

**TRAINERS' GUIDE TO:**

**TRAINING MANUAL ON INTEGRATED  
ENVIRONMENTAL ASSESSMENT AND  
REPORTING IN AFRICA**

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## **I. General Introduction**

This document is produced as a guide to assist trainers using the United Nations Environment Programme (UNEP) Division of Early Warning and Assessment (DEWA) Africa Section training materials on Integrated Environmental Assessment and reporting (IEA) in Africa. Trainers are expected to use a set of three resources during the training:

- The Integrated Environmental Assessment and Reporting in Africa Training Manual (hereafter referred to as The Manual);
- A PowerPoint Presentation on Integrated Environmental Assessment and reporting (hereafter referred to as The PowerPoint Presentation) based on The Manual.
- The Trainers' Guide to the Training Manual on Integrated Environmental Assessment and Reporting in Africa. (the present document, hereafter referred to as The Trainers' Guide).

The set should be used together for maximum effectiveness in training because the focus in each component of the set is different and the components complement each other as a set of materials for training on Integrated Environmental Assessment and reporting (IEA).

The Manual provides the most detailed descriptions of concepts and ideas on IEA. It also has:

- boxes which add further explanations and provide case studies for the concepts described,
- study/discussion questions, and
- exercises to help trainees think more about what is described or discussed in the concepts.

The Manual is not written for individual use but for a workshop style training where the method of information delivery is "learning by doing", roundtable discussions and presentations by trainees. Training using the Manual is likely to be most successful for formal, well-coordinated programmes at the national, sub-regional, and regional levels where trainees are, or will be, responsible for writing environmental assessment reports. The best examples of this might be cases where trainees are government representatives from different countries covering a sub-region or the whole of Africa.

The PowerPoint Presentation provides a basis for trainers to present concepts to trainees between exercises and discussions on concepts. Trainers should not mistake this to be a summary of what is in the Manual. While the Manual focuses on "learning by doing", the PowerPoint Presentation focuses on "what you are going to do" (i.e. the

lecture). Consequently, there are some ideas in the PowerPoint Presentation which are not in the Manual because they increase the trainees' understanding of IEA more through a lecture. In addition, sometimes the order of ideas is not presented in the same sequence.

This Trainers' Guide provides guidance to the trainer on how to conduct the training using the set of two resources discussed above. Particularly it advises on how to:

- prepare for a workshop,
- select trainers and trainees,
- conduct pre-workshop activities, and
- structure and conduct the workshop itself.

Detailed suggestions are also given on how to deliver the materials in the nine modules of The Manual.

## II. Pre-Workshop Activities

The resources for training will be most effective if planning for the training workshop is carried out well in advance. Preparation for the workshop is done by both the trainer and the potential trainees.

- *Putting the training workshop in context*  
Organisers of a workshop where The Manual will be used may put the objectives of the workshop in context by explaining to potential trainees that the workshop is part of UNEP's global effort to build capacity in Integrated Environmental Assessment and reporting (IEA). This information may be communicated to all potential participants at the time of advertising the training workshop, and may be repeated at the beginning of the course. Participants should know that their training is not an isolated event. Reference also might be made as to how this effort fits in with the major initiatives on sustainable development in Africa. Useful ideas on this point may be obtained from The Manual's preface.
- *Selection of the trainers*  
Trainers using The Manual are expected to be conversant with UNEP's global effort to build capacity in IEA. They should also have a good knowledge of Africa's initiatives in linking environment and development to achieve sustainable development. Some experience in conducting training workshops would be a good advantage. Where a group of people with these abilities does not exist, especially at the sub-national level, a team of trainers might be developed through a "train the trainers" workshop using The Manual.
- *Selection of the trainees*  
The Manual is designed to provide practical training to those who are taking part, or are expected to take part, in State of Environment (SOE) reporting using the IEA approach. To the skills this group of people may have, the training workshop adds knowledge of a process to produce and communicate policy-relevant information on key interactions between the environment and human society. There are many case studies to illustrate the points made throughout The Manual.
- *Pre-compilation of additional information to be used at the training workshop.*  
Training using these materials employs a "learning by doing" approach. The best data to use with this approach are those that come from the trainers' daily work. Therefore, it is suggested that trainees should bring data from their places of work, region or country. The Manual has a questionnaire which could be sent out to potential trainees well in advance of the training workshop. Completed questionnaires should be returned and made available to the trainers at least a week before the workshop starts. The trainer, however, should have a back-up plan for his exercises, probably by compiling an answered questionnaire from local information sources, in case not enough questionnaires are returned, or those returned have insufficient information.

