |      |      |   |      | 1  |      |   | 1 |   | -        | -    |          |     | -    |
| 21 | Compile Final Draft of GEO 2, incorporating inputs/comments (HQ)                   |      |   |        |   |   |     |       |   |       |      |      |   |      | 1  |      |   |   | + | -        |      |          |     | 1 .  |
| 22 | Final Draft of GEO 2 ready   |      |   |        |   |   | 111 | -     |   |       | -    |      |   |      |    |      |   | • |   | -        |      |          |     | -    |
| 23 | GEO 2 production, including final editing (Publisher, HQ)                          |      |   |        |   |   | -   |       |   |       | 1    | -    | - | 1000 |    |      |   |   |   |          | 1    | -        |     |      |
| 24 | GEO 2 camera ready copy  |      |   |        |   |   |     |       |   |       |      | -    |   |      | -  |      | 1 | - | - | -        |      | 1        | -   |      |
| 25 | GEO 2 Book printed   | 7.5  |   |        |   |   |     |       |   |       |      | -    |   |      |    |      | 1 |   | - | -        |      | <b>③</b> |     | 1    |
| 26 | GEO 2 launch period (ED, HQ, RO)   |      |   |        |   |   |     |       |   | -     |      |      |   |      | -  |      | - | - | - | -        |      |          |     | -    |
| 27 | UNEP Governing Council 20  |      |   |        |   |   |     |       |   |       |      |      |   |      |    |      |   | - |   | -        |      |          | (4) | 6    |

#### ANNEX V: REGIONAL BREAKDOWN - June 1997

A few general points to keep in mind while using this sub-division

- The breakdown is to be used for the regional studies and for reporting findings within the 7 regions in GEO-2 (to allow for some differentiation while reporting on the 7 regions and on recommendations to policy makers).
- Spatially continuous grouping was considered a prerequisite. Some sort of socio-economic /
  political cohesion was considered essential (comparable histories of development, current socioeconomic state as well as prospects for the future).
- The choice of breakdown may have a considerable influence on the eventual findings, for example
  with respect to unequal development between regions. A short uncertainly analysis will be prepared
  to get a feel of how much our findings are dependent on the sub-regional breakdown.
- Findings will often have to be more detailed spatially to make sense, especially when it comes to
  assessing the impact on the environment. Some parts of the analysis will have to be presented in
  terms of seas, forests, drainage basins rather than as averages over the regions or sub-regions. Also
  GIS can be used to do some overlay work.
- For the sub-regions that are not (yet) covered by a Collaborating Centre, a pragmatic solution was
  decided upon, namely: Collaborating Centres in the same region will take the responsibility together
  to cover such countries (detailed in the overall regional workprogrammes).
- Some countries will be considered on two or more sub-regions because of their memberships in several political groupings (eg. Thailand and Mexico).
- Japan, Australia & New Zealand will be refereed to as a separate sub-group as the need arises during reporting on Asia and the Pacific.

#### **AFRICA**

Northern Africa

Algeria, Egypt, Libya, Morocco, Tunisia

Western and Central

Africa

Benin, Burkina Faso, Cameroon, Cape Verde, Central African Republic, Chad, Congo, Côte d'Ivoire, Equatorial Guinea, Gabon, Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Sao Tomé & Principe, Senegal, Sierra Leone, Togo, Zaire

Eastern Africa & Indian

Ocean Islands\*

Burundi, Comoros, Djibouti, Eritrea, Ethiopia, Kenya, Madagascar, Mauritius, Rwanda, Reunion (France), Seychelles, Somalia, Sudan, Uganda

Southern Africa

Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Zambia, Zimbabwe

countries will be covered by NESDA, CEDARE and IMERCSA

#### **ASIA & THE PACIFIC**

South Asia

Afghanistan, Bangladesh, Bhutan, India, Islamic Rep. of Iran, Maldives, Nepal, Pakistan, Sri Lanka

