

United Nations Environment Programme

UNEP

Division of Technology, Industry and Economics

Economics and Trade Branch

**Studies of EIA Practice
in Developing Countries**

Edited by Mary McCabe and Barry Sadler

A supplement to the UNEP EIA Training Resource Manual

EDITORIAL NOTE

These case studies have been arranged and formatted to accord with the template produced for the 1994-96 International Study of the Effectiveness of Environmental Assessment. They have been edited to conform to standard English usage. For the sake of consistent presentation some rewriting and reformatting has been necessary. The editors accept total responsibility for these changes.

The quality of the graphics is in some cases poor, but they have been included as they give an indication of location even when the keys are not clearly decipherable. The terms 'Environmental Assessment' and 'Environmental Impact Assessment' are interchangeable, reflecting the local usage.

The author details at the end of each case study were those supplied at the initial presentation of the materials to IAIA and may not be current addresses.

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The United Nations Environment Programme

The United Nations Environment Programme (UNEP) is the overall coordinating environmental organization of the United Nations system. Its mission is to provide leadership and encourage partnerships in caring for the environment by inspiring, informing and enabling nations and people to improve their quality of life without compromising that of future generations.

UNEP's Economics and Trade Branch (ETB) is one of the branches of the Division of Technology, Industry and Economics (DTIE). Its mission is to enhance capacities of countries, particularly developing countries and countries with economies in transition, and to integrate environmental considerations in development planning and macroeconomic policies, including trade policies. The work programme of the Branch consists of three main components: economics, trade and financial services. The Economics component of the programme focuses on enhancing the capacities of countries, particularly developing countries and countries with economies in transition, to develop and implement assessment tools and economic instruments.

UNEP's work on assessments includes the further development and promotion of environmental impact assessment as an effective tool to integrate environmental considerations at the project, programme and policy levels to achieve sustainable development.

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Preface

This publication is a companion volume to the *UNEP Environmental Impact Assessment Training Resource Manual*. It contains a series of case studies of EIA (and elements of SEA) practice in developing and transitional countries. As with the Manual itself, EIA centres and training institutions in developing countries are invited to take ownership of the case studies, and to further develop them for use in their region or country.

The case studies have been prepared by EIA specialists from developing countries to exemplify how the EIA process is implemented in different parts of the developing world and to identify difficulties that are commonly encountered in EIA practice in this context. No claim is made that these studies are representative of the status of EIA in particular countries or of best (or worst) practice. Their purpose is to provide supporting materials for EIA trainers who are designing and delivering courses based on the various topics covered in the Manual.

It is intended that the case studies will be of use in two main ways: First, they can be incorporated into customised training materials to give them added relevance and realism. Collectively, the compendium of studies can be reviewed to select examples and aspects of interest that correspond to one of the training topics contained in the Manual and approximate to the local situation.

Second, the studies can be used as 'reference points' or 'building blocks' to develop specific cases that reflect experience and issues of EIA practice in a country or region. In using the Manual, EIA trainers are encouraged to prepare locally appropriate materials, including case studies and examples.

Case studies as resource aids

The Manual is a generic tool kit for use by EIA trainers, particularly those in developing and transitional countries. The main objective is to facilitate the preparation of training courses and materials that are specific to a particular country or region. Resource aids are included to help EIA trainers to identify the needs of participants and to custom-design courses to meet them. There is guidance on the sources of EIA information that will be useful when preparing training courses and materials for each topic. EIA reports and supporting documents have been identified as particularly relevant as a resource for preparing locally appropriate case studies.

Case studies based on EIA Reports are one of the best means of relating EIA training to local conditions and realities. In particular, appropriate case studies offer lessons and insights on EIA strengths and weaknesses locally. They are valuable for a number of purposes, including:

- demonstrating the institutional arrangements and procedures for EIA implementation in a given country;
- illustrating how the main steps and activities of the EIA process are carried out locally;
- considering the environmental settings and types of impacts that are typically addressed in EIA practice; and
- highlighting key trends and issues of EIA practice, including areas where capacity needs to be improved.

However, copies of EIA reports are not always readily obtainable in many developing countries or they may be too descriptive to be easily translated into a case study. Indeed, relatively few case studies of EIA practice in developing countries are available in the literature of the field.