- *Evaluation of the pre-training workshop questionnaire*  
The trainer must decide whether there is sufficient information in the returned questionnaires for use in the exercises of The Manual where required. He/she should evaluate the returned questionnaires carefully and be aware of the contents of the responses from each potential trainee. Preparing a table containing key points in the responses for each potential trainee would be useful.

### III. Structure and Conduct of the Training Workshop

The Manual is designed in modular format which so that trainers can have various possible arrangements for using it. The trainer should assess the abilities of his/her trainees and decide how much time is required for the training workshop to cover the materials given in The Manual. It is suggested that the training workshop should be five days long. They may be used in either of the following formats:

- One 5-day, long workshop at which all modules are covered.
- A series of workshops eventually covering all the eleven modules. This arrangement may be particularly suitable at the national level where trainees may not able to get away from their places of work for five consecutive days.
- A basis for training on one or more aspects of IEA addressed in the Manual using one or more of the modules.

The modular format also makes it easier for trainers to add exercises and/or case studies they think might help trainees to understand concepts better.

The length of a workshop when using the resources discussed here will depend on the number of modules selected for the training workshop, and the additional materials and exercises the trainer may wish to use. A schedule for a five-day training workshop covering all eleven modules is suggested in Table 1. It is based on previous training workshops on IEA supported by UNEP-DEWA that have been conducted at various training institutions in Africa and assumes a 7.5 hour working day (e.g. 8.30 h to 17.30 h with two tea breaks of 15 minutes each and 1 hour for lunch).

**Table 1: Suggested schedule for a five-day training workshop**

Day	Activity
Day 1	Opening ceremony Putting the training workshop in the context of UNEP-DEWA's capacity-building efforts in Integrated Environmental Assessment and reporting (IEA) for Africa. Module 1 Module 2 Module 3
Day 2	Module 4 Module 5
Day 3	Module 6
Day 4	Module 7 Module 8
Day 5	Module 9 Module 10 Module 11

## IV. Delivering the Training

Advice is given below on how to deliver the materials in The Manual. In the first three modules, more is expected from the trainer in terms of guidance and there might be more lecturing than will be the case for the rest of the modules. The notes guiding trainers in these three modules are written with this in mind. From Module 6 to 11, it is expected that trainees will have become more active and that they will be assisted to learn more from the data they will bring to the workshop from their own countries/sub-regions. The notes below for these modules also reflect this approach to training, suggesting a general discussion of revelations that may be obtained in the data brought by the trainees which they will use to discuss the principles and techniques of IEA. From this description, trainers may see how important it is to encourage trainees to bring data from their own countries. If the training is carried out at the national level, national data sets will be easier to collect and use.

Detailed advice to trainers on each module follows below.

### **Module 1 – Introduction to Environmental Assessment.**

This module sets the overall set-up of environmental assessment and highlights the different types of environmental assessment. It discusses the differences between:

- Traditional SOE
- Integrated environmental assessment and reporting (IEA)
- Environmental Impact Assessment (EIA)
- Strategic Environmental Assessment (SEA)
- Corporate environmental assessment and reporting

Examples of each one of these are given but trainers may wish to give local examples and explain how regulations and laws for each of them, if any, have evolved in line with international efforts. In the lecture and discussion, trainers may wish to start by stressing the following points discussed in The Manual in the definition of IEA:

- The link between environment and policy formulation resulting from the increased interest in sustainable development
- The forward and backward linkages between human activity and environment (ask for examples)
- The importance of a holistic approach. It should be pointed out that simple examples are not sufficient to evaluate system sustainability because of the inter-linkages that may be missing

## Module 2 – Introduction and Background to Integrated Environmental Assessment in Africa

This is another introductory module and aims at providing the history and background to environmental assessment in Africa.

