

# Module 2 National IEA Process Design and Organization

## Overview

Integrated environmental assessment (IEA) is a way of understanding and mapping environment-society interactions<sup>1</sup>. A national IEA is complex and dynamic, so it requires careful planning. This module on design and organization of a national IEA is based on UNEP's GEO approach to IEA. The module provides an overview of why the process is important, how it is established and governed, who would participate and in what role. It gives advice on the allocation of resources, and explains the stages involved in setting up and implementing a GEO-based IEA process. It will give you a better understanding of the role and structure of the process, and your role in participating or managing it. This module also explains how other modules in this resource book fit into the IEA process.

The module concentrates on the following aspects of the IEA process:

- securing institutional commitment for an IEA;
- identification of stakeholders and defining their roles ;
- instruments for conducting the process;
- allocation of required resources (time, human, financial); and
- interactive process design and its benefits.

A key feature of the GEO approach is the participation and interaction of different experts and stakeholders. This module explains how to identify relevant stakeholders and their roles. It shows approaches to using a participatory process, which could also enhance the capacities of the stakeholders to lead similar processes elsewhere.

Through a participatory process, IEA promotes a better use of existing capacities and information at the national level, which reduces the amount of effort allotted for IE and financial costs. Given its interactive process<sup>2</sup> an IEA helps to capitalize on the experience of assessment practitioners and facilitate information exchange.

## Course Materials

### 1. Introduction and objectives

A successful integrated environmental assessment at the national level requires good advance planning. This starts with understanding the design and organization of the process, as well as identification of the main steps and activities needed to achieve the GEO goals.

After successfully completing this module, you will have developed the capacity to conceptualize, participate in and manage the design and organization of a national IEA process. You will be able to:

- understand the main stages of the IEA process;
- understand the institutional arrangements to be developed;
- learn to lead an interactive and participatory way;
- identify the main activities and procedures for preparing IEA report and promoting their findings to achieve maximum impact; and
- be aware of and able to manage challenges of running the process while involving the public.

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<sup>1</sup> For more detailed regarding GEO and the Integrated Environmental Assessment review modules 1 and 5.

<sup>2</sup> Interactive process stands for a process that stimulates the exchange of ideas, consider different points of view based on scientific and empirical evidence, that generates a value added knowledge and enrich the analysis..

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In order to achieve this competence and these capacities, the module incorporates three interactive training elements: case examples, discussion questions and exercises.

The module is organized in three main sections, of which this introduction is the first. The second section explains the main contributions of the IEA process in terms of capacity building and network development. The third section presents in detail the organization and design of the national IEA process, explaining each stage of the process from start-up and institutional framework through the final steps for reporting and follow-up.

Preparation of this module was based on practical experience gained by the authors through participation in national IEA projects in the Asia-Pacific region.

## 2. IEA process features

National IEA and reporting process are designed to generate information on the status and dynamics of the environment and its interaction with human well-being. IEAs are typically known first and foremost for their products: reports, websites or databases. However, in order to produce such information and expect it to have both high levels of scientific credibility and policy relevance, an IEA also must have a well-planned and well-managed process.

The ultimate success of IEA process depends on who is in charge of and who participates in the process, in what specific role, how the process is structured, and how it allows for flexibility to adapt to local cultural, administrative, political, legal and other conditions.

Based on the experience of GEO preparation at global level and national IEA in the region, we have identified key attributes that can help guide planning of new initiatives at the national and sub-national level.

- **Participatory.** Involving different stakeholders is a way to achieve a better understanding of themes incorporating the issues to improve the process and quality of policy making and establish the ownership.
- **Multidisciplinary and multisectoral.** IEA deals with multidisciplinary knowledge and also involves multisectors, therefore participation of multidisciplinary and multisectoral stakeholder is necessary to carry out a sound assessment as well as to ensure that results of the assessment lead to articulate responses and actions from different sectors.
- **Integrated.** IEA deals with numbers of aspects in integrated way in the assessment:
  - linking the state of the environment analysis with policy analysis;
  - incorporating global and sub-global perspectives;
  - incorporating historical and future perspectives;
  - covering a broad spectrum of issues and policies; and
  - looking at dynamic and complex interactions between the environment and human well-being in place-based contexts (e.g., particular countries, ecosystems, cities, regions, watersheds)<sup>3</sup>.
- **Multi-product.** IEA process generates family of products targeting the wide key audience. The products range from simple posters through fact sheets, data compendia to the main IEA reports and summaries.

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<sup>3</sup> See Module 1 for details.

- **Institutionalized.** IEA stimulates assessing and reporting on the environment and its interaction with human well-being as an integral part of governance mechanisms for sustainable development. IEA-based process needs to be built with a long-term perspective in mind where assessment is cyclical, and where periodic products and continuous interaction among participants in policy and science communities and other elements of the public are part of the process. As long as this is an active process, based on stakeholders' participation, stakeholders will take ownership of the process and lead it.

The IEA process is made up of a number of activities including:

1. *Establish an institutional framework for collaboration and organization of IEA.* Identify and enter into formal or informal cooperative agreements with different organizations with interest, capacity and/or mandate concerning the environment. Discuss and agree on objectives and roles to be adopted in production of your report.

2. *Establish and maintain an information base (i.e., set up information system, gather and update high quality data).* The information-gathering process during the preparation of the report provides an opportunity to analyze the quality and usefulness of information in the national environmental system. It is also an opportunity for institutional data sharing and harmonisation. Also, during this activity, it is possible to identify themes and information needs, as well as data availability. This step further allows identification of indicators of key environmental issues.

3. *Discussion forum.* An IEA represents an opportunity for discussions on topics such as a common methodology, trends of the driving forces and pressures, key environmental issues, policies, policy options and scenarios. The discussions involve the public and private sectors. Also, this provides an opportunity to analyze environmental policy and practice with involvement of different stakeholders.

5. *Capacity-building activities.* Based on interactive workshops and other non-workshop based interactions such as distance learning or Internet fora, the GEO process emphasizes a *learning by doing* approach to master the methodology and disseminate it, thus enhancing national capacities for integrated environmental assessment. Further, it is an opportunity to identify any capacity-building needs, and determine whether they can be met from resources within the country or require additional input.

6. *Define and implement a communication and impact strategy.* From the beginning of the process, it is necessary to understand who your various audiences are, so you can establish an efficient and effective communication and impact strategy. Strategies should include implementation plans as well as evaluation measures.

## Discussion questions

1. Identify the main organizations that use an integrated approach to lead participatory processes focused on environment-development interactions in your country. Explain briefly the main activities that were/are involved.
2. What key initiatives are ongoing in your country that could be strengthened by the IEA process?
3. What opportunities do you see in your country to help drive the IEA process?