This compendium of cases has been compiled to help fill that gap.

Acknowledgements

This volume of case studies of environmental impact assessment (EIA) practice in developing countries was prepared in response to a UNEP's initiative to gather and make available country studies on EIA, in collaboration with the International Association for Impact Assessment (IAIA). This initiative is part of the Capacity Building Programme run by IAIA between 1997 and 1999, and funded by the Foreign Ministry of the Netherlands.

The Programme enabled over 90 EIA practitioners from developing countries and those moving to a market economy to participate in the Annual Meetings of IAIA during that period. Participants were selected for their professional experience, their demonstrated capacity to both learn and lead, and their ability to use their conference experiences to promote the ongoing development of impact assessment in their respective regions. Each was invited to bring to the meeting a case study demonstrating 'EIA practice' in their region.

A selection of these case studies has been included in this volume, which is a supplement to the second edition of the UNEP Environmental Impact Assessment Training Resource Manual. It is intended that Manual users will incorporate into their presentations and training Programmes this first-hand material and other local studies to give added relevance and credibility to the training materials. The cases included here have been chosen because they are appropriate to the various topics covered in the Manual; that other case studies presented by this group are not included does not mean that they are of less merit.

There is a separate compendium of case studies of strategic environmental assessment (SEA) in countries in transition. The Regional Environmental Centre (REC) for Central and Eastern Europe published this volume jointly with UNEP as part of the case studies project and work under the Sofia Initiative on EIA and SEA. The paper by Ly Jalakas, Estonian Ministry of the Environment is reproduced in this volume as well because of its possible applicability to developing countries.

Our thanks to IAIA for permission to use the materials and to the Director-General for International Cooperation, Ministry of Foreign Affairs of the Netherlands for providing funding for the EIA Capacity Building Programme. Particular mention must be made of the work of Anneke Wevers, Environmental Assessment Advisor for the Department, who was the key link between the Ministry and IAIA, and the driving force behind the Capacity Building Programme.

Most importantly we wish to thank all participants in the Capacity Building Programme for the support they gave to each other and to the IAIA meetings in which they were involved and their generosity in sharing their expertise with the wider community of EIA practitioners.

Getting value from the case studies

These case studies are organised to correspond broadly with the order of training topics in Section E of the *UNEP Environmental Impact Assessment Training Resource Manual*. For reference, Topics 1 to 3 respectively introduce the EIA process, the legal and institutional framework and public participation; Topics 4 to 11 cover the main stages of the EIA process from screening to implementation and follow up; and Topics 12 to 15 respectively address EIA project management, social impact assessment (SIA), strategic environmental assessment (SEA) and new directions. Each case is keyed to a particular Topic of the Manual.

This initial reference is designed to guide EIA trainers in their primary search for case materials. However, they also are encouraged to conduct a broader review of the studies, working through them systematically if time permits. As will become quickly apparent, many of the studies are relatively comprehensive in that a number of EIA steps or elements are covered. Others are more general in that they emphasise EIA trends or issues related to procedure and methodology in a particular country or project context. Key words at the end of each case indicate the main subjects covered.

Collectively, the 30 case studies in this compendium cover a diverse range of EIA experience from some 25 countries. These include poor, low-income countries where EIA is not well developed and more rapidly developing countries where EIA is on a sounder footing. Approximately half of the case studies relate to EIA of specific projects, with particular representation of hydro and road schemes. Inevitably, the treatment of EIA practice is uneven with respect to topics in the Manual and to aspects that are highlighted. Nevertheless, there is valuable material on the real world of EIA in developing countries, and cues as to how they can be related to Manual Topics.

Although others may find them useful, the case studies are primarily intended for EIA trainers and users of the Manual. Their particular use, in that context, will depend on the results of the training needs analysis (TNA), which is an integral part of the approach outlined in the Manual. When custom-designing EIA training courses, these findings will give pointers to which cases may be helpful and how they could be recast to make them more relevant, useful and interesting to participants. In sum, the compendium of cases is best seen as a menu of options, which can be selected and adapted to purpose.