- *The lecture*

The key points of the lecture for this module are:

- The history of environmental assessment in Africa and the weaknesses of approaches used in early SOE reports
- The current link between the Global Environment Outlook (GEO) process, the African Environmental Outlook (AEO) and national efforts in capacity-building for IEA
- The African initiatives for linking environment and sustainable development
- The meaning of sustainable development and its relevance to the African initiatives that support capacity-building efforts in IEA as an important element in linking sustainable development and the environment

- *The study questions*

The questions, when answered in sequence, are designed to make trainees realize that using traditional SOE reporting has had value in countries which are now attempting to adopt the IEA approach. Traditional SOE reports build up data, skills, and awareness. Some detailed discussion of the answers would be useful.

- The answers to Question 1, referring to Table 2.1, may be used to start discussions on participants' own experiences. If they have had SOE reports, how useful and relevant are they (or have they been) for building a baseline for IEA reports? Each participant may give his/her view.
- Question 2 emphasizes the answer to Question 1 but for a country whose major problem is lack of awareness and skills, not lack of funds.
- The concepts in Question 3 are addressed throughout the rest of The Manual and this question gives the trainer an opportunity to evaluate what ideas the trainers have on the link between environment, economy, and human society at the beginning of the workshop. Try to see if many of the trainees realize the link between these and policy formulation. This question may be revisited at different points in the training workshop as the links discussed here become clearer.

## Module 3 – Frameworks for Environmental Assessment and Reporting

This module discusses frameworks for conducting IEA: the driving forces-pressures-state-impact-response (DPSIR) framework and the Opportunities Framework. The former is a well-established framework and has been used widely. The latter is not as well known yet but was used in the development of the AEO-2 report.

- *The lecture*

In describing and comparing the DPSIR and the Opportunities frameworks, trainers may point out the following:

- Both frameworks have the same objective: to provide a framework under which IEA can be conducted.
- The DPSIR achieves this objective by looking at what has gone wrong with the environment. In its preamble to analysis, it focuses on how much has been lost as a result of humankind and, by implication, how much effort is required to regain what has been lost. The environmental policies formulated after this analysis, are intended to correct the current environmental problems based on losses observed. The best future policies are recommended to guide decision-makers in retaining a sustainable, balanced environment. Socioeconomic activities are looked at as a disturbing force creating pressures on the environment.
- On the other hand, it has been expressed that the Opportunities Framework centres its planning for sustainable development on people and their activities, though the deliberations on this point have not been concluded yet. The available resource inventory in the environment provides opportunities for increasing the inventory to a level where humankind may have sustainable livelihoods in future. Trainers should link this framework to the New Partnership for Africa's Development (NEPAD) Environment Initiative. The people-and-their-activities centred framework focuses on improving socioeconomic activity, reduction of poverty and vulnerability, and providing sustainable livelihoods for the future. To achieve all these, there must be a good and clean environment within which the inventory of resources can be increased to overcome the problems stated above.

Trainers should start a discussion on how the differences in the frameworks are reflected in the four step-by-step questions answered by each of the two frameworks. Examples using both DPSIR and the Opportunities Framework at the local level should be followed by a discussion of individual trainees' examples from their work, logically leading on to the discussion questions and exercise.

- *Exercise 3.1*  
If, in the evaluation of the questionnaire discussed under Section II above, it is seen that there is sufficient information from trainees, the groups made here may be retained throughout the rest of the training workshop.

#### **Module 4 – Managing the Assessment and Reporting Process**

This module discusses the management aspects of SOE reporting when using IEA. Working in sectoral compartments is a common practice and limits people's ability to interact and freely exchange ideas on their work. The first conceptual approach to managing the process properly is to start by breaking down the sectoral walls and allowing for a free flow of ideas among departments which may not be used to working in collaboration. The trainer may quote some local examples of projects that have conflicted because there was no communication among departments. These examples are abundant in any African government. If this were to happen with SOE reporting, essential participation in IEA would be difficult.