### 3. The Overview of the IEA Process

This section provides a general view of the national IEA process, identifying its main components and the relationships among them. It will help you to understand how the process can be structured in order to provide an answer to key questions in a GEO-based report (Figure 1- can be referred in another module to reduce the page). These are further explained in Modules 5 and 6.

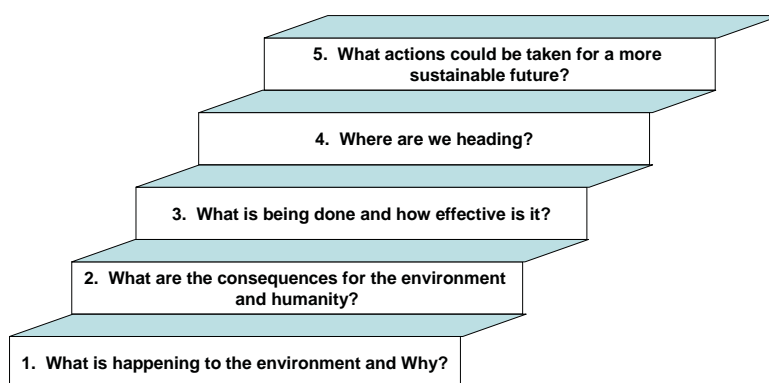


Figure 1: Schematic view of key questions to be answered by the GEO approach

#### 3.1. Objectives and importance

The objectives of the process are the following:

- bring together relevant organizations and individuals with interests in IEA and potential for significant contribution, some of whom may not otherwise have a history of collaboration;
- involve policy-makers in order to secure their support for the process and its key findings; and
- facilitate the process of interaction based on a common methodology, fostering the dialogue between science and policy.

The IEA process is important because:

- it provides an opportunity for policy-makers to have close contact with various experts and stakeholders to discuss key environmental issues from an integrated perspective, to develop a better understanding of their points of view and define together an agenda for action.
- promotes learning from experts and organizations based on their interaction as they proceed with the assessment (Box 1).
- opportunity to discuss possible environmental futures, identifying emerging issues and analysing scenarios.

The principal output of the process is the main IEA report. As explained in Modules 3 and 7, its audience is typically broad, including decision makers in the private and public sectors, scientists and resource managers, the general public, youth and community groups, and the education community. Therefore, the IEA main reports need to be non-academic, but sub-products may be needed to target specific audiences.

#### 3.2. Basic conditions for initiating a GEO process

IEA process involves a range of complex activities and promotes active engagement of government, the academic community, NGOs and the private sector. One key element is political will and commitment of the national environmental authority or equivalent to support the IEA process. A legal mandate and requirement to produce an IEA helps, as it may oblige government to support a meaningful assessment and create a basis for accountability in the political system. The mandate should be clearly laid out in the context of laws and regulations. Some key issues in such a legal mandate include the following:

- legislation may call for collaboration among government agencies that contribute to the IEA;
- a common methodology for data collection may be identified among the national authority, private and public organizations, and scientists or technical experts;
- the legislation may refer to environmental reports to be produced by a range of public and private organizations;
- legislation may promote exchange of data and harmonization of reporting initiatives; and
- the lead agency's role in preparing the way for consultations and external participation.

Some examples of legal mandates countries have for preparing environmental assessments and reports are given in boxes 1 to 3.

### Box 1: India Case

The Government of India scheme for preparation of state of environment reporting in each state/UT was launched during the Tenth Five Year Plan (2002 – 2007), with the objective of highlighting the upstream and downstream linkages with environment issues besides creating a baseline document in form of SoE reports. In view of growing environmental stress and the need to conserve natural resources, the scheme has been continued in the 11th five year plan as well. There are efforts being made to regularize the preparation of these reports in the future. (Source: Development Alternative, India)

### Box 2: North Korea Case

In North Korea, the UNDP office has assisted the Ministry of Land and Environment Protection with the preparation of the National Framework of Environmental Database Management for Environment Assessment and Reporting in DPR Korea. This framework states that every five years the country will prepare a state of the environment report.

Source: UNEP-RRCAP.

### Box 3: China Case

In China, the national Environmental Protection Law ordains that the competent departments of national or sub-national environmental protection administration shall regularly issue bulletins on environmental situations. Since 1989, the State of Environmental Protection Administration (SEPA) has begun to issue the national SOE reports annually, with the goals of publishing the real environmental information, providing foundational information for different policy makers, and measuring the process and efforts for sustainable development. The sub-national SOE reports also have been issued regularly in recent ten years by the governments of provinces, autonomous regions and municipalities directly under the Central Government according to their capability and actual situations.

Source: SEPA website, China

It is necessary to have national technical capacity to conduct the process. This requires leading institutions that can mobilize a range of stakeholders through the process. Also, the institutions should have professionals on environmental issues to lead and contribute to the analysis.

### 3.3. General Structure of the IEA Process

The various stages of the process creates a structure around which activities and participation can be organized, capacities built, resources and time allocated, and release of outputs scheduled.

Details of the process may change country by country, and they may need to be modified as the IEA proceeds in order to adapt to how events unfold. However, based on the practical experience of previous GEO-style reports and other assessments in the region, we can outline elements of a generic process with key elements that one way or another need to be considered in such an assessment.

Based on this body of experience we can identify seven stages of a generic national IEA process, as well as a set of generic activities and outcomes related to them (Figure 2). Each stage is explained in this module.

while details of how to manage specific components of the assessment (e.g., analysis of environmental trends and conditions, policy analysis, data and indicators, and scenario analysis) are explained in other modules in this resource book. The national IEA process in general followed in the Asia Pacific region are given in the Box 4 (?).

As shown on Figure 2, IEA is an ongoing process. It aims to improve decision making, enhance national capacities, and provides systematically collected, analyzed and presented information. Activities and outputs can be identified for every stage, and these, along with expected outcomes, provide a basis for evaluation, learning and improvement. Besides internal learning, the fact that many countries use the IEA approach presents an opportunity for sharing lessons learned across a wide range of initiatives. It is necessary to define expected results at different stages (Figure 2). Technical and political partners will identify lessons learned from the process and thus can improve it. As such, the process is enriched by continuous feedback at the national level, and information is often exchanged with other countries using a GEO approach.

### 3.4 The role of participation in the IEA process

An IEA requires blending knowledge and perspectives from many different points of view. It also aims to influence audiences with different interests and information needs. In order to maximize impact, it is essential to have the participation of a wide range of actors, either as contributors to the assessment, as audiences, or as both, throughout the process (Figure 3 – ??).