South East Asia

Brunei Darussalam, Indonesia, Malaysia, Philippines, Singapore, Thailand

**Greater Mekong Region** 

Cambodia, China (only Yunnan Province), Lao PDR, Myanmar, Thailand, Viet Nam

North West Pacific

and East Asia

China, DPR Korea, Japan, Republic of Korea, Mongolia, Russian Federation

re

Australasia and the Pacific

American Samoa (USA), Australia, Cook Islands, Fiji, French Polynesia (FR), Guam (USA), Kiribati, Micronesia, Marshall Islands, Nauru, New Caledonia (FR), New Zealand, Northern Mariana Islands (USA), Niue, Papua New Guinea, Pitcairn Islands (UK), Republic of Palau, Solomon Islands, Tokelau (NZ), Tonga, Tuvalu, Vanuatu, Wallis

and Futuna (FR), Western Samoa

#### **EUROPE** (and Central and North Asia)

Western Europe

Andorra, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Holy See, Iceland, Ireland, Israel, Italy, Liechtenstein, Luxembourg, Malta, Monaco, Netherlands, Norway, Portugal, San Marino, Spain, Sweden, Switzerland, United Kingdom

Central Europe

Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Former Yugoslav Republic of Macedonia, Slovakia, Slovenia, Turkey, Yugoslavia

continued .../-

Eastern Europe

Armenia, Azerbaijan, Belarus, Russia, Georgia, Moldova, Ukraine

(data on the European and the Asian part of Russia will be kept separate as much as possible to keep the option open of reporting on them

separately)

Central Asia or Stans

Kazakstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan

(final name to be decided. Within the UN System the "Stans" are nowadays officially included in the Asia Pacific Region. However, for GEO-2 data collection and draft reporting most material will still come from the European region. A final decision will need to be taken during the SOE section drafting meeting in December 1997).

#### LATIN AMERICA & THE CARIBBEAN

Caribbean

Anguilla (UK), Antigua and Barbuda, Aruba (NL), Bahamas, Barbados, British Virgin Islands (UK), Cayman Islands (UK), Cuba, Dominica, Dominican Republic, Grenada, Guadeloupe (FR), Guyana, Haiti, Jamaica, Martinique (FR), Montserrat (UK), Netherlands Antilles (NL), Puerto Rico (USA), St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad & Tobago, Turks and Caicos (UK), U.S. Virgin Islands (USA)

Meso-America

Belize, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama

South America

Argentina, Bolivia, Brasil, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay, Venezuela

NORTH AMERICA

Canada, Mexico, United States

WEST ASIA

**Arabian Gulf** 

Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, UAE

Mashreq

Iraq, Jordan, Lebanon, Palestine, Syria, Yemen

#### POLAR REGIONS & DEEP OCEANS

Arctic

the 8 Arctic countries are: Canada, Denmark (Greenland), Finland, Iceland, Norway, Russian, Sweden, US (Alaska)

Antarctica

ANNEX VI:

DATA TABLES

| Subr     | Subregion:   |            |  |             |             |            |      |                  |        |
|----------|--|------------|--|-------------|-------------|------------|------|------------------|--------|
| Country: | ntry:  |            |  |             |             |            |      |                  |        |
| Tota     | Total area (ha):   |            |  |             |             |            |      |                  |        |
| Tota     | Total land area (ha):  |            |  |             |             |            |      |                  |        |
| Coas     | Coast line (km):   |            |  |             |             |            |      |                  |        |
|          |  |            |  |             |             |            |      |                  |        |
|          | TYPE OF DATA/BASIC INDICATOR NAME  | DAT        | DATA (Internationally/regionally compiled) | tionally/re | gionally co | mpiled)    | DAT  | DATA (National)1 | al)1   |
|          |  | Base Year² | Data                                       | Year³       | Data        | Source*    | Year | Data             | Source |
| 1        | ENVIRONMENTAL STATUS AND TRENDS  |            |  |             |             |            |      |                  |        |
| 1.1      | Land   |            | *  |             |             |            |      |                  |        |
| -        | Arable land (total ha)  * permanent pasture (ha)   |            |  |             |             |            |      |                  |        |
| 7        | Irrigation percent of arable land (%)  |            |  |             |             | FAO        |      |                  |        |
| 3        | Land affected by desertification (ha)  |            |  |             |             |            | k    |                  |        |
| 4        | Areas affected by salinization and waterlogging (ha)   |            |  |             |             |            |      |                  |        |
| 2        | Areas affected by moderate-severe erosion (total ha)  * moderate erosion (% of total)  * severe erosion (% of total) |            |  |             |             |            |      |                  |        |
| 9        | Km of road (km)  |            |  |             |             | WB         |      |                  |        |
| 1.2      | Forests  |            |  |             |             |            |      |                  |        |
| 7        | Total forest area (ha)  * natural (ha)  * plantation (ha)  |            |  |             |             | FAO, UNECE |      |                  |        |
| ∞        | % annual change in forest area 1989-90  * natural  * plantation  |            | a .  | ,           |             | FAO, UNECE |      |                  |        |
| 6        | Total round wood production (1000 m³)  |            |  |             | 11          | FAO        |      |                  | 8      |
|          |  |            |  |             |             |            |      |                  |        |

