

**INTERNATIONAL INSTITUTE FOR ENVIRONMENT AND DEVELOPMENT**

**STRATEGIC ENVIRONMENTAL ASSESSMENT:  
An International Review**

**With a special focus on developing countries and countries in transition**

By

**Barry Dalal-Clayton and Barry Sadler**

*FINAL DRAFT  
19 July 2004*

*Work generously funded by  
The Royal Norwegian Ministry of Foreign Affairs and  
The United Nations Environment Programme*

as a contribution to the work of the OECD DAC ENVIRONET Task Team on SEA  
and the UNEP initiative on Strategic Integrated Planning

**IIED**

3 Endsleigh Street  
London WC1H 0DD, England, UK  
Tel: +44-207-388-2117  
Fax: +44-207-388-2826  
Contact e-mail: [barry.dalal-clayton@iied.org](mailto:barry.dalal-clayton@iied.org)  
Website: <http://www.iied.org/>



## PREFACE

Strategic environmental assessment (SEA) of policies, plans and programmes is a rapidly evolving field. New approaches and areas of application are emerging all the time, particularly in the fields of development cooperation and international trade. Recently, for example, the Network on Environment and Development Cooperation (ENVIRONET) of the OECD Development Assistance Committee (DAC) established a Task Team on the role, scope and contribution of SEA in support of development cooperation. This review is intended to provide a baseline for the ENVIRONET work programme on SEA. It also supports a UNEP programme, initiated in 2003, to develop a generic framework for “strategic integrated assessment” building on the strengths of SEA and earlier work on Integrated Assessment of Trade Liberalisation and Trade-Related Policies.

Both the UNEP and OECD/DAC initiatives respond to the change that is taking place in the agenda for international development, where the focus is increasingly shifting away from individual projects and toward policy-based lending and sector-level programming. This transition has placed a new emphasis on approaches and tools for strategic environmental assessment. It is an ‘upstream’ continuation of a larger, decade long process of integrating environmental and social considerations into the mainstream of development planning and decision-making across all sectors. Recently, there has been a call for more proactive, integrated approaches, notably in the Plan of Implementation of the World Summit on Sustainable Development.

In light of these developments, a review of SEA experience with a particular focus on developing countries, countries in transition and development cooperation agencies seemed to be timely and relevant. To date, the literature on SEA has concentrated predominantly on progress and issues in developed countries. Our initial intent was to avoid reference to this material. But we were persuaded otherwise by southern colleagues who suggested that it would be of considerable help to include a chapter on SEA practice in developed countries (for accessing relevant information and for comparative purposes).

Yet this book does not claim to be comprehensive. Rather it aims to describe the key trends and rapid evolution of SEA, and to provide a picture of the different approaches being used in particular countries and by a range of agencies. Inevitably, the coverage is uneven and varies in extent and depth. We have been dependent on the information we have been able to identify and access or that individual contributors have offered and provided. In addition, SEA is a fast-moving field where information quickly becomes dated. As far as possible, we have tried to present the latest position but, inevitably, by the time this review is published, things will have progressed again.

The particular focus on developing countries and international agencies has necessitated taking a pragmatic view of SEA in this review. We consider SEA to comprise a broad and diverse family of approaches that includes ‘*para SEA*’ processes – a term we use for processes which do not meet formal definitions of SEA or their specification in law or policy but which have some of their characteristics and elements. The concern is to look at SEA and ‘para-SEA’ from three perspectives:

1. What is in place in developing and transitional countries, whether applied domestically or in relation to development assistance and lending?
2. How well does this process work, especially from the standpoint of addressing the environmental and resource management agenda agreed at the World Summit on Sustainable Development (WSSD)? And

3. Which options and measures could strengthen SEA application in the formulation of policies, plans, programmes, legislation and other higher level proposals; and particularly to integrate the environment into economic development, and poverty reduction and sustainability strategies at all levels.

It is apparent that there is resistance in some quarters (particular amongst some senior decision-makers) to even considering the use of SEA. This arises for various reasons, for example: the role and methods of SEA are seen as unclear; or it is perceived to be too difficult, too time-consuming, too costly, etc. (all similarly unfounded criticisms of EIA in its early days). In other circumstances, various methods have been used to assess environmental dimensions and integrate these in the development of strategies, policies, plans and programmes. But these approaches have not been called SEA and those involved do not necessarily recognise them as a form of SEA.

A word on the structure of the book is warranted: The first chapter is introductory and sets SEA in its international context, whilst Chapter 2 discusses terms, principles, benefits and the evolution of SEA. Chapters 3-6 represent the core of the book and deal with SEA experience and practice in different regions/areas of application. But their structure varies. Chapters 3 (developed countries) and 6 (developing countries) are set out along on a country-by-country basis (alphabetically). Chapter 4 (development cooperation) is organised in two main sections dealing with multilateral development agencies and bilateral aid agencies – again alphabetically. But Chapter 5 (countries in transition) is presented in a more thematic manner. This is partly a reflection of different experiences in applying SEA. In the CEE region and NIS, there has been a focus on regional learning, much helped by the EIA and SEA programme work of the Regional Environment Centre for Central and Eastern Europe (REC), which has enabled sharing and distillation that we have been able to draw upon. Chapter 7 discusses the role of SEA in strategic planning processes, particularly strategies for sustainable development. Finally, in Chapter 8, we present our conclusions and recommendations and consider future directions and challenges for SEA.