IEA can and often does provide a forum for continuous dialogue, although the number of actual participants involved in the assessment and reporting often needs to be kept at manageable levels.

Participation is important not only because it helps to identify key environmental issues from the different stakeholders' perspectives, but also because it can offer options for addressing those issues. If participation is open and transparent, it is more likely that interests of different stakeholders, including interests of poor, vulnerable groups and women will be recognized and better reflected in the formulation of policy responses.

A basic definition of stakeholders includes those:

- whose interests are affected by environmental problems, or whose decisions have environmental effects;
- who have information, resources or expertise required for policy formulation and strategy implementation; and/or
- who control key mechanisms for policy and strategy formulation and implementation. Potential stakeholders and partners whose support for the whole IEA process is crucial may include the following:

<ul style="list-style-type: none"> <li>▪ political leaders; political party representatives;</li> <li>▪ officials of national and regional public offices (such as ministries, institutes, councils, directorates and the military);</li> <li>▪ local authorities;</li> <li>▪ scientific community; academia (universities and research centres);</li> <li>▪ representatives of industry or entrepreneurial associations;</li> </ul>	<ul style="list-style-type: none"> <li>▪ private sector representatives;</li> <li>▪ professional schools or associations;</li> <li>▪ non-government organizations;</li> <li>▪ mass media;</li> <li>▪ youth groups, women groups;</li> <li>▪ indigenous communities and groups;</li> <li>▪ civil society organizations;</li> <li>▪ community and religious groups; and</li> <li>▪ opinion leaders.</li> </ul>
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Figure 2: Stages of National IEA Process

Stages	Activities	Outputs	Organizations' Participation
Stage 1 Start-up (4-6 weeks)	<ul style="list-style-type: none"> <li>Secure legal mandate for environmental assessment and reporting.</li> <li>Identify a local technical team within the lead agency.</li> <li>Develop a basic outline for conceptual framework and process, capacity, time and resources required.</li> <li>Hold start-up meetings to discuss adjust and finalize the process and institutional arrangements.</li> <li>Secure commitment for resources and in-kind contributions.</li> </ul>	<ul style="list-style-type: none"> <li>MOUs reviewed</li> <li>Conceptual framework</li> </ul>	National environmental authority, local technical team
Stage 2 Institutional set-up (1-3 months)	<ul style="list-style-type: none"> <li>Define roles and responsibilities of the political and technical partners.</li> <li>Establish mechanisms of coordination among partners and collaborating institutions.</li> <li>Define an institutional framework.</li> <li>Discuss the elements for the impact strategy</li> </ul>	<ul style="list-style-type: none"> <li>MOUs signed</li> <li>Institutional Framework.</li> <li>Stakeholders map</li> </ul>	National environmental authority, local technical team
Stage 3 Scoping and design (2-4 weeks)	<ul style="list-style-type: none"> <li>Clarify methodological issues.</li> <li>Establish geographic boundary and detailed timeline for producing the report.</li> <li>Identify key environmental issues.</li> <li>Identify indicators, data requirements and sources of information.</li> <li>Draft an outline of the report.</li> <li>Identify the target audience.</li> <li>Develop the impact strategy.</li> <li>Discuss the elements for a communications and outreach strategy</li> </ul>	<ul style="list-style-type: none"> <li>Design document (including annotated structure or outline).</li> <li>Impact strategy</li> </ul>	National environmental authority, local technical team, designated organizations and experts
Stage 4 Planning (4-6 weeks)	<ul style="list-style-type: none"> <li>Define activities in the process, assign responsibilities and identify expected outputs.</li> <li>Allocate financial and human resources.</li> <li>Review and adjust the impact strategy and define indicators of impact.</li> <li>Develop a communication and outreach strategy.</li> <li>Establish a monitoring and evaluation system.</li> </ul>	<ul style="list-style-type: none"> <li>Implementation plan.</li> <li>Adjusted impact strategy.</li> <li>Communication and outreach strategy.</li> </ul>	National environmental authority, local technical team, designated organizations and experts
Stage 5 Implementation (10-12 months)	<ul style="list-style-type: none"> <li>Validate priority environment/development issues and their connection according to the IEA framework.</li> <li>Collect, process and analyze data and information.</li> <li>Present and discuss preliminary results with relevant partner organizations.</li> <li>Write draft report, organize peer review and finalize report based on feedback.</li> <li>Translation and publication (hardcopy, CD, website, etc).</li> </ul>	<ul style="list-style-type: none"> <li>Report and complementary results, in different media</li> </ul>	National environmental authority, local technical team and stakeholders
Stage 6 Communication of results & outreach (1-2 months)	<ul style="list-style-type: none"> <li>Promote different IEA products and messages.</li> <li>Organize interviews with the media.</li> <li>Organize presentations for stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>Report and complementary products in the public domain</li> </ul>	National environmental authority, local technical team and stakeholders
Stage 7 Monitoring, evaluation and learning (1-2 months)	<ul style="list-style-type: none"> <li>Evaluate the process. Identify lessons learned.</li> <li>Evaluate the impact of the process in terms of contribution to policy planning capacity building and public awareness</li> </ul>	<ul style="list-style-type: none"> <li>IEA impacts and recommendations for the future.</li> </ul>	National environmental authority, local technical team and stakeholders

PROCESS MONITORING, EVALUATION AND LEARNING

#### Box 4: National IEA process in Asia Pacific Region

One of the key features of the GEO process is its flexibility. The following description illustrates the process followed in national IEA initiatives supported by UNEP in the Asia Pacific region.

1. Hold Initial discussions with the government after receiving the letter of interest.
2. Identify a National Collaborating Centre (NCC) through consultation with the government. If the NCC has inadequate capacity, look for a collaborating centre (CC) in neighbouring countries or within the sub-region. For instance, while preparing the Bhutan and Laos SoE reports, two collaborating organizations, the Tata Energy Research Institute) in India and the Thailand Environment Institute in Thailand, both GEO CCs, provided assistance.
3. Hold training workshop(s) with about 30 participants each. Participants include representatives of government line agencies dealing with environmental matters, NGOs, the scientific community, business and civil society. During the training participants develop and agree upon the conceptual framework of the report. A focal point for data provision from each government department is identified that to help the NCC collect the required information.
4. The NCC starts collecting the environmental information required (based on the conceptual framework developed during the training workshop) by contacting the focal points in national agencies. The NCC will proceed to analyze the information collected and start to prepare the first draft report based on an outline developed and accepted during the training workshop.
5. Consult with stakeholders including relevant line agencies, academia, journalists, major groups and international donor agencies, to discuss and validate first draft of the report. Consultation serves not only to help orient and improve the draft document, but also to build awareness about the process in the wider national community.
6. Prepare second draft, taking into account comments from consultation workshop; circulate that draft to relevant line agencies and experts for review and comments. Comments are collected by the NCC to be addressed in the final report.
7. Design the layout of the report. This is usually done by the NCC under supervision of a relevant national government agency and UNEP, following UNEP publication guidelines. The report usually displays logos of both the relevant government agencies and the NCC.
8. Proofread final draft, and submit it, along with the graphic design, to the government for review and clearance publication.
9. A national launch event for the report is organized, inviting distinguished individuals who have significant political, social and/or scientific profiles. Special attention is given to inviting local, national and as applicable, international press, and to coordinating a simultaneous press release issued with UNEP.

