

IEA

Training Manual

*A training manual on
integrated environmental
assessment and reporting*

Introduction



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IEA Training Manual: A training manual on integrated environmental assessment and reporting

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Division of Early Warning and Assessment Mission Statement: To provide the world community with improved access to meaningful environmental data and information, and to help increase the capacity of governments to use environmental information for decision making and action planning for sustainable human development.

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Introduction

László Pintér (IISD)

Purpose and Audience of the Training Manual

The year 2007 marks the twentieth anniversary of the release of *Our Common Future*, commonly known as the Brundtland Report. The need for building environmental considerations into decision making, a central theme in the Brundtland Report, is no longer a bold proposition, but a basic necessity. Without the ability to monitor and assess changing environmental trends and their interactions with human development, navigating the sea of global change would be reduced to reactive crisis management—hardly an effective way to tackle policy issues with such profound relevance for the planet.

Our Common Future called not only for attention to the interactions between environment and development, but also for the need to consider the interests of future generations. This requires an ongoing effort to substantially strengthen our capacity to assess the range of possible futures and to create policies that take this knowledge into account. Addressing these needs is at the heart of this *Training Manual*.

The purpose of the *IEA Training Manual* is to help build capacity for forward-looking integrated environmental assessment (IEA) and reporting at the sub-global level. For the purposes of this publication, we define IEA as *the process of producing and communicating future-oriented, policy-relevant information on key interactions between the natural environment and human society*. The methodology underlying IEA has been pioneered and championed by the Global Environment Outlook, UNEP's flagship assessment on the status and direction of the global environment. As a key measure of GEO's success, since the publication of the first global report in 1996, the GEO approach to environmental assessment and reporting has been adopted by an increasing number of organizations at the regional, national and sub-national level.

Capacity building has been a key element of the GEO process, and training activities carried out by UNEP and its partners since the late 1990s contributed to the wider adoption of IEA methods. In 2000, UNEP and the International Institute for Sustainable Development (IISD), a UNEP Collaborating Centre, jointly published a training manual that served as the basis for many training activities and as a basis for developing other regionalized training curricula (Pintér, Zahedi and Cressman, 2000). The need for updating the first training manual became obvious for a number of reasons, including the evolution of the GEO methods, progress in the scientific and technical aspects of assessments, the need for more detailed and more easily customizable resource materials on IEA, and the need to increase the effectiveness of capacity building. A 2004 meeting of the GEO Capacity Building Working Group discussed the criteria of more effective capacity building efforts shown in Box 1, and these criteria, along with additional guidance from UNEP and the GEO Capacity Building Working Group and others, inspired the development of this *Training Manual*.

Box 1: Criteria for improving the effectiveness of IEA capacity building.

1. **Improve coordination** – Identify, monitor and, where possible, improve coordination and cooperation with similar capacity building initiatives, including other initiatives of UNEP.
2. **Utilize existing capacity** – Identify and improve the utilization of capacity that exists in current partner organizations and the GEO network.
3. **Promote innovation and diversity** – Embrace the diversity of capacity building and training approaches to assessment and reporting while maintaining the coherence and integrity of the GEO approach.
4. **Introduce innovative tools and methods** – Increase the effectiveness of capacity building by introducing novel tools and innovative, experiential and participatory training methods successfully used by partner organizations.
5. **Multi-level engagement** – Increase sustainability of impact by engaging capacity building audiences both on an individual as well as organizational level.
6. **Link capacity building to actual assessment and reporting** – Search for and create opportunities to connect capacity building and the actual production of GEO-compatible assessments and reports.
7. **Provide incentives** – Provide incentives to eligible organizations and experts where possible and warranted to maintain their interest in GEO assessment and reporting beyond training.
8. **Strengthen capacity to effectively communicate assessments** – Ensure capacity building strengthens the ability to design and implement communications strategies.
9. **Improve monitoring, evaluation and learning** – Ensure methods and mechanisms are in place to monitor, measure and, as required, report on the short- and long-term impacts of capacity building efforts.

Source: Report of the March 2004 meeting of the GEO Capacity Building Working Group in Geneva, Switzerland

It is recognized that capacity is multi-dimensional, particularly in an area as complex as an IEA which requires a multi-pronged approach. This may include a training component (face-to-face, distance learning, training-by-doing), but also additional measures such as staff exchanges, technical support or providing easy access to data. Therefore, the *IEA Training Manual* has to be seen in a broader context, as a key—but not the only—element in IEA capacity building efforts.