- *The lecture*  
The logical sequence of the module as presented in The Manual is to first discuss the importance of the process, the most appropriate participants, the process of

deciding important issues to be included in the assessment process, and then the question is asked as to "who" might be the best in managing such a process. The trainer may want to change this sequence by putting early in the sequence, the discussion of "who" will manage the process and then justifying why such a manager is appropriate. The following sequence is given in The Manual:

- Point out why the process is important:
  - It is a learning process for all about the environment and sustainable development and tends to increase support for environmental protection;
  - It encourages decision makers to develop sustainable development strategies and policies and to seek support for these policies from the public, further developing a good working relationship between the public and decision-makers on the environment;
  - It encourages the development of appropriate policy packages which may differ among countries depending on each country's available environmental resources;
  - It encourages good governance through dialogue on environmental issues between the government and the public;
  - It promotes ownership of the set of environmental policies formulated by both the government and the public; and
  - It breaks down sectoral walls among government ministries by requiring their contribution to environmental knowledge in decision making and bringing together what was previously fragmented knowledge.

The trainer may wish to give examples on each of the points above, and then may ask trainees to give real living examples from their own experience.

- Discuss who might be expected to participate in the process.
 

Trainers should discuss the various levels of getting involved in IEA, and point out that although it is desirable that a very large number of people get involved at the highest level (i.e. participate), it is not practical and not always appropriate. Let trainees give examples where different levels of participation may be suitable in an environmental policy they know well in their countries. Look out for overemphasis of individual trainees on people in their particular professional areas. Trainers may use this to illustrate how useful it is to carefully select a wide range of participants to avoid bias.
- Discuss how important issues might be decided.
 

Who decides what issues to include? Trainers may wish to give an example of how the AEO-2 issues were decided: through the wide participation of scientists. This is another example of how important it is to decide on the best categories of people to participate.

The question of the management structure and its benefits may produce some good debates. Starting with the organizational chart in Figure 4.1 in The Manual, prepare for Exercise 4.1 by allowing trainees to make short comments on the advantages and disadvantages of the organizational chart presented. There should be more variation in similar organizational structures at the sub-national level. Discuss these, as well, after giving the advantages of those given in The Manual.

- *Study/Discussion questions*

The Q&A under this section is basically for information gathering. In effect it is meant to allow trainees to start looking at the data they brought to the training workshop. In subsequent Modules more attention is paid to this data.

- *Exercise 4.1.*

The objective of the exercise is the same as that of answering the questions above: each trainer starts looking at his/her data and compares it with that of other trainees to prepare for later discussions and exercises. In this particular exercise, the relative advantages of the organizational structures for SOE reporting in different countries are compared.

### **Module 5 – Peer Review**

This is a very short but very important module:

- Trainers should make sure trainees understand the importance of peer review as an evaluation process.
- The key points given in Section 5.2. should be discussed in detail. Examples may be quoted from local documents, e.g. from the government printer, which may have used peer review. The peer review activities in Section 5.6 are not likely to be common knowledge and should also be discussed in detail.

### **Module 6 – Preparing for the Assessment and Reporting Process**

From this module onwards, trainees are expected to be more prominent in the discussions, giving their own experiences and learning from others'. The trainer might want to assist them in using the data they brought to the training workshop to learn the principles and techniques of IEA.

This module is designed to prepare SOE reporting teams for the actual assessment of the state of the environment. Many decisions are made at this stage.

- The stages that will be followed in the SOE are outlined with each stage being associated with specific activities.
- Responsibilities may be assigned so that each organization, institution, and/or department knows what is expected to be its output.
- How to communicate the message on environmental assessment effectively to decision-makers and the various groups of the public.

The trainer should impress on the trainees the importance of having a complete plan of all activities before beginning the process. The several advantages include:

- Providing a framework for systematic progress

- Making it easy to coordinate a large number of participating departments, institutions, and the public.
- Mapping out the responsibilities of each participating group.

For each of the figures on organizational structure (Figures 6.1 to 6.4), the trainer may wish to ask trainees to compare what is in these figures with what they used in their countries, pointing out how different ways of organizing the IEA may differ and if there are advantages to the differences. This may also be extended to communicating the SOE report as part of planning IEA (Box 6.1). The trainer here may ask whether the communication they use is in line with Box 6.1. If it is not, the trainer might ask whether trainees see any added advantages to the system presented here that they might add to theirs.

