

Module 8 – Role Playing with Integrated Environmental Assessment²

Overview

This module is an exercise with the objective of assisting you to think through the SOE assessment process starting with conceptualisation and ending with a chapter outline of the SOE report.

² This section is largely based on Pinter and others 1999.

8.1 Introduction

In this section, the information you brought to the training workshop from your country or region is very important. From presentations made above in previous exercises, you now know, in general, the kind and quality of information from the other participants. We now use that information for role-playing, pretending that you are real stakeholders in developing a national (or sub-national) SOE report. The data you have for any country may not be sufficient to answer all the questions you would like to answer. This is more likely to be the case in real life development of SOE reports. For the purposes of this activity, the workshop depends on you as a professional: point out the data gaps where they exist, and “plan” the next round of data collection to fill these gaps.

Form groups of three to four depending on the total number of participants so that you have about four to five groups in total.

Within the Group

- *Decide on a country to use for role playing.* Each member of the group has information brought to the workshop from the questionnaire you filled out. Discuss which of the country within the group has the most information which you will use in the role-playing exercise.
- *Try to develop a database* which you will use in your role-playing based on the real-life data from the country you have selected, in addition, maybe, to some data you have to guesstimate.

8.2 Country profile

Based on the information you already have for the country you have selected, outline the basic country profile focusing on those parameters that are relevant to developing the country’s SOE report. Table 8.1 provides a good example of some of the parameters. You may add others you think useful in the development of the report. Please add guesstimates where you think data may be needed but is not available.

Table 8.1: Basic statistics for Country Selected

Parameter	Past (Date?)	Present (Date)	Future (Date?)
Population			
Percentage living in cities			
Per capita GNP			
Distribution of income			
Food situation (per cent of food imported)			
Water supply situation. Is water a problem?			
Attraction as a tourist destination			
Energy supply			
Governance and political stability (on a scale of 10)			
Total commercial energy production (petajoules)			

8.3 Physical description

The physical description of the country you have selected for role-playing is important because it will give the course participants information on ecological differences, physiographic contrasts, climatic zones, etc. All these are important in human activity for the SOE report.

8.4 Settlements and sources of livelihoods

Outline the major settlements and their contribution to social, economic and cultural life. Point out any contrasts in sources of livelihoods in different parts of the country, and cultural contrasts which may intensify any conflicts over resources. Outline any recent or potential conflicts in natural resource use, for example, between: wildlife management and arable/livestock farming; urban expansion and agriculture, irrigation and human water consumption, etc.

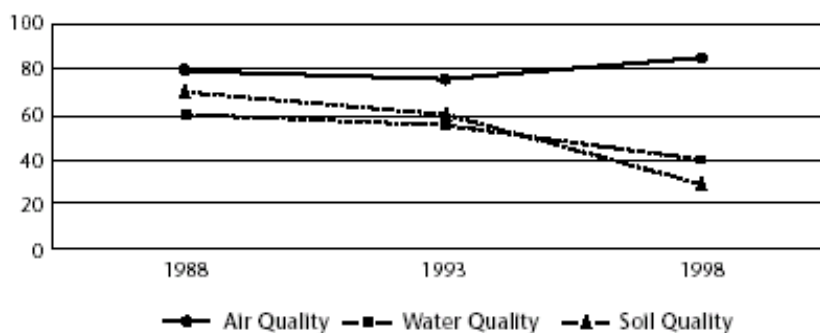
8.5 Environmental management

Outline any international commitments that the country selected has at different levels (sub-regional, regional and global) that may encourage or hinder the country's ability to conduct an IEA. Describe how the environment is managed at the national and sub-national level as a way of showing how easy it might be to conduct an IEA in the country you have selected. Decide what improvements in environmental management might be needed to encourage greater public participation in SOE reporting.