Wherever possible, EIA trainers are encouraged to develop their own case studies based on local experience. A framework for this purpose, which was used to compile the case studies in this volume, can be found in Section D of the Manual. In the interim, trainers can use the case studies in this volume to

highlight EIA trends and issues of particular interest to their situation and participants' needs.

When selecting cases, trainers are encouraged to:

- compare case study characteristics with EIA experience in their country;
- identify the differences and similarities in the EIA arrangements and elements;
- consider if there are aspects that illustrate lessons that are applicable to issues of EIA practice locally;
- relate these, when appropriate, to internationally recognized standards of EIA good practice (which are set out in the training topics of the Manual); and
- ensure these comparisons are realistic and practicable, leading toward ways and means of improving EIA process and practice that can be implemented.

It may be useful first to incorporate into training materials EIA trends and lessons from neighbouring countries or regions that have similar capacities and issues. There are major differences in the development of EIA systems and standards of practice in the developing world, which need to be taken into account. Some developing countries have considerable EIA experience, predating that of many developed countries. Others have yet to introduce or implement their own EIA legislation, although they may apply EIA to projects that are financed by development banks and agencies.

It may also be useful to evaluate the case studies against internationally accepted EIA principles and standards of good practice. There are various benchmarks that could be used or adapted for such a review. One approach would be to adopt the guidelines of the World Bank or a regional development bank, which apply to borrowing countries for projects financed through their lending activities. Another would be to adapt the *Report Card* of the International Study of the Effectiveness of Environmental Assessment as a checklist. The fold-out at the back of the book provides an easy-use form of this checklist which can be viewed while reading the individual case studies. Most of the case studies include a section on lessons learned, which incorporates the report card approach.

Some things to look for

The Manual underlines the reciprocal relationship of EIA practice and training in the context of capacity building (see Section B). EIA good practice is identified as the basis for quality training. In turn, EIA training has an acknowledged role in improving EIA practice, including strengthening institutional arrangements as well as implementing them more effectively.

What are some of the things EIA trainers might look for in that regard when reviewing the case studies?

Using the yardsticks described above, both positive and negative aspects of EIA practice can be noted from a review of the case studies. Often, the experiences described indicate approaches that are systematic and appropriate, and in some instances, innovative (such as the Environmental Review Fund established in the Philippines). It is evident that EIA procedure and practice in many developing countries has more points of similarity than difference with that in the developed world, and the necessary expertise is available to carry out EIA methodology. Not unexpectedly, the case studies also highlight a number of areas where EIA arrangements are either deficient or their implementation wanting.

Take as an example public involvement in the EIA process, which, typically, is considered to be deficient in developing countries compared to practice in the developed world. Collectively, the cases show evidence of effective practice in this area, as well as examples where lack of public input has resulted in conflict over project implementation (both are described in the Ghana case). Some issues related to public consultation in EIA are distinctive to parts of the developing world, such as being sensitive to cultural and historical traditions and respecting rights and interests of stakeholders. In some cases, social impact assessment (SIA) methodology has proven useful in engaging youth, women and elders in traditional communities (see Nigerian experience).

The areas and aspects of EIA procedure and practice that require improvement can be divided into two categories. First, there are issues that are similar to those experienced in developed countries. Examples include lack of effective monitoring, limited or no analysis of cumulative effects and inadequate mitigation measures – compounded in developing countries by cost constraints (as exemplified in the EIA of the highway corridor in Mexico).

Second, other concerns are particular to developing regions and broadly reflect their stage of development and political traditions. Examples include poor compliance in implementing newly established EIA arrangements (as in the Syrian case), and the openness of decision-makers to taking account of information in an EIA report (as in the Yemen case). In some cases, this brings into question the whole credibility of the EIA process (as in the case of the proposal for prawn farming in Tanzania).

This second category of concerns are particular targets for EIA training and capacity building to strengthen institutions and core competencies. A perennial question in this regard centres on the portability of so called western EIA processes and procedures. With certain reservations, the case studies in this compendium indicate that EIA arrangements used by development banks or other countries can be used, provided that specific

care is taken to adjust these to the situation and circumstances of a particular country. Further guidance on this matter can be found in the Manual and the companion volume on *Environmental Impact Assessment and Strategic Environmental Assessment: Towards an Integrated Approach*, which has particular reference to developing countries.