Source: UNEP-Regional Resource Centre for Asia and the Pacific.

### 3.5. Stages of the GEO process

#### 3.5.1. Stage 1: Start-up

The start-up stage of the IEA involves initial contacts between the participating organizations in the IEA, the determination of the need for the assessment, securing the necessary mandate and establishing the scale and feasibility of securing funding to carry out the work. The management of this stage may vary according to the institutional structures in any given country.

Once the lead and participating or technical support institutions are identified, the first start-up meetings are held to define the national IEA goals, and the responsibilities of the parties. Outputs at this stage include a conceptual framework and memoranda of understanding (MoUs) between the parties involved in the IEA process. The conceptual framework is prepared with input by the national environmental authority and the core team.



### 3.5.2. Stage 2: Institutional setup

This section explains the activities and instruments required to establish proactive institutional coordination through the process. It is important to identify suitable institutions with properly defined roles in the process. It is important to involve institutions that can continue to lead the process for a long time.

In many cases, national organizations lead the IEA process while UNEP-DEWA in the region or GEO collaborating centres provides technical support. Figures 4, illustrate the generic institutional frameworks. There are no generally applicable, rigid rules; so many variations are possible depending on national organizational capacities and structures.

The focal point for UNEP-DEWA is the national environmental authority that holds a legal mandate on environmental reporting. DEWA will provide the methodology and guidelines for the process.

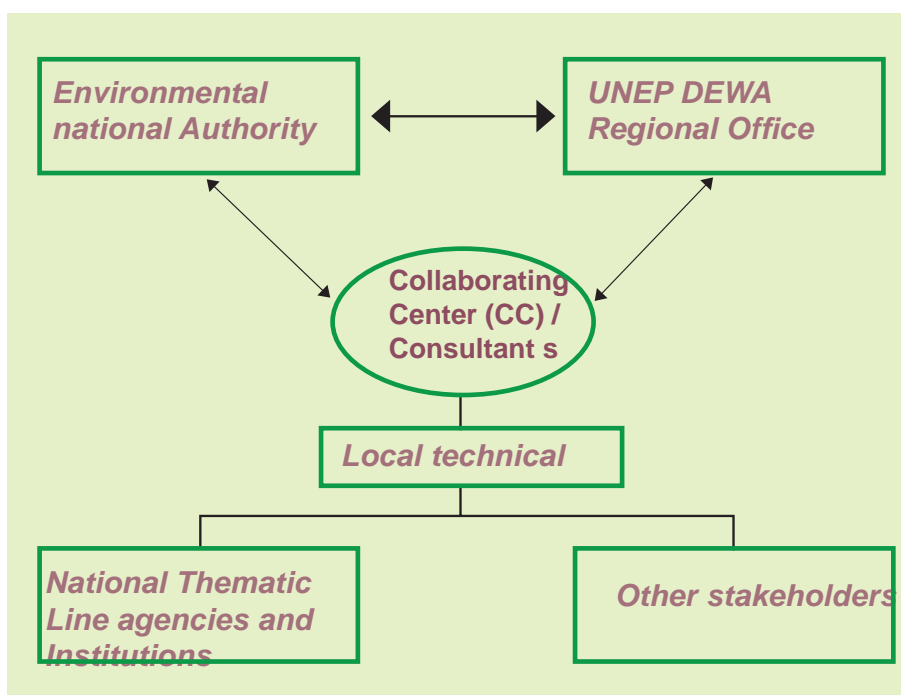


Figure 4: Generic Institutional framework in Asia-Pacific

#### a. Lead institution

The lead organization would have a legal mandate for preparing an integrated environmental assessment (Figure 4). The leader is usually a government organization (e.g., the ministry of environment or national environment council).

The IEA process is flexible and customized to national institutional capacities, a private organization (e.g., NGO, university) could also be selected by the mandated agency to lead the process, depending on the national preferences. This will increase the IEA's legitimacy and likelihood of its use by decision-makers. Different institutional arrangements have strengths and weaknesses that need to be evaluated during planning.

Criteria for selecting the lead institution include the following:

- leadership capability to convene and incorporate key stakeholders;
- institutional capacity to manage the process (i.e., does not need to depend on consultants);
- credible to the range of stakeholders; and
- able to construct networks, and keep stakeholders informed of progress.

## ***b. Local technical team***

The role of the technical team is to undertake specialized analysis, provide, analyze and interpret data, provide peer review, and help engage the wider expert community.

Criteria for selection of effective technical partners may include the following:

- experience in integrated environmental assessment;
- high public profile and recognized leadership capacity
- good relationship with the national environmental authority;
- capacity to dialogue with different stakeholders from both the public and private sector, and ability to build consensus on key environmental issues;
- experience in organizing and facilitating workshops; and
- sufficient human resources to dedicate to a demanding assessment.

The selection could be accomplished by direct invitation by the national environmental authority or through a tendering process.

## ***Technical team organization***

Depending on the national context and type of process, the structure and capacity of the technical team may vary.

*a. Relatively small technical team.* This model uses a team of 3–5 people including 2–3 researchers, one of them being responsible for coordinating inputs into the entire report.

*b. Extended technical team.* In this model, the small technical team would add subject experts for specific tasks (e.g., state of a particular component of the environment, scenarios). Experts will be engaged under terms of reference for accomplishment of specific task which need to be periodically reviewed to ensure the delivery of the task. When the lead organization is different from the organization in charge of writing the overall report, it is important to define mechanisms of coordination to ensure that there is regular communication as well as clear and agreed review and revision guidelines and timelines. Each partner should select a person from the team to serve as the contact point for issues related to the IEA process.

## ***c. Collaborating institutions and other stakeholders***

Collaborating institutions or Centre are those which has been assigned by mandated government agency for the preparation of assessment report. This institution might be from in-country or from neighbouring countries or GEO Collaborating Centre in the region if country does not have capacity. This institution will have direct role in coordination, selection of key issues to be covered, data collection and analysis, drafting of assessment reports and communication of results.