8.6 Information on trends

The questionnaire you filled out before the workshop requested you to get key information on environmental resources, social and economic trends, and any other trends you considered relevant (e.g. governance) to introducing or improving IEA in your country. If you have them drawn, just prepare them for presentation to the rest of the participants at the workshop. If you have the data but did not draw it out, sketch them as graphs or pie charts for presentation. Some of your data may be qualitative and might only need describing. An example of how you might draw a graph for environmental resources is given in Figure 8.1.

Figure 8.1: Air, water and soil quality indices for your selected country



Source: Pinter and others 1999

Other key trends may be obtained from the information that had been requested in the questionnaire.

8.7 The key sector and its impact and driving forces

Select a key industry or industries (e.g. agriculture, tourism, mining, manufacturing, etc.) and identify its major contribution to environmental problems (e.g. deforestation, land

degradation). Summarise the driving forces for its activities, and its importance in the economy of the country.

8.7.1 Driving forces of the major sector

The driving forces of the key industry are the reasons why the industry maintains activities even if these are not fully acceptable for maintaining a clean or sustainable environment. Examples are given in Table 8.2. Each Impact will be associated with several activities each of which will have a driving force or forces.

Table 8.2: Examples of driving forces of major sectors in an economy

Sector	Impact	Activity	Driving force
Forestry	Deforestation	Cattle ranching and agriculture for export.	Forests are cleared to ranching to produce beef which is sold on the world market to earn foreign income . . .
Manufacturing industry	Pollution	Car manufacturing . . .	Increase in new car output because of new markets recently negotiated . . .
Fisheries	Fish depletion	Overfishing . . .	Increasing population with limited alternatives for protein-rich food . . .

8.7.2 Importance of the key sector in the economy of the country

Show the importance of the key sectors in the economy of the country (e.g. percentage of foreign earnings/revenue, percentage of labour force employed, etc.). You may do this over a number of years to show any relative importance of sectors.

The combination of the impact and driving forces and the importance of the sector(s) in the economy in most African countries you select are likely to reveal a dilemma for sustainable development. Integrated environmental assessment and reporting (IEA) is ideal for attempting to overcome the problems observed. The driving forces are probably difficult to reduce; they must be maintained to keep the economy buoyant. Does this give you a good basis for writing your SOE report? Broad participation of various government departments, the private sector, and the public in general is essential to educate the country's population on current problems and to show them the dangers of not doing anything about these problems. Policy response should be used to break the circle of unsustainable resource use to achieve preferred future scenarios.

8.8 Preparing for the assessment process for your selected country

Now you are ready to prepare for the assessment of the selected country. You have environmental and socioeconomic data required for SOE reporting. Your job will be to

integrate these data to get a good understanding of the current state of the environment under the existing socioeconomic conditions which serve as a baseline for evaluating alternative policy measures.

This exercise will assist you to appreciate the practical details and challenges to be faced when creating a state of the environment baseline. In your case, the challenges are in fact less than would be the case in a real life situation where the range of stakeholders is very broad and includes the public. However, the exercise is sufficient to give you a feel of the problems involved.

In your preparation you still need your mandate to be able to conduct the SOE report for your selected country. A law has just been passed giving the Ministry to which your National Environment Management Authority belongs the mandate to issue a national SOE report every four years. It is the champion within the Ministry for this task. The law provides only vague guidelines about what is required, so it is up to the National Environment Management Authority staff to devise the best strategy. As always, funds are scarce, staff are stretched to their limits, data are hard to come by, and key stakeholders have barely started talking to each other.

The National Environment Management Authority needs to start with only the following specific guidelines:

- Development must meet the needs of the present generation without compromising the ability of future generations to meet their own needs:
- The report should cover environmental, social and economic trends and their interactions
- The report should deal only with the highest priority issues
- In spite of the limitations on the budget, all affected sectors of society should be involved following your selected country's motto: "Always do more with less"
- The report should use quantitative sustainability indicators as appropriate
- The description of current trends should be presented along with possible future development paths
- The final report should be ready within a year
- The total budget is limited and cannot be stretched beyond the minimum required

The person in the group whose data is being used for the exercise should be the spokesperson of the group. S/he will present the deliberations of the group to the rest of the participants in this training workshop. You can now see why there are, at least four people in each group: one each to represent the government, the private sector, NGOs, and academia.