| WB             | * totally protected land areas (ha) - number * narrially protected land areas (ha) |
|----------------|--|
|                | Partitated Province data areas (stay)  |
|                | * totally protected marine areas (ha) - number - number                            |
|                | * partially protected marine areas (ha) - number                                   |
|                | 11 Wilderness/non-gazetted areas (ha)  |
|                | 12 Total area of wetlands (ha)   |
| cies WCMC, WRI | nreatened species as a percent of total native species                             |
|                |  |
|                | - plant  |
|                | bird - reptile   |
|                | - amphibian<br>- freshwater fish   |
|                | * threatened species:  |
|                | - plant  |
|                | - bird -   |
|                | - bird<br>- reptile<br>- amphibian   |
|                | - reptile<br>- amphibian<br>- freshwater fish                                      |
|                |  |
|                | threa  |
| cies           |  |
|                |  |
| *              |  |

|   | 2 1  |   |                     |   | G                        |           |                          |                       |  |            |                                  |                                   |                                      |                             |
|---|--|---|---------------------|---|--------------------------|-----------|--------------------------|-----------------------|--|------------|----------------------------------|-----------------------------------|--------------------------------------|-----------------------------|
| МНО   | мно  | >   |                     | WRI   |                          |           |                          | WRI                   | WRI  |            | OECD, UNEP                       | OECD, UNEP                        | CDIAC                                |                             |
|   |  | ¥.  |                     |   |                          |           |                          |                       |  |            |                                  |                                   |                                      |                             |
|   |  |   |                     |   |                          |           |                          | ,                     |  |            |                                  |                                   |                                      |                             |
|   | d d  |   | 20                  |   |                          |           |                          | . 14                  |  |            |                                  |                                   |                                      |                             |
| 16% of total population with access to sanitation  * % of rural population with access  * % of urban population with access | % of total population with access to safe drinking water  * % of rural population with access  * % of urban population with access | Wastewater treatment coverage (% of wastewater treated) | BOD in water bodies | Total freshwater fish production (tonnes)  * wild catch (tonnes)  * from aquaculture (tonnes) | Marine and coastal areas | EEZ (km²) | Total mangrove area (ha) | Coastal areas at risk | Total marine fish catch (tonnes)  * wild catch (tonnes)  * from aquaculture (tonnes) | Atmosphere | Emissions of sulphur oxides (kg) | Emissions of nitrogen oxides (kg) | Total CO2 emission (million tonnes). | Total CH4 emission (tonnes) |
| 16  | 17   | 18  | 19                  | 20  | 1.5                      | 21        | 22                       | 23                    | 24   | 1.6        | 25                               | 26                                | 27                                   | 28                          |

|  |                                  | . 1                             |   |   |   |                               |   |                    |                       |            |                                   |                      |  |
|--|----------------------------------|---------------------------------|---|---|---|-------------------------------|---|--------------------|-----------------------|------------|-----------------------------------|----------------------|--|
| ě.   |                                  |                                 |   |   |   |                               |   |                    |                       |            |                                   |                      |  |
|  |                                  |                                 |   |   |   |                               | u u   |                    |                       |            |                                   |                      |  |
| овср   |                                  | UNPOP, WB,<br>WRI               | UNPOP, WB,<br>WRI                       | WRI   | UNHCS?  | UNSTAT, WB                    | WB  |                    |                       | UNPOP      | UNPOP                             | UNPOP                | UNESCO                                   |
|  |                                  |                                 |   |   |   |                               |   |                    | 4                     |            |                                   |                      |  |
| 186  |                                  |                                 |   |   |   |                               |   |                    |                       |            |                                   |                      |  |
|  |                                  |                                 |   |   |   |                               |   |                    | 1                     |            |                                   |                      |  |
| * '  |                                  |                                 |   |   |   |                               |   |                    |                       |            |                                   |                      |  |
| Ambient concentrations of pollutants in urban areas:  * ozone (ppb)  * CO (ppm)  * SPM (ppb)  * SO2 (ppb)  * NO2 (ppb)  * NO (ppb) | Urban and industrial environment | Urban population (total number) | Urban population annual growth rate (%) | Number of cities with over 1 million population | Generation of industrial and municipal solid waste (tonnes) | Industrial production (% GDP) | Average annual industrial growth rate (%)  * 1980-90  * 1990-94 | UNDERLYING CAUSES: | Population and social | Population | Annual population growth rate (%) | Total fertility rate | Adult literacy (%)  * % male  * % female |
| 29   | 1.7                              | 30                              | 31                                      | 32  | 33  | 34                            | 35  | 2.                 | 2.1                   | 36         | 37                                | 38                   | 39                                       |