Participants or stakeholders in the IEA process are those who are invited to contribute their views in different stages of preparation process. These are typically thematic government thematic departments or agencies, academic or specialized NGOs, corporations, civil society organizations, youth or women's groups, aboriginal associations or the media. It is important that the different stakeholders participate throughout the entire process, providing information or developing specific activities.

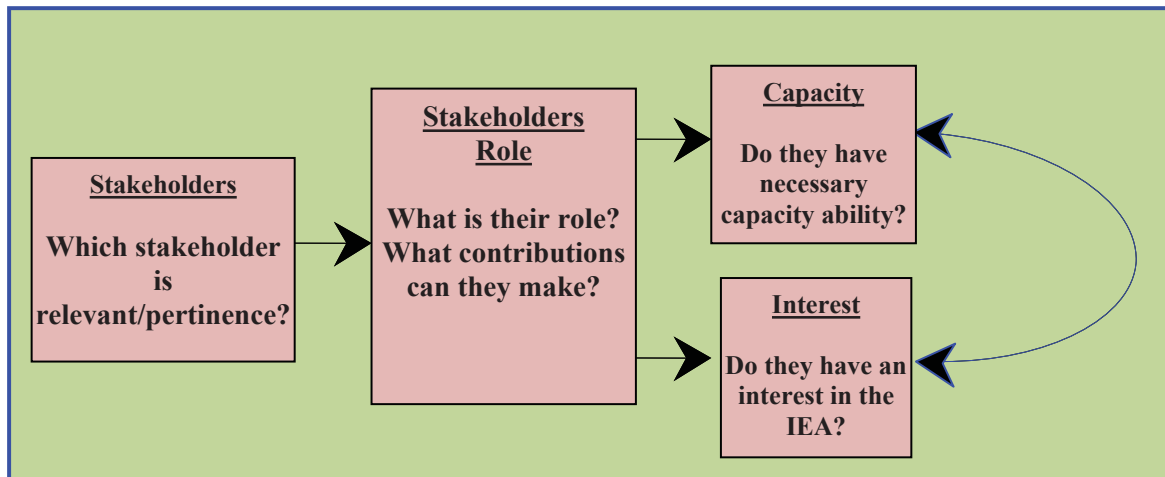
### **Box 5: GEO CC's towards capacity building and developing national SOEs**

In 2000, as Bhutan and Laos did not have capacity to prepare the national SoE reports, UNEP RRC.AP facilitated GEO collaborating Centre in the sub region in consultation with the respective line countries environmental authority to take the responsibility of preparing the report. Tata Energy Research Institute (TERI) in India and the Thailand Environment Institute (TEI) in Thailand, both GEO CCs, provided assistance to prepare the national SOE of Bhutan and Laos respectively.

Source: UNEP RRC.AP

### f. Identification of stakeholders

Stakeholders for the IEA process are those who are directly or indirectly influence and impacted by the changing trends of the state of the environment. These vary from the governmental institutions, NGO, academics, civil society, and media.



Source: UN HABITAT (2002). *Herramientas para una gestión urbana participativa. Colección de Manuales*. Ediciones SUR.

**Figure 5: Identifying stakeholders, their roles and interests**

Based on the key and priority environmental issues the stakeholders is required to identify. Stakeholders list should be inclusive, pertinent, and gender perspective which can be helpful in bringing the real world issues and problems in to the experts notice to be included in the IEA process to be analysed and documented. The conceptual diagram on identification of stakeholder is given in the Figure 5.

### e. Establishing the basis for the impact strategy

It is important to try to understand how the national IEA process can have an impact on policies that influence the state of the environment. Particular attention should be paid at this point to identifying persons and groups that are in a position to influence policies that have an impact on the environment, and effectively manage relationships with these people. The summarized steps on the developing the impact strategy is given in the box 6.

Determining effective ways of engaging key decision-makers is a key element of crafting an impact strategy. An important element of this is to ensure the issues covered by the IEA also reflect the concerns and priorities of decision-makers. Besides decision-makers, involving the media is particularly important both as a provider of information through public surveys, and as a channel to reach key audiences.

#### Box 6: Developing an Impact Strategy

##### What is an impact strategy?

An impact strategy consists of the steps you take to ensure that the work you do will lead to real progress on key issues or concerns. It is proactive in nature, and adaptive in a public policy environment where priorities of governments and citizens can shift and change.

##### Why do you need an impact strategy?

It is often an underlying assumption of reporting that good information will lead to good decisions. But while good

information is necessary, it does not follow that decision makers will act on it. Decision makers are often quite well informed, but their priorities and intentions may differ from what your assessment might indicate is important. The challenge for you is to take proactive steps to ensure that your assessment does not sit on a bookshelf once it is done. Your assessment will lead to recommendations for action, and such actions may require changes in government policies and practices. You should consider from the outset how the findings from your assessment might be used, and how the priorities you identify become the priorities of your government and your country.

### **Steps in building an Impact Strategy (see Figure 6 below)**

**Step 1.** Anchor the assessment with a decision statement: **what do you want to see changed, based on the findings of the assessment, what decisions may need to be made and what changes in policy or policy might be required?** There will always be other influences on decision makers. Some will compete with and others will align with your interests.

**Understanding the external political and bureaucratic environment, and issue attention cycles, will help you focus your impact objectives.**

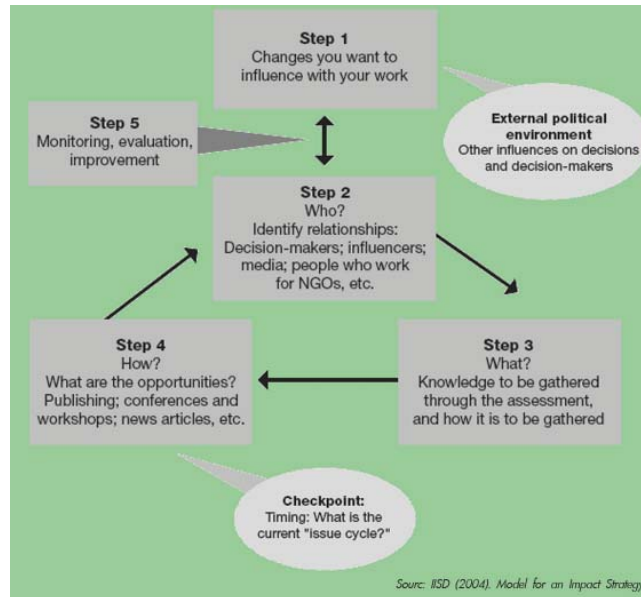
Too often, people move immediately to the information gathering stages of the assessment, without due consideration of Step 2. You need to think carefully about who will be in a position to take the findings of your assessment and use them effectively. **Information by itself does not leverage change, but relationships do. It is vital to have people communicating ideas, analysis and data to other people.** The next step is to identify the individuals and groups you most want to reach. You need to consider how these people acquire information, who they trust and what do they trust. How can you get to those people? If you cannot reach them directly, then who are the people they do listen to, and can you reach them instead?