8.9 Stages of preparation

Stage 1 - Deciding on a work plan and a joint strategy to carry it out

You need to establish a work plan and assign responsibilities as the first step at your first meeting.

- To make role playing more real, make opening statements and record them as if you are in a national planning meeting. An example of how this can be done is given in Table 8.3 below. It is not expected that the different stakeholders will agree on the various points in the table. For example, the government is likely to want the scope to include a wide range of social issues while industry may be eager to limit social issues and emphasize profit-making ventures. Try to really think like the stakeholder you are. It would, for example, be strange for an NGO stakeholder to say (on funding) that he/she will pay for 50 per cent of all the cost of producing the SOE report.

Table 8.3: Views of stakeholders

Issue	Government	Industry	NGOs	Academia
Scope and emphasis of report				
Distribution of responsibilities				
Requirement for funding				
Human resources required				

- Whatever your discussions on points in Table 8.3 you have to eventually have a joint strategy for making sure that the basic requirements for SOE reporting are met. Fill in Table 8.4 your joint strategy to make sure you cover the points listed

Table 8.4: Joint strategy for ensuring that the basic requirements of the report are met

	Agreed joint strategy
1. The report covers environmental, social and economic trends and their interactions	
2. All stakeholders are involved in the reporting Process	
3. The report uses quantitative sustainability indicators as appropriate	
4. The report deals only with high-priority issues	
5. The assessment and report are forward looking	

Stage 2 - Identify the issues to be addressed in the SOE report

Use Table 8.5 as a guide to identify issues to be addressed in the report and to roughly rank their importance

Table 8.5: Issues to be addressed in the SOE report

What is the environmental problem? (national and/or regional scale)	How serious are the main consequences?			Which areas are affected?			What priority should be given to the problem?		
	Low	Med	High	Human Health	Ecology	Economy	Low	Med	High
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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Stage 3 - Create a flowchart and timeline

Within your sub-group develop a flowchart (Table 8.6) to list steps to be followed and the time each step would take. One item will be missing from the Table: who is going to be responsible for each task.

Table 8.6: Task flowchart for producing the SOE report

Task flowchart	Time required

Stage 4 – Create a list of contents

Develop a list of the topics for your SOE report. Some examples have been provided in Table 8.7 to give you guidance Your Table, however, is expected to be unique based on the important issues in your selected country.

Table 8.7: Some examples of lists of contents of an SOE report

<ul style="list-style-type: none"> • Southern African Development Community <ul style="list-style-type: none"> ○ Regional Overview: People and Environment ○ Learning from History ○ Evolution of Policy ○ Southern African Eco-zones ○ The Climate Factor ○ Soils and Land Use
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- Woodlands and Forests
- Wildlife and Protected areas
- Freshwater Resources
- Marine Ecosystems
- Pollution
- Armed Conflict
- Global Atmospheric Change
- Trends and scenarios

- **Zambezi Basin 2000**
 - Regional overview: People and Environment
 - Physical Features and Environment
 - Water and Wetland Resources
 - Biological Resources and Biodiversity
 - Agriculture
 - Industry
 - Energy
 - Tourism
 - Pollution
 - Poverty
 - Gender and Women's Roles
 - Environmental Management and Regional Cooperation
 - Trends and Scenarios

- **Uganda**
 - Environment and development
 - Land
 - Forests and woodlands
 - Wetlands resources
 - Freshwater resources
 - Biodiversity
 - Urban areas
 - Atmosphere
 - Human health and environment
 - Environmental disasters
 - Policy responses
 - The future
 - Outlook and recommendations

Sources: Chenje and Johnson 1994, Chenje 2000 and NEMA 2000

Stage 5: Divide your list in Table 8.7 into chapters

Lastly, divide your list of topics in Table 8.8 and give the key issues for each chapter in your selected country. Identify an indicator(s) for each of the key issues you list.