|  |  |                       |   |  | ,                              |                                     |  |                            |  |
|--|--|-----------------------|---|--|--------------------------------|-------------------------------------|--|----------------------------|--|
| UNESCO   | ПО   | WHO,WB                | UNSTAT,                                 | UNESCO                                   | UNESCO                         | UNESCO                              |  |                            | UNSTAT, WB UNSTAT, WB  |
|  |  |                       | (50)                                    |  |                                |                                     |  |                            |  |
|  |  |                       |   |  |                                |                                     |  |                            |  |
| Education expenditure:  * total (millions US \$)  * public (millions US \$)  * primary and secondary (% of total)  * tertiary (% of total) | Total labour force (% population)  * agriculture (%)  * industry (%)  * services (%)  female-male gap index (male=100) | Population per doctor | Telephones (main lines/100 inhabitants) | Daily newspapers (copies per 100 people) | Radios (number per 100 people) | Televisions (number per 100 people) | Computers (number per 100 people) - Internet connections (number per 100 people) | Consumption and production | Total commercial energy production (thousand tonnes of oil equivalent)  * % fossil fuels  * % natural gas  * % from hydro  * % from muclear  * % from geothermal  * % from biomass  * % from solar  Total commercial energy use (thousand tonnes of oil equivalent):  * share of world consumption (%)  Traditional fuel (% of total energy consumption) |
| 40   | 41   | 42                    | 43                                      | 4  | 45                             | 46                                  | 47   | 2.2                        | 48 49 50   |

|  |   |  |   |   |                                     |   | ±)   |   |                                 |                                       |                                   | 2        | V   |                       |
|--|---|--|---|---|-------------------------------------|---|--|---|---------------------------------|---------------------------------------|-----------------------------------|----------|---|-----------------------|
|  |   |  |   |   |                                     |   |  |   |                                 |                                       |                                   |          |   | 1                     |
| OECD,WB  | UNSTAT, WB  | WRI  |   |   |                                     | n<br>A                                  | WB   | WB  | WB?                             | UNSTAT                                |                                   |          | WB,PENN   | WB                    |
|  |   |  |   |   |                                     |   |  |   |                                 |                                       |                                   |          |   |                       |
|  |   |  |   |   |                                     |   |  |   |                                 |                                       |                                   |          |   |                       |
|  |   |  |   |   |                                     |   |  |   |                                 |                                       |                                   |          |   |                       |
|  |   | ė  |   |   |                                     |   |  |   |                                 |                                       |                                   |          |   |                       |
| Commercial energy efficiency (US \$ GDP/ kilojoules) | Energy imports (% of commercial energy consumption) | Share of consumption of renewable energy sources (%) | Total electricity generation (GWh)  * thermal (including oil and gas) (%)  * hydro (%)  * nuclear (%)  * non-hydro renewables (%) | Electricity losses in transmission and distribution (% of generation) | Total electricity consumption (GWh) | % population with access to electricity | Distribution of GDP by production:  * agriculture (%)  * industry (%)  * manufacturing (%)  * services (%) | Distribution of GDP by demand:  * general govt consumption (%)  * private consumption (%)  * gross domestic investment (%)  * gross domestic saving (%) | Military expenditure (% of GDP) | Motor vehicles (total number running) | [Production of waste (under 1.7)] | Economic | Real GDP:  * billion US \$ (PPP)  * billion US \$ (MER) | Annual GDP growth (%) |
| 51   | 52  | 53   | 42  | 55  | 99                                  | 57                                      | 28   | 29  | 09                              | 19                                    |                                   | 2.3      | 62  | 63                    |