**Step 2.** Identify those who are in positions to make the decision or effect the changes; those who can influence the decision makers directly (intermediaries -- the people who lean in to whisper advice into the ears of the decision makers); those in civil society who can bring pressure to bear on decision makers; those who can support, reinforce and strengthen your recommendations, in particular the academic community and other research institutes; and those in the media through whom we reach the public, who can also influence decision makers. Central to determining who to reach is the concept of **relationship management, which means** maintaining the connections and influence over time.

**Step 3.** Once you have identified who will help with achieving the decision you seek, you need to analyze both what they need to know, and what you need to know, that will help them take or influence the decision. This is the **knowledge management** process of the assessment. The remainder of this session will introduce some of the tools you need to gather, analyze and process your information.

**Step 4.** Next, determine how to move that knowledge into the hands of those you want to influence. There are many tools available to do this: the products to be released, the conferences and workshops to hold, and the amplifiers, including electronic mailing lists and websites, which get replicated throughout much wider audiences than may have been targeted. At the heart of the tactics and strategies that are developed is the creative management of opportunities: both taking advantage of key windows to move the assessment findings into the hands of others, and creating opportunity directly. An important part of this process is the development of “key messages” that are short, simple, plain language statements that capture the essence of the work.

**Step 5.** We know that in most work, we cannot easily demonstrate causality. It is hard to prove that one’s efforts have led directly to the decision we were seeking. But it is possible to look at incremental changes in attitudes, actions, and behaviours that are a direct outcome of one’s work. Monitoring, evaluation and learning mechanisms must be in place so that you can identify and map these incremental changes that will lead towards the decisions or changes you are seeking. This will help you to adjust your strategy, if necessary.



**Figure 6: Impact Strategy Steps**

Following are a series of steps for policy-makers that can be used to help convert recommendations into actions thus increasing impact.

1. Prepare an executive summary of the main results and policy options for policy-makers.
2. Identify instruments needed to put the actions in place and opportunities to obtain technical support.
3. Consider specific follow-up actions in compliance with policy options identified and use the mass media as well as campaigns to engage the public in dialogue.
4. Use stakeholders involved in the IEA to inform and engage other social actors about the process and its results.

### **3.5.3. Stage 3: Scoping and Design**

The main objectives of this phase are to:

- define the geographic boundaries of the report;
- agree on the methodology for the assessment, and clarify any methodological issues;
- establish the structure of the report, considering the priority environmental issues;
- determine the target audiences;
- define an impact strategy; and
- determine the main elements for a communications and outreach strategy.

UNEP's integrated environmental assessment is based on the **Drivers-Pressure-State-Impact-Response** (DPSIR) framework, which shows relationships between human activity and ecosystem well-being. This analytical framework helps one to understand connections among the components of an IEA.

The IEA process requires the people involved to learn and understand how to apply the IEA methodology, a process that some will find easier than others. It is important that everyone is clear about the methodology and their roles in using it. The IEA process approach is iterative (learning by doing.) with specific steps, but these are flexible, and can be adapted to different needs.

Prior to the start of detailed planning, reviewing earlier IEA products and processes may be of help. This is particularly useful regarding indicators already developed and identifying information sources and organizations related to earlier assessments.



Throughout the IEA process, the coordinating team must meet at regular intervals. This should start with a preparatory meeting at the start up stage. If the process includes a training workshop, the coordinating team should meet with the selected trainers and discuss the overall goal and approach of the IEA. The training can both help build capacity and also scope out process and content, as well as help set milestones and time line.

It is necessary to have follow up meetings to keep the report writing progressing. During the IEA process, especially once data has been collected, it can seem that activities slow down. You need to have regular interaction with the technical teams to keep up momentum. Also, technical teams need to serve as reviewers and should bring relevant experiences from other IEAs to the attention of participants.

### **3.5.4. Stage 4: Planning**

The purpose of the planning stage is to bring together key process elements and content identified in the previous stage into a coherent and concise plan.

There are several outcomes to be achieved from the planning phase:

1. To share and make sure participants of the process understand the IEA methodology
2. To have a timetable and well-defined results at each stage
3. To identify the requirements of human, financial and infrastructure resources and how to overcome any shortfalls in these;
4. To have adequate coordination mechanisms with the process stakeholders;
5. To establish adequate mechanisms of coordination with the UNEP DEWA team and GEO collaborating centres, if applicable;
6. To review and adjust the impact strategy and define measures of impact;
7. To develop a communication and outreach strategy; and
8. To establish a monitoring and evaluation system.

During planning, you should consider using documents, survey results and workshops to get a clear understanding of the main environmental problems. This knowledge is essential for the design and planning of future activities in the process. It is also important at this stage to review and adjust the impact strategy, and to develop a monitoring and evaluation system in order to recognize, understand and learn from successes and failures of the process.

#### ***Costed work plan***

The IEA process requires many types of activities that involve human, financial and infrastructure resources. The costs will vary among countries, depending on a number of factors, such as the quality of institutions dealing with environmental issues and stakeholder awareness of the problems. It is important to have a clear, transparent fully costed work plan. In-kind resources can be part of the budget.

A key component of an IEA work plan is the budget. Given different institutional contexts and financial management systems, details naturally vary, but some common elements can be identified.

## **DISCUSSION QUESTIONS**

1. Is there a planning process for integrated environmental assessment in your country? (If yes, go to question 2.)
2. What are the characteristics of the planning process for integrated environmental assessment in your country? List the characteristics and draw a plan chart.
3. In your opinion what are the main conditions for a successful IEA planning in your country?

### **3.5.5. Stage 5: Implementation**

The implementation stage has three basic components: identification of environmental problems, indicators and sources of data; data collection, analysis and writing; and translation (if needed) and publication. Following are details on the first two components.

#### **Identification of environmental issues and priorities**

The identification of environmental issues and priorities requires a series of steps that help participants in the IEA move from a general conceptual framework of the IEA towards specific issues and interrelationships that will be analyzed in the assessment products.

The starting point is a conceptual framework that identifies the key domains of the environment as it interacts with human society. GEO uses a modified version of the drivers-state-impact-response (DPSIR) framework as described in module 1, and this framework has been successfully used also in the context of many national IEAs.