The target audience for the *IEA Training Manual* includes facilitators who construct IEA training curricula, and ultimately the participants in capacity building programs. The latter include primarily mid-level leaders and practitioners in public agencies, with overall responsibility for initiating and managing assessment and reporting processes. They may work on different scales, from national governments to states and provinces, municipalities or eco-regions. Many of them would have prior assessment or state of the environment reporting experience. Based on experience with previous training endeavours, IEA practitioners may also include representatives of non-governmental organizations, academics, students, media and experts from the private sector.

While a variety of technical specialists have a key role to play in IEAs, the *IEA Training Manual*, even with its extended content, provides only introductory coverage of some methods. The use of tools and methods such as geospatial analysis or integrated modeling would require advanced formal training that is beyond the scope of the *Training Manual*. The emphasis is on the IEA system as a whole, and helping participants realize when and where to bring in specialist knowledge for maximum effect.

Training Manual Structure

The *IEA Training Manual* builds on elements of the earlier IEA training manual, other teaching resources and experience with previous IEA initiatives, but there are also several significant differences.

Content is organized in eight modules as shown in Table 1. A modular design was chosen because capacity building needs vary, and often it is necessary and more effective to concentrate efforts on one or a few topics rather than on the entire IEA package. The intention is to provide maximum flexibility to audiences and facilitators in deciding what content is most relevant. The *IEA Training Manual* is the IEA “source code” that can be freely used as a library of ideas and materials that, over time, can evolve and integrate new concepts and ideas that arise either from GEO or from the many other assessments that will be undertaken in future at the global or sub-global level.

Table 1: Modules in the IEA Training Manual.

Module 1: The GEO Approach to Integrated Environmental Assessment
Module 2: IEA Process Design and Organization
Module 3: Developing an Impact Strategy for your IEA
Module 4: Monitoring, Data and Indicators
Module 5: Integrated Analysis of Environmental Trends and Policies
Module 6: Scenario Development and Analysis
Module 7: Creating Communication Outputs from the Assessment
Module 8: Improving the IEA Process and Increasing Impact through Monitoring, Evaluation and Learning

The modules take participants through the IEA process, essentially treating IEA as an *institution* that organizations in charge of assessment and reporting processes need to build. This will take the reader through questions related to setting up a process and securing the mandate to build an impact strategy, carry out the actual assessment, prepare information products and close the loop by reflecting on lessons learned throughout the process.

Each module is accompanied by a set of PowerPoint slides on a CD, and sample agendas that are intended to help course designers construct and run sessions of either an overview or comprehensive nature, or somewhere in between. Course designers are encouraged to modify and enrich the slide decks with regional case studies and other more locally relevant information.

Course Design and Delivery

Generally, a course based on the *entire IEA Training Manual* will *not* be offered in full (i.e., all modules in full detail), as it would require much more time in one block than a typical participant could devote to the program. The modules are cross-referenced and are designed to be delivered as individual modules or as a package. As a result, there is some repetition of key graphics and concepts across modules.

Figure 1: Illustrating the relationship between the Training Manual and Participant Workbook