| u.  |  |  |  |                                    |               |                       |  |  |                                      |                         |  |
|---|--|--|--|------------------------------------|---------------|-----------------------|--|--|--------------------------------------|-------------------------|--|
| WB,FFAD   | UNCTAD, WB,  | UNCTAD, WB,<br>UNSTAT  | UNSTAT   | UNSTAT,<br>UNCTAD, IMF             | IMF,WB        | OECD                  | WB, OECD   | WB,OECD  | IMF,WB                               |                         |  |
|   |  |  |  |                                    |               |                       |  |  | ć                                    |                         |  |
| b 5   | -  |  |  |                                    |               |                       |  |  |                                      |                         | d  |
| ×   |  |  |  |                                    |               |                       |  |  |                                      |                         |  |
|   |  |  |  |                                    |               |                       |  |  |                                      |                         |  |
| Total number of people in absolute poverty (millions)  * rural (% of total)  * urban (% of total) | Total exports (million US \$)  * manufactures (%)  * fuels, minerals and metals (%)  * other primary commodities (%)  * services (%) | Total imports (million US \$)  * food (% of total)  * fuels (% of total) | Trade dependency (exports + imports as % of GDP) | Terms of trade (selected year=100) | Inflation (%) | Unemployment (rate %) | Total debt external (million US \$)  * as % of GNP | Total debt service (as % of exports of goods and services) | Foreign direct investment (% of GDP) | Environmental (natural) | Number of natural disaster events:  * earthquakes  * cyclones/typhoons  * hurricanes  * floods  * volcanic eruptions  * tsunamis  * landslides |
| 2   | 65   | 99   | 29   | 89                                 | 69            | 70                    | 71   | 27   | 73                                   | 2.5                     | 74   |

|   | 7.75                          |                             |                      |                                       |                                  |  |                       |                           |                                 |   |                                     |   |                                |                     |                         |
|---|-------------------------------|-----------------------------|----------------------|---------------------------------------|----------------------------------|--|-----------------------|---------------------------|---------------------------------|---|-------------------------------------|---|--------------------------------|---------------------|-------------------------|
| CRED  |                               |                             |                      |                                       | UNPOP,WB                         | мно  |                       |                           | FAO,WB                          | WRI                                       | WRI,FAO(?)                          | WB  | UNDP,FAO,<br>OECD              | WRI,WB              | WRI/FAO                 |
|   |                               |                             |                      |                                       |                                  |  |                       |                           |                                 |   |                                     |   |                                |                     |                         |
|   |                               |                             |                      | T.                                    |                                  |  |                       |                           |                                 |   |                                     |   |                                |                     |                         |
|   |                               |                             |                      |                                       |                                  |  |                       |                           |                                 |   |                                     |   |                                |                     |                         |
|   |                               |                             |                      |                                       |                                  |  |                       |                           |                                 |   |                                     |   |                                |                     |                         |
| Human and economic loss due to natural disasters:  * number of persons  * US \$ | OTHER SOCIO-ECONOMIC ELEMENTS | Human health and well-being | Crude death rate (%) | Infant mortality rate per 1000 births | Life expectancy at birth (years) | Number of deaths due to:  * pulmonary/respiratory diseases  * water-related diseases (malaria, diarrhoea, schistosomiasis, filariasis, etc.) | [Poverty (under 2.3)] | Agricultural productivity | Agricultural production (% GDP) | Food production index (selected year=100) | Average agricultural yield (tonnes) | Average annual agricultural growth rate (%)  * 1980-90  * 1990-94 | Pesticide consumption (tonnes) | Fertilizer use (kg) | Livestock units (units) |
| 75  | 8                             | 3.1                         | 92                   | 11                                    | 78                               | 79   |                       | 3.2                       | 80                              | 81  | 82                                  | 83  | 84                             | 85                  | 98                      |

| KESPONSES  |   |                                       |                 |     |  |
|--|---|---------------------------------------|-----------------|-----|--|
| A party to international legal agreements:  * Montreal Protocol  London Amendment  Copenhagen Amendment  Biodiversity Convention  * Besertification Convention  Climate Convention  Climate Convention  Convention on Trade of Endangered Species  Convention on Migratory Species |   |                                       | UN Legal Office |     |  |
| Mandatory EIA  |   |                                       |                 |     |  |
| Presence of action plans/programmes:  * environmental (umbrella type)  * sectoral:  - biodiversity  - climate/energy  - air pollution (emissions)  - industrial effluent  - ozone layer  - soil/land/desertification  - coastal protection   | > |                                       |                 | e e |  |
| * environmental (umbrella legislation)  * sectoral: - biodiversity - climate/energy - air pollution (emissions) - industrial effluent - ozone layer - soil/land/desertification - coastal protection   |   | e e e e e e e e e e e e e e e e e e e |                 |     |  |