### **Module 7 – Assessing the State of the Environment**

This is the longest module in The Manual. It is designed to introduce trainees to assessing the state of the environment as a first step in IEA. The distinction between “traditional” SOE reporting and IEA should be emphasized. Let trainees try to explain where in the transition from one to the other they are in their own country/sub-region.

The discussion on indicators could be more than what is given in The Manual, with trainees giving examples of different indicators they use in their own experience in assessing the environment.

The illustrations on how remote sensing can be used in environmental assessment are included to make trainees aware of the potential of the technique. There is not enough in The Manual to assist them to use the technique in their own assessment. Those who want to learn more about the technique should be encouraged to take specialist short courses which are widely available in Africa.

Exercise 7.8: Introduction to the GEO Africa Data Portal can only be carried out where World Wide Web access is available. There are, however, many data sets which may be used instead, some of which may be available on individual CDs. Trainers may want to contact the Africa section at UNEP-DEWA in Nairobi for assistance.

### **Criteria for developing indicators**

The trainer should emphasize how important it is to have rules under which indicators are developed. Otherwise, we would have indicators which are not practical and/or unusable. Also, because of the points important in the criteria, as much as possible, indicators should be locally based. Trainees should know that some indicators may sound attractive but that as long they do not meet the criteria provided in this section they are not likely to be very successful. Let the trainees give examples of indicators that might not make sense under the environments in which they work. Take some time to look at indicators which have been suggested for AEO-2:

- Are these appropriate given the criteria for selection?
- At what level would they be appropriate (regional, sub-regional, national, sub-national)?

- Discuss how the relevance of these indicators might diminish with increase in scale.

Participatory indicator development should be used to illustrate some important points in indicator development:

- The importance of scale in the development of indicators
- Links between indicators which may seem to be of purely local importance with what is more internationally accepted

Developing indicators, especially participatory indicator development, is given some prominence in The Manual. The importance of appropriate and easily understood indicators are clearly emphasized. Trainers may want to emphasize how using the wrong indicators in policy formulation may be responsible for changing the environment. Local examples may be useful in stressing this point.

Using geographic information systems (GIS) to present data and indicators is meant to make trainees realize the value of the technique and, as is the case for remote sensing, trainees may be encouraged to take a specialist course in the technique.

## **Module 8 – Role playing with Integrated Environmental Assessment and Reporting**

This module is intended to assist trainees to think the SOE assessment process through, from conceptualisation to the development of an outline for the chapters. The whole of it is, in effect, an exercise and is not included in the PowerPoint Presentation. If the data brought by trainees to the workshop is sufficient for analysis, the module should be very interesting. The trainer should try to retain the variety of environments for planning that have been designed for this module. Trainees should learn from others real life differences available in the data that trainees brought to the workshop, and how these differences may influence the actual assessments that are done. It is unlikely that there will be enough time for each and every trainee to present his/her country's planning situation. To maximize the trainees' learning from other situations, two levels of discussion are set in this module: discussions in groups on individual countries as the first level; and presentations from each group on a country of the group's choice as the second level. It is recommended that trainers should try to include, in each group, countries that are as varied as possible. For example, it is recommended that countries which are semi-arid or landlocked should not make up one group. The decisions will have to be made by the trainer.

- *The group discussions.* In the first part of role playing, trainees discuss data they brought to the workshop in small groups of three or four. Each member of the group quickly goes through the information he/she has on sub-headings 8.2 to 8.7 in The Manual for all members of the group to appreciate the variety of the environments within their group. They may then select one of the countries (probably one for which there is a lot of information) for detailed discussion and preparation of a presentation for all trainees. For the selected country:

- Sections 8.2 to 8.7 should be written out for presentation to provide a basis for the rest of the workshop participants to understand the background to the assessment. Some of the information may be difficult to obtain, e.g. information on trends (Section 8.6). Here the trainee whose country is selected will provide some guidance and try to guesstimate what is acceptable. Tables 8.1 and 8.2 should be filled out.
- Section 8.8 onwards: instructions on how the group will get to the drawing up of chapters for its report:
  - Section 8.8: emphasize that the report must be produced within given constraints (including time). Some of the constraints may be difficult to comprehend in a comprehensive manner, and to make them sink in, they may be the basis of discussions at the presentation stage (e.g. Can the report as outlined be ready in a year?)
  - For Section 8.9: previous training workshops have shown that the roles of different stakeholders are difficult to comprehend, especially since, as might be the case for many workshops, the majority of the trainees are from government offices. The trainer may want to point out what may be natural tendencies for the various stakeholders; e.g. industry may look out for potential larger profit margins, a less likely desire for non-governmental organizations (NGOs). Show how these may be important in influencing what some stakeholders may accept as their responsibility in Table 8.3. In Table 8.4, the agreed upon joint strategy refers to how each of items 1 to 5 will be achieved.
  - The list of contents of the SOE should match the entries in the tables preceding it, including the major themes.
  - The final discussion for the group should be on how to divide the list of topics into chapters with key issues and possible indicators.
  - The presentations from each group should be short with more time given to points from Section 8.8 onwards. The discussion after the presentation might be focussed on the differences in the chapters in the reports and whether these are logical developments from the data that is presented in Sections 7.1 to 7.7.
  - Other points: which country is the most difficult to assess and why? Which of the countries presented has the highest potential for sustainable development and why?  
The trainer may make these questions lead on to the next Module on how to link SOE reporting to policy.

### **Module 9 – Linking Integrated Environmental Assessment to Policy**

In recent training workshops in different parts of Africa, it has been found that trainees find linking environmental assessment to policy more difficult to digest compared to other topics. Many examples and illustrations have been included in this module to assist trainers to overcome this problem. There are also more exercises in this module than in any other for the same reason Trainers are encouraged to supplement the examples given with local information or by asking for more examples from trainees.

- Three types of policy are listed:

- Routine decisions should be easy to understand since they are broadly advertised and affect people directly.
  - Urgent reactive policies will also be easy to understand by referring to any recent policies in the trainees' experience that have been formulated to address hazards or catastrophes.
  - Grey zone policies may not be as clear. If the trainer gives some examples of local policies of this category that have evolved from grey zone policies through routine procedures to documented policies, trainees may see the difference more clearly. An example is given in Box 9.1 to assist the trainer to illustrate this category and to help him/her to encourage trainees to give similar examples.
- Hierarchies of policies are common (Section 9.3). The example given starts from the international level; the trainer may wish to supplement the given example with several from the trainees' countries. It would be useful to stress how difficult it is to enforce regulations based on international policies especially at the global level and to state why.
  - The web of influence of policies on each other is put in an exercise (Exercise 9.1) partly to break the monotony, but also because it was considered more effective than talking about the interlinking influences of policies. The discussion in groups should be short. The drawing could be modified in any way the groups wish, but the direction of influence, and whether it is positive or negative, should be clear.
  - Conflicts in policies formulated independently (Section 9.5) are unfortunate but exist widely. The trainer might try to get examples from the trainees' own experience. He/she should also stress the importance of an IEA process to minimise such conflicts. If there were to be broad participation, consultation and information in policy formulation, there should be people who will point out the conflicts before they actually occur.

### **Module 10 – Targeting a theme in environmental assessment: human vulnerability in a changing state of the environment**

This module is an illustrative module to show the importance of environmental assessment in linking socioeconomic and environmental issues to develop a basis for policy formulation.

By the end of this module, trainees should:

- be aware of the different concepts of vulnerability
- have learned the framework and indicators for assessing human vulnerability
- have learned the importance of linking human vulnerability to environmental change on one hand, and policy formulation on the other, to reduce poverty.

### **Module 11 – Assessing the future**

The materials contained in this module are sufficient for the trainees to have a good idea of the meaning and importance of assessing the future in IEA. However, they may not be sufficient for carrying out scenario development. Trainers should take the module as a simple introduction to assessing the future and encourage trainees who would like to develop scenarios to take a full course on scenario development. Within these limitations, this module:

- attempts to make trainees appreciate how present environmental policy formulation can be linked to the future. Trainers should point out how looking only at the present is an incomplete task in terms of planning sustainable development and why;
- stresses the importance of recognizing emerging issues as uncertain disturbances; and
- gives trainees some skills in scenario development.