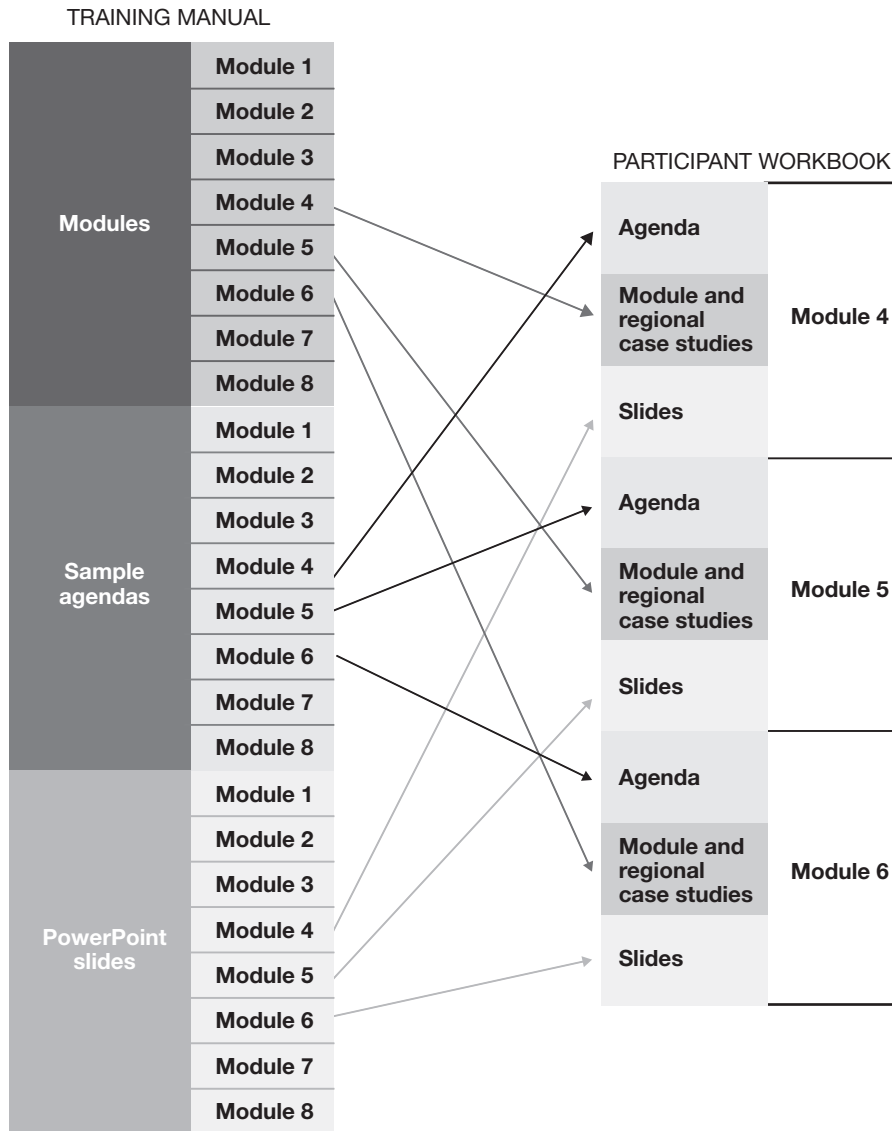


Figure 1 illustrates the relationship between the *IEA Training Manual* and the *Participant Workbook*. A *Participant Workbook* is a customized set of training materials based on the *IEA Training Manual* and selected by the facilitator, and possibly enriched with regional case studies. A participant workbook includes detailed agendas, core content and PowerPoint slides for the modules to be delivered. Other modules not covered need not be included. Course participants thus do not receive the entire *IEA Training Manual*, only the sections selected by the facilitator.

Effective IEA capacity building, as emphasized by some of the criteria shown in Box 1, should be an interactive process. The modules therefore are set up to include a series of didactic elements:

- concept presentations;
- discussion questions in breakout groups and/or plenary;
- case studies;
- role plays;
- problem solving group exercises; and
- plenary sessions at the end of the days to review key lessons learned, review any outstanding questions and explore concrete opportunities for practical application of the topics covered.

In some cases the facilitator may ask participants to read selected papers prior to or during the workshop.

Included with the sample agendas and PowerPoint slides is a guide for interactive course design and delivery.

The margins of each module contain symbols for the facilitator and participants to more readily identify discussion questions, participatory exercises, and information for which a specific PowerPoint slide has been created.



– discussion question



– PowerPoint slide and number



– participatory exercise

Course facilitators should formally and informally gather participant feedback throughout a course. In order to help the process, a sample evaluation form is included on the CD for daily and for overall course evaluations.

Future Directions

In order to advance the use and usefulness of IEA in policy planning and decision-making, options will be explored by UNEP and its partners regarding additional capacity building tools and products. Some of these can directly build on the *Training Manual*, but also go beyond its scope and strengthen the reach and effectiveness of IEA in important ways.

Some of the additional tools that were revised during the preparation of the *Training Manual* that will be considered include:

- Case study bank – internet-based collection of region-specific case studies associated with and referenced by exercises and themes in specific *Training Manual* modules;
- E-learning – use of the modules as a basis of interactive distance education modules; and
- Network of IEA trainers and practitioners – global and/or regional network of experts involved in running IEA courses and capacity building programs or IEA processes.

Those interested in new developments related to the *Training Manual* are invited to consult UNEP's and IISD's website for updates: <http://www.unep.org/geo> and <http://www.iisd.org/measure>