Table 8.8: Chapters, key issues, and possible indicators

Topic/chapter title	Key issues in Selected Country	Possible indicators

You may wish, as a final stage in this exercise, to divide your topics into themes as they might appear in the final report. Each chapter might address a theme and show the major issues and policies under each theme. Table 8.9 below shows how West Africa's State of Environment report was divided into chapters. Your own themes and issues should not be the same; each report should be uniquely based on the specific environment it reports on.

Table 8.9: Division of topics into themes/chapters for West Africa's State of Environment (2004)

Themes	Majors issues and policies
General Introduction	The sub-region at a glance Geophysical characteristics Socioeconomic situation of west Africa Good governance, a priority for the development of the region Major environmental problems encountered in the sub-region
PART ONE: STATE OF THE ENVIRONMENT	
CHAPTER 1 ATMOSPHERE	Current situation Pressures (Causes) of Atmospheric degradation in West Africa Impacts of degradation of the Atmosphere Policy responses to conservation of the Atmosphere Conclusion
CHAPTER 2 BIODIVERSITY	State of the Biological diversity Pressures on Biodiversity in the Sub-region Impacts on Biodiversity Policy responses to conservation of Biodiversity Conclusion

CHAPTER 3 MARINE AND COASTAL ECOSYSTEMS	Coastal and Marine environment outlook Pressures on the Coastal and Marine environment Impacts of anthropogenic and natural activities Policies and options for conservation of the Coastal and Marine environment Conclusion
CHAPTER 4 FORESTS	State of Forests in the region Pressures on Forest resources Impacts of deforestation Policies on Management and Conservation of Forests Conclusion
CHAPTER 5 WATER RESOURCES	Water Resource Outlook Pressures on Water Resources Impacts of Anthropogenic activities Policy Responses for Sustainable Management of Water Resources Conclusion
CHAPTER 6 SOILS	State of the Soils Pressures on the Soil Impact on Soils Policy responses to Soil conservation Conclusion
CHAPTER 7 URBAN ENVIRONMENT	Urbanization outlook Urban pressures in West Africa Impacts of Urbanization on the environment in West Africa Policy responses to Urban problems Conclusion
CHAPTER 8 HUMAN HEALTH AND ENVIRONMENT	Current situation The pressures Impacts of the Environment on health Policies initiated to control Environmental diseases Conclusion
CHAPTER 9 NATURAL DISASTERS	Current situation Pressures Impacts Policies on protection against Natural disasters Conclusion
PART TWO: POLICY REVIEWS	
CHAPTER 1 REVIEW OF CURRENT ENVIRONMENTAL POLICIES	Introduction General overview of the Trend of macro-economic and Social policies Conclusion
CHAPTER 2 TRENDS IN SECTOR POLICIES IN WEST AFRICA	Agricultural Policies Industrial Policies Energy Policies Conclusion
CHAPTER 3 MULTILATERAL ENVIRONMENTAL	

AGREEMENTS	
CHAPTER 4 REGIONAL AND MULTILATERAL ENVIRONMENTAL AGREEMENTS	The Permanent Interstate Committee for Drought Control in the Sahel (CILSS) and Environmental conservation in the Sahel The Algiers Convention The Bamako Convention The Abidjan Convention
General Conclusion	Recommendations
ANNEXES	ANNEX 1: LIST OF PARTICIPATING COUNTRIES ANNEX 2: STATUS OF RATIFICATIONS
CONTRIBUTORS	
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Source: UNEP and NESDA 2004

8.10. Study/discussion questions

Q: Consider the range of stakeholders that were involved in the SOE process through the role playing experience. Is this a valuable addition or does it only make work more complicated?

A: _____

Q: How can you include socioeconomic information in the SOE section of an integrated environmental report?

A: _____

Q: If you did, would this still be only a state of the environment report?

A: _____

8.11 References

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