Trainers might spend some time differentiating scenario development from forecasting as a starting point, to pointing out the reasons for forward planning under IEA (Section 11.2). By the time trainees get to this stage, they will have learned a lot from the data they brought to the workshop from their own country and will be aware how this differs from that which other trainees brought. If the trainer uses the differences that will develop between countries to show how scenarios may differ, this module will be more interesting. Starting from Section 11.2, he/she may show trainees how:

- Present actions and policies presented in Module 6 are relevant to the environment in the future. Contrasts may be drawn between those countries that have attempted to formulate environmental policies to solve current problems.
- Looking into the future may provide a basis for detecting and avoiding the dangers that could happen in the future.

Exercise 11.1 (Section 11.3) is intended to make trainees think about past mistakes that may be compared with the discussions and deliberations in Section 8.2.

Emerging issues are given here as potential sources of uncertainty. Discussing them will bring out further justification for using scenarios rather than forecasts when looking at the future of the environment. Trainers should encourage trainees to think of examples of emerging issues which may be at the national and sub-national levels.

In discussing scenario development (Section 11.6), it is worth pointing out that unavailability of the type of data scenario developers would want to have should not be considered sufficient to discourage scenario development. This point must be stressed since many of the trainees may come from countries or sub-regions where data for scenario development may be very scarce.

In discussing steps in developing a scenario (Section 11.8), reference may be made to the results of Module 6 on role playing. That module did not include a section on

scenarios but the trainer may attempt to go further than the module to see if trainees can link their results to this Module.

## **V. Concluding Activities**

### **Evaluation of the training workshop**

An evaluation of the course is requested from each individual at the end of the workshop. The idea of the evaluation is to get from trainers, points that will assist trainers to improve their delivery of the course. The trainers are requested to forward these comments to UNEP-DEWA Africa for onward transmission to the authors of The Manual for possible improvements to the content and to improve the IEA training component as part of an overall programme for capacity-building in environmental assessment in Africa.

### **Closing the workshop**

Some time should be taken to close the workshop properly, preferably with a social event at which “graduating” trainees spend at least two hours. The social component of the closing ceremony will be good for the trainees, but more importantly, the training workshop is expected to be part of the overall and continuous effort to build capacities in Integrated Environmental Assessment and reporting (IEA). A social event at the end will be effective for networking beyond the training workshop. It will also allow for discussions of the training workshop as a whole, thereby helping in the preparation of other training workshops.

## APPENDIX 1

### Preparatory Questionnaire for the Training Workshop on Integrated Environmental Assessment and Reporting

Please send this questionnaire back as soon as possible. The several questionnaires from different potential trainees for the workshop will be collated and will be used during the workshop. Participants should be prepared to assist the workshop understand the answers provided by making a short presentation at some point in the workshop.

The SOE reporting questionnaire consists of six main sections:

- Section I: Contact information
- Section II: SOE report structure
- Section III: Information sources and reporting tools
- Section IV: Key environmental issues and indicators
- Section V: Process and participants of assessment and SOE report preparation
- Section VI: SOE report use and audience

#### Section I: Contact information

1. Country	
2. Organization	
3. Primary contact person	
4. Full address	
5. Telephone	
6. Fax	
7. E-mail	
8. Address on WWW	

#### Section II: SOE report structure

9. Title of initiative	
10. Year of first SOE	
11. Frequency of reporting	

14. Main sections and subsections in report.

[illegible]

<b>Section III: Information sources and tools</b>	
Main sources of environmental information for the SOE/sectoral reports	<p>National census : census frequency -----years</p> <p>Reports from Government Departments</p> <p>Municipal/Local Governments</p> <p>International organizations</p> <p>NGO's</p> <p>Schools and Universities</p> <p>Private sector</p> <p>Special surveys</p>
Presentation tools used in the report	<p>Case studies or box stories to illustrate general points</p> <p>Graphs with time series data</p> <p>Diagrams to illustrate links among environmental issues</p> <p>Symbols to communicate success or failure in meeting targets</p> <p>Photographs</p> <p>Others (specify)</p>

**Section IV: Key environmental issues, policies and indicators**

List of key environmental issues identified in the SOE report. List all issues that are related to a specific policy, and if indicators were used in reporting on their performance.