Once the framework is developed a range of environmental issues can be identified involving both expert and stakeholder participation. Issues are more specific than the categories in a conceptual framework, but discussing them does not require deep technical expertise, which would limit the opportunities for stakeholder participation. The result of issue identification is typically a longer list of items that is usually longer than what can be effectively covered in an IEA. Therefore, there is normally a need for prioritization based on criteria. Alternatively, prioritization can happen once there is a list of indicators selected, but prioritization at an early stage can save time and work, as no indicators would be developed for lower priority issues.

The result of this stage of the process is a short list of clearly formulated priority issues with a clear link to the IEA's conceptual framework and a strong connection to stakeholders' concerns about the environment.

#### **Indicators, data collection and analysis**

National IEA reports use indicators to quantitatively describe various issues and to track changes. In a national IEA report, the number and type of indicators will depend on the objectives defined by the technical team. The list should include environmental, economic and social indicators. Indicator selection can directly build on the earlier identified priority environmental issues. Typically, indicator selection involves several rounds of discussion first producing a larger list and then narrowing it down to a tighter set of leading indicators based on scientific, policy and feasibility criteria. Indicator selection, data collection, visualization and analysis are described in detail in Module 4.

Due to limitations of time and resources, as well as common technical difficulties in gathering primary data, the technical team is likely to rely on secondary information sources, using information already prepared by various organizations, such as national statistical offices. Information needed for the report is often dispersed, and may require considerable work just to locate. The technical team need to establish agreements with organizations willing to share their files and databases. This involved two main steps: collecting and processing the information, and analyzing the information and writing the report. The first task often takes more time than expected, mainly because of institutional barriers to information sharing. Once the first task is completed, the next steps are relatively straightforward.

## a. Information gathering

Technical teams usually do not produce primary data, they must acquire it from original sources, often in government agencies. Sometimes, the technical teams have to persuade government officials to get interested in the project and help in the data collection.

Once the data and information is collected, it should be organized and verified. This involves checking the sources of the information to ensure that the data is reliable. Ensure that you have enough time for the task. Then, the data has to be transformed, combined and presented in different ways according to each component of the DPSIR framework.

## DISCUSSION QUESTIONS

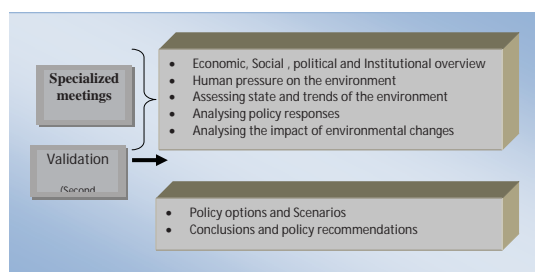
1. In order to know the constraints that your GEO process will face, what are the main problems collecting information for the GEO-based report in your country?
2. Regarding environmental data, do you think it is reliable, and how regularly is it updated?
3. Sometimes, a report's conclusions show the lack of environmental information that make it impossible to analyze the magnitude of the problem, Can you think of examples of environmental problems for which there is no monitoring data or it is not accessible?

## ROUND TABLE DISCUSSION

Discuss how the GEO Process can help to organize the collection and assessment of information and the assessment of responses to the report by government and society.

## b. Information Processing, analysis and writing

The analysis of the data and information compiled sets the stage for the detailed integrated assessment, the main substantive part of the IEA. The underlying conceptual framework of the analysis in IEA is based on the logic of the driving force-pressure-state-impact-response (DPSIR) method, described both in Module 1 and 5. The DPSIR logic also serves as a basis for sequencing the steps of the assessment, although often several analytic processes are run in parallel.



**Figure 7: Sample Outline of IEA report**

The DPSIR logic is also reflected in the structure of IEA reports. Figure 7 shows a possible IEA report structure that is based on this logic, though one has to keep in mind that variations are possible and used by the many countries that undertook or will undertake an IEA.

## IEA Structure

This stage deals with how to structure the report to get a final product that can be used in national environmental decision making processes. In this stage, it is crucial that participants discuss and agree on the main environmental problems and choose the best way to present the information through the report and associated products. The technical team should prepare a preliminary report outline and discuss it with stakeholders and participants. The following examples the outline developed in the inception workshop. The choice and order of issues will vary among countries, depending on important issues and priorities.

## **Example : Table of Content of Sri Lanka Environment Outlook**

### **EXECUTIVE SUMMARY**

#### **Part I: GENERAL INTRODUCTION**

#### **Part II: OVERVIEW OF MAJOR ENVIRONMENTAL DEVELOPMENTS AND TRENDS**

- A. Social – economic condition
- B. Environmental Condition/ Resources
- C. Policy and legal framework
- D. Institutional framework

#### **PART III: KEY ENVIRONMENTAL ISSUES**

##### **(identified in National Policy of Sri Lanka)**

1. Forestry, and wildlife conservation
2. Agriculture , Land development and mining
3. Fisheries and coastal and Marine Area Management
4. Industry and Tourism
5. Energy and Transport
6. Health, sanitation and Urban Development

#### **Part IV: PRIORITIZATION OF ISSUES (Trends, Indicators)**

#### **Part V: CONCLUSIONS AND RECOMMENDATIONS**

#### **Annexes**

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### **Economic, social and institutional overview**

This section provides a high-level, retrospective analysis of the country's socio-economic and institutional conditions and identifies underlying driving forces. Driving forces refer to deep structural changes such as demographic trends or consumption patterns with fundamental influence on human activities that lead to direct pressures on the environment.

The overview can also help to firmly establish the link between environment and development and convey the need to look for the causes and solutions to environmental problems well beyond the environment itself. The economic overview could include not only a description of key macroeconomic parameters, but also, for instance, the country's approach to international trade or degree of technological advancement.

Finally, the section should also describe the institutional framework for environmental and sustainable development governance, including the underlying legal framework, key institutions and division of responsibilities among different layers of government.

### **Human pressures on the environment**

Pressure in the DPSIR terminology refers to human activities with direct influence on environmental conditions. Pressures are typically correlated with driving forces and may refer to processes such as emission of pollutants, conversion from natural to cultural landscapes, or the harvest of renewable natural resources beyond their carrying capacity. Pressures are often combined, for instance land clearing for roads in a pristine forest may be accompanied by increased forest harvest intensity, introduction of non-native species or growing air pollution. Usually, information on pressures tends to be more easily available because it comes from socio-economic databases (for more details see Module 5).