# ENDNOTES:

- national data, particularly for items where data were not available from international datasets/sources. Countries may also wish to indicate This column enables countries to indicate the latest available data from national sources. The countries can indicate the latest available available national data if there are discrepancies between available national data and data obtained from international sources. that the published data source be mentioned for those national data (no grey literature data should be used)
- As far as possible, the data should be collected for the years 1996. Where data are not available, the latest data should be indicated 3
- The base year will be [1989/1990]. This should allow the trends to be abalysed in comparison with the 1996 dta. In those cases where meaningful trends can be identified only over longer periods, include as long time series as permitted by the availability of acceptable quality 3
- This column lists the main international data holders who have published the data in a convenient form. These data holders are not necessarily the original sources of data but have collected them from various sources at national level and harmonized them. 4.

#### NOTES/GUIDELINES ON THE DATA

- 3 Land affected by desertification (total ha): An indicator for which data are unlikely to be easily available. The methodology for deriving this indicator is found in the CSD Indicators of Sustainable Development Framework and Methodologies (p.263)
- Areas affected by salinization and waterlogging (total ha): An indicator for which data are unlikely to be easily available. The methodology for deriving this indicator is found in the CSD Indicators of Sustainable Development Framework and Methodologies (p.293).
- Protected area as a percent of total area: The methodology for deriving this indicator is found in the CSD Indicators of Sustainable Development Framework and Methodologies (p.315). The methodology requires the protected areas to be split into totally and partially protected areas. The totally protected areas include areas defined as Categories I, II and III of IUCN management categories and partially protected areas include Categories VI, V and VI. Data available from international data holders (e.g. WRI).
- 13 Threatened species as a percent of total native species: The methodology for deriving this indicator is found in the CSD Indicators of Sustainable Development Framework and Methodologies (p.311). Data are available from international data holders (e.g. WRI).
- Wastewater treatment coverage (% of wastewater treated): An indicator for which data are unlikely to be easily available. The methodology for deriving this indicator is found in the CSD Indicators of Sustainable Development Framework and Methodologies (p.227)
- 19 BOD in water bodies: An indicator for which data are unlikely to be easily available. The methodology for deriving this indicator is found in the CSD Indicators of Sustainable Development Framework and Methodologies (p.224)
- 23 Coastal areas at risk: Reference: Bryant, D. et al. 1995. Coastlines at risk: An Index of Potential Development-Related Threats to Coastal ecosystems. World Resources Institute Indicator Brief. This "indicator" was used in GEO 1 for each region under Chapter 2, Regional Perspectives; see e.g. Fig. 2.5 (p.34).
- 25/6 Emissions of sulphur oxides and nitrogen oxides (kg): Recent data on the emissions may not be easily available for developing countries. The UNDP Human Development Report contains data for combined emissions of sulphur and nitrogen oxides.
- 29 Ambient concentrations of pollutants in urban areas: An indicator for which data are unlikely to be easily available for developing countries. The methodology for deriving this indicator is found in the CSD Indicators of Sustainable Development Framework and Methodologies (p.338). Other sources of data include RIVM, TNO, NASA, NOAA, CDIAC, OGIST (see Annex IV 15 to 17, Report on the Meeting of Integrated Environmental Assessment/Global Environmental Outlook Core Data Working Group, UNEP/DEIA/MR.97-1)
- 33 Generation of industrial and municipal solid waste (tonnes): The methodology for deriving this indicator is found in the CSD Indicators of Sustainable Development Framework and Methodologies (p.349).
- 48 Total commercial energy production (thousand tonnes of oil equivalent): This refers to commercial forms of primary energy petroleum (crude oil, natural gas liquids, and oil from non-conventional sources), natural gas, solid fuels (coal, lignite and other derived fuels) and primary electricity all converted into oil equivalents. (The definition used in the World Bank publication World Development Indicators 1997.)