Section in report	1			
	2			
	3			
	4			
	5			
	1			
	2			
	3			
	4			
	5			
	1			
	2			
	3			
	4			
	5			
	1			
	2			
	3			
	4			
	5			

## **Section V: Process and participants of assessment and SOE report preparation**

### **18. Main steps in developing the SOE/sectoral report(s).**

19. Please identify other participants in the SOE reporting process and specify their role, if applicable, by putting a check mark in the appropriate boxes:

<b>Role</b>	<b>Other Gov't Departments</b>	<b>Academic institutions</b>	<b>NGO's</b>	<b>Industry and private sector</b>	<b>International agencies</b>	<b>General public</b>	<b>Other (please specify)</b>
a. Share project management responsibilities							
b. Invited to participate in specific tasks for the SOE report							
c. Help identify key issues for the report							
d. Help develop indicators							
e. Help with data collection							
f. Help with data analysis							
g. Help with policy analysis							
h. Provide comments on drafts							
i. Participate in writing specific sections of the SOE report							
j. Provide additional funding for the project							
k. Provide other non-monetary support (please specify)							
l. Participate in distributing and marketing SOE report							

## **Section VI: Assessment and SOE report use and audience**

20. Number of copies printed (latest edition):

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21. Number of copies distributed:

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22. Cost for local residents to get report:

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23. Target audiences:

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Other government departments

Schools and academic institutions

NGOs

Industry and private sector

International agencies

General public

Others (please specify)

## APPENDIX 2

### EVALUATION OF THE TRAINING WORKSHOP

Please complete the following form as your evaluation of the training workshop

Please indicate your opinion about each section of the training workshop by circling the appropriate number.

1 = strongly disagree   2 = disagree   3 = neutral   4 = agree   5 = strongly agree

Overall objectives and content:

- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| 1. The objectives were clear and precise?      | 1 | 2 | 3 | 4 | 5 |
| 2. The objectives were attained?               | 1 | 2 | 3 | 4 | 5 |
| 3. The contents were linked to the objectives? | 1 | 2 | 3 | 4 | 5 |
| 4. The workshop was well structured?           | 1 | 2 | 3 | 4 | 5 |

5. Give your evaluation on the overall

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6. What part of the training programme did you find least valuable? Why?

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7. What part of the training programme did you find most valuable? Why?

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Methodology

8. The methodology used for the training workshop was appropriate for me as a professional?

1   2   3   4   5

9. The approach used helped me to share my own knowledge and experience?

1   2   3   4   5

The following elements of the training workshop were very useful.

10. Case studies	1	2	3	4	5
11. Presentations	1	2	3	4	5
12. Group exercises	1	2	3	4	5
13. Group sessions	1	2	3	4	5
14. Demonstrations of tools (e.g. models)	1	2	3	4	5

15. The following may be improved in the methodology used. (How?)

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#### Training materials

The following training materials were easy to use

16. Visual aids (e.g. transparencies)	1	2	3	4	5
17. The manual	1	2	3	4	5

#### Trainers

The trainers:

18. Had a good command of the training materials	1	2	3	4	5
19. Presented the materials clearly	1	2	3	4	5
20. Cared about trainees problems during training	1	2	3	4	5
21. Were eager to assist me whenever I had a problem	1	2	3	4	5

22. The manual could be improved in the following way.

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23. How will this programme help you in your job? Please be specific.

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24. Did the instructors teach the course effectively? Please be specific.

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25. How would you improve the training or make it more interesting?

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26. Overall, how would you rate the training? Please circle one.

Excellent

Good

Average

Unsatisfactory

Poor

27. General remarks

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## **Abbreviations**

AEO	African Environmental Outlook
DEWA	Division of Early Warning and Assessment
DPSIR	Driving forces-pressures-state-impact-response
EIA	Environmental Impact Assessment
GEO	Global Environment Outlook
GIS	Geographic information systems
IEA	Integrated Environmental Assessment and reporting
NEPAD	New Partnership for Africa's Development
NGO	Non-governmental organization
SEA	Strategic Environmental Assessment
SOE	State of Environment
UNEP	United Nations Environment Programme