### **Assessing the state and trends of the environment**

This section presents the actual condition and trends in the environment, resulting from the driving forces and pressures. The most common approach to categorise the SOE issue is to follow a hybrid structure based on environmental media and environmental problems. For instance, this could include such aspects of environmental degradation, as levels of air pollution, water contamination and solid waste, as well as changes in biodiversity. Module 5 provides detailed information and examples on some of the more common categories used, but these should not be taken as prescriptive. You should build in sufficient time for consultations with your experts and stake-holders to identify the categories most suitable for your reporting area. This stage also involves the identification of key indicators and relevant data sources, acquiring the data, organizing the data on a suitable database, data analysis and interpretation. You need to remember that the IEA should not be driven by data but by the issues and information needs identified by stakeholders.

### **Assessing policy responses**

The assessment of policies can either be integrated with or separated from the SoE analysis. Both approaches have their strengths and advantages: separating the two sections leads to a more disjointed report where environmental state issues and their underlying policy causes are discussed separately; on the other hand, discussing policy responses together in one section may lead to a more coherent comparative analysis. Policy analysis is a conceptually complex area and often requires either the

collaboration of science-based and policy experts or experts well versed in analyzing environmental issues on the interface of science and policy. From the substantive point of view policy analysis involves the identification of public or private sector policy drivers that contributed to earlier demonstrated environmental change and assessing their effectiveness. It may also involve pointing out policy gaps. In order to help identify relevant policies Module 5 provides a general typology and further detail on the methodology of policy analysis.

### **Analyzing the impacts of environmental change**

Analyzing the impacts of environmental change has gained increasing prominence in UNEP's GEO-4 report. Analyzing environmental impacts requires identifying changes in socio-economic or ecological conditions that are significantly influenced by changes in the state of the environment. Typically, the observed impacts are a result of multiple forces of change, some short term and local, others long term and global and everything in-between. You will need to both scan a wide range of impacts and then select priorities to concentrate the analysis on. This will also require consultations in the scoping and more detailed analytic stage. You will also need to remember to try and separate or at least identify cases where impacts are caused or significantly influenced by non-human induced pressures, such as natural disasters. Further methodological detail on analyzing impacts of environmental change is provided in Module 5.

### **Policy options and scenarios**

Scenario analysis is an essential signature component of IEAs and outlooks. The scenario section builds on SoE and policy analysis and tried to answer these questions: where are we heading; what actions could be taken for a more sustainable future? This can help with long-term planning, and can support applying the precautionary approach to specific issues. By exploring possible future scenarios, decision-makers can get a clearer picture of what tomorrow might bring, and what the impact of alternative decisions is likely to be.

### **Scenario analysis usually combines quantitative and qualitative elements.**

The quantitative component requires modelling and may directly build on data and indicators. The qualitative component involves creating and refining descriptive narratives. These two sides of scenario analysis require different methods and skills and a process that helps combine them in coherent scenarios. The process usually involves several iterations of interaction among stakeholders, thematic experts and a core group of 'integrators', scenario experts who create the actual scenarios. In cases where capacity for quantitative modelling is limited, countries used only scenario narratives that may be still useful to explore alternative future trajectories and their policy implications in a series of facilitated conversations with participants. Details of the scenario process are described in Module 6.

### **Conclusions and recommendations**

Preparing recommendations is the final analytic stage of the IEA process, but whether it is required depends on a particular country. In some cases the task of formulating policy options is seen as the realm of the policy process, and decision makers may explicitly request that the IEA does not produce recommendations. However, there are also many examples in the past where recommendations were explicitly requested and were even included in the IEA mandate. Formulating recommendations builds on all earlier IEA stages, and requires the participation of senior or high level policymakers who may not have been directly involved in earlier stages of the assessment. The technical team may be requested to prepare draft recommendations that then become a starting point for a dialogue, leading to a final set. In order to be effective, recommendations would ideally be connected with strategic policy processes, such as budgeting or long-term strategic planning. For further details of the scenario concept and process please see Module 6.

## **3.5.6. Stage 6: Communication and outreach**

Communicating the results is a vital part of the process. The report can be an instrument for social mobilization on the question of the environment and sustainable development. You will need a strategy to stimulate public participation, to communicate the information and to encourage its use by citizens and public bodies not directly involved in its preparation. Following are some tips for preparing your messages so they will be more easily understood.

### *Make your messages understandable to your audiences*

The team producing the report needs to remember that the audience will not be environmental specialists or technical people. The report has to be easy to read, with limited use of jargon. Experiences in national IEA reports show that maps are very useful for communicating some messages in an easy manner.

### *Make information relevant to your audiences*

Communications is a two-way process. Before trying to communicate, it is important to first listen to your audiences, and understand what is relevant to them. Try to find out what they understand, misunderstand or do not know about. Use this information to shape



your messages so you provide them with useful information.

### *Shape the delivery system for the audience*

Do not give long technical reports to people who do not have a technical background. Offer more detailed information to those who want it. Senior officials, such as cabinet ministers or business executives like a one or two-page synopsis. Only specialized audiences have the time and interest to read the full report.

There are many communications options. The classic methods are largely oriented to print (reports, synopsis report with highlights, bulletins, articles, newsletters), or to radio and TV (interviews, pre-recorded messages). In recent years, the Internet has become a major communications tool through the posting of reports online and the use of techniques such as interactive reports and electronic bulletins by e-mail. Consider alternative communications such as cartoons for populations that can't read or write or puppets in a theatre play. In addition to distribution to the news media, consider outreach to a wide range of interested organizations, such as civil society organizations, universities, national and international agencies, schools and many others. (For more details see Module 7.)

### **3.5.7. Stage 7: Monitoring, evaluation and learning**

The integrated environmental assessment report should be seen not as a one-time effort, but rather as the first step in a system that will hopefully produce IEA reports at regular intervals (e.g., every two years). Continuity of reporting will allow for better analysis of the impacts of actions taken, as well as the evolution of the links between pressures, the state of the environment, and impacts on ecosystem services and human well-being.

Evaluating the impact of the GEO process is an important part of the learning process in reporting and for progress toward sustainable development. Technical teams should document evidence of impacts of their work to confirm the legitimacy of their analysis and recommendations. This can help to increase the likelihood that its recommendations will be adopted. This means that during the process, it is important to monitor progress at each stage. For effective monitoring, it is important to define, in the planning of each stage, the expected results and some progress measures. The monitoring process allows improvements in GEO methodology and the institutional framework based on lessons learned at every stage (*For more details see Module 8-where is Module 8??*).

## **DISCUSSION QUESTIONS**

1. Do you think it is important to evaluate your national IEA processes? Why?
2. Which measures will be good to keep track of your impact?
3. Which mechanisms will you implement in order to promote continuity of your reporting processes?

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