- 49 Total commercial energy use (thousand tonnes of oil equivalent): This is indigenous production plus imports and stock changes, minus exports and international bunkers. (The definition used in the World Bank publication World Development Indicators 1997.)
- Traditional fuel (% of total energy use): This includes estimates of the consumption of fuelwood, charcoal, bagasse and animal and vegetable wastes. Total energy use comprises commercial energy used plus traditional fuel use. (The definition used in the World Bank publication World Development Indicators 1997.)
- 68 Terms of trade (selected year=100): The ratio of a country's index of average export prices to its index of average import prices (see UNDP Human Development Report).
- 75 Human and economic loss due to natural disasters (number of persons, US \$): The methodology for deriving this indicator is found in the CSD Indicators of Sustainable Development Framework and Methodologies (p.129). Data available from international data holders (e.g. Centre of Research on Epidemiology of Disasters (CRED) in Brussels).
- 79 Number of deaths due to: (i) pulmonary/respiratory diseases; (ii) water-related diseases (malaria, diarrhoea, schistosomiasis, filariasis, etc.): The categories of diseases could be refined according to data available in the International Classification of diseases (ICD), of WHO.
- 81 Food production index (selected year=100): The average annual quantity of food produced in relation to that produced in the index year. Food comprises commodities that are considered edible and that contain nutrients. Coffee and tea are excluded because, although edible, they contain no nutritive value (definition contained in the World Bank's 1997 World Development indicators). (Also see UNDP Human Development Report.)

#### ANNEX VII: INITIAL NOTE ON GEO-2 LAYOUT AND ILLUSTRATIONS

The following notes are intended to help GEO collaborators in the preparation of their contributions to GEO-2. They are concerned mainly with word length and the nature of illustrations.

#### Word length

On average, GEO-1 contained 1000 words and one illustration for every two printed pages. Thus where contributions of 16 pages overall are called for, they should contain about 8000 words and about 8 illustrations. Check word length with the word counter on your word processor. Writing to length will prevent the production team from having to make excessive cuts or ask the originators for additional material.

#### Illustrations

Illustrations are boxes, tables, maps, graphs, bar charts, flow diagrams, etc. There is no need to have artwork commissioned since all artwork will be redrawn to a standard style during the production process. Thus maps can even be hand drawn, graphs and bar charts can be supplied simply as raw data, and flow diagrams delivered as pencil sketches.

Where GIS-originated material is to be used, it should be presented in either Illustrator or Freehand format. For very large files - say more than 1 MB - it will be better to deliver the material as a high-quality print-out for scanning and/or redrawing. Material of this nature contains much redundant information for printed publications since the detail cannot be detected by the human eye.

#### Style sheets

Simple style sheets will be issued to GEO Collaborators in September/October 1997, dealing with such matters as styles for references, currencies and spelling. The design for GEO-2 will also be communicated by then.

#### ANNEX VIII

#### ACRONYMS USED

A&P Asia and the Pacific CCs Collaborating Centres

CGIAR Consultative Group on International Agricultural Research

CIAT Centro Internacional de Agricultura Tropical CILSS Inter-State Committee for Drought Control

CO<sub>2</sub> Carbondioxide

CSD Commission on Sustainable Development of the UN

DEIA Division of Environmental Information and Assessment of UNEP

DPCSD Department for Policy Coordination and Sustainable Development in the UN

DWG Data Working Group

EEA European Environment Agency

ESCAP Economic and Social Commission for Asia and the Pacific of the UN

EW UN System-wide Earth Watch

FAO Food and Agriculture Organization of the UN

GEO Global Environment Outlook of UNEP

GEF GLobal Environment Facility
GIS Geographic Information System
GMF Global Integrated Modelling Forum

GRID Global Resource Information Database in DEIA of UNEP

GSG Global Scenario Group HQ Head Quarters of UNEP

ICSU International Council of Scientific Unions

IE/PAC Industry and Environment Programme Activity Centre of UNEP

IISD International Institute on Sustainable Development

INPE Instituto Nacional de Pesquisas Espaciais

IUCN The World Conservation Union ODA Overseas development Assistance

OECD Organization for Economic Cooperation and Development

RCs Regional Coordinators in DEIA of UNEP SADC Southern African Development Community

SCOPE Scientific Commmittee on Problems of the Environment

SEI Stockholm Environment Institute

SOE State of the Environment

UN United Nations

UNDP United Nations Development Programme
UNEP United Nations Environment Programme

UNU United Nations University

WB The World Bank

WHO World Health Organization of the UN

WRI World Resources Institute