We are conscious that this is a long book, which covers a lot of ground. This approach is warranted because as far as we know there is no comparable survey of the state of play in SEA development and practice, worldwide. Also adding to the length are many examples of SEA practice and more detailed case studies, which we consider necessary to illustrate SEA in operation and the pros and cons of particular arrangements and approaches. We hope this material will be of interest and help to SEA practitioners and observers, as well as development planners, policy analysts and others involved in preparing strategies and taking actions to integrate economic, environmental and social factors in sustainable development.

Barry Dalal-Clayton and Barry Sadler  
London, UK; and Victoria, BC, Canada  
July 2004

## ACKNOWLEDGEMENTS

This report builds on an unpublished earlier draft (Dalal-Clayton and Sadler 1998a), summarised in Dalal-Clayton and Sadler (1998b), prepared with financial assistance provided by the DGIS, Ministry of Foreign Affairs of The Netherlands. A large number of people provided information, suggested contacts or made available case material for the first draft and grateful thanks are particularly due to the following individuals:

Ron Bisset (Cordah Consultants) and Professor Chris Wood (EIA Centre, University of Manchester) for suggesting contacts in developing countries;  
Elizabeth Brito (IADB, Washington) for information on SEA in Brazil;  
Dr Andriy Demydenko ((UNDP Aral Sea Basin Capacity Development Project) for information on the Newly Independent States (NIS);  
Jiri Dusik (Regional Environment Center for Central and Eastern Europe, Nenad Mikulik (State Dept. of Environment and Nature Protection, Croatia) and Aleg Cherpa (Central European University, Budapest) for information and assistance regarding SEA in Countries in Transition and NISs.  
Dr Gilberto Gallopin (Stockholm Environment Institute), for information on global environmental scenarios;  
Jan Joost Kessler (AIDEnvironment, The Netherlands) for information on SEAn and contributing Case 15;  
Dr Parvaiz Naim (IUCN-Pakistan) for information on Pakistan and Case 16;  
Nick Robins (IIED) for information on scenario-planning within the European Union and case material Anna Spencely for contributing case material;  
Keith Wiseman (Cape Metropolitan Council South Africa) for commenting on the original manuscript and for checking two case studies.  
Hans van Zijst (Ministry of Housing, Spatial Planning and the Environment, The Netherlands) for information on scenario planning in the Dutch National Environmental Policy Plan.

Generous financial support for this updated and completely revised report has been provided by the Royal Norwegian Ministry of Foreign Affairs (MFA) and the United Nations Environment Programme (UNEP). We are particularly grateful to Inger-Marie Bjonness (MFA) for her support and encouragement, to Knut Opsal (NORAD) for technical advice and discussion on the scope of the work, and to Hussein Abaza (UNEP) for his encouragement.

The report has been prepared as part of a project to investigate the role and potential of SEA, particularly as a key tool for sustainable development. This project is also a contribution to the work programme of an OECD Development Assistance Committee (DAC) Task Team on SEA.

We are grateful to the following for their contributions:

Koassi d'Almeida (University of Quebec) for drafting text on SEA in francophone countries.  
David Annandale, Murdoch University, Australia, for documents and information on SEA application by multi-lateral development banks  
Kerstin Arbter (Arbter Consulting and Research) and Ralf Aschermann (Austrian Institute for the Development of Environmental Assessment), for information on SEA application in Austria  
Gideon Asfaw (Project Manager, Nile Transboundary Environment Action Project) for reviewing Nile Basin Initiative case study.  
John Ashe (consultant) for information on SEA in Australia.  
Michelle Audoin (CSIR, South Africa) for comments and SEA materials  
Leyli Bektashi, University of Manchester, for information on SEA in the Russian Federation, Azerbaijan and Slovakia  
Elizabeth Brito, Inter-American Development Bank, for information on SEA in Latin America  
Susie Brownlie (South Africa) for information on Spatial Development Frameworks and an SEA case study of the Lower Breede River.  
Aleg Cherp (Central European University, Hungary) for contributions to Chapter 5

Eben Chonguica, Southern Africa Regional Office of the World Conservation Union (IUCN-ROSA), Zimbabwe, for checking the section on Zimbabwe.,

Ray Clark (USA) for information on SEA in the USA.

Peter Croal (CIDA) for suggested text on the role of donors in promoting SEA in developing countries.

Holger Dalkmann, Wuppertal Institute, for reviewing section on SEA use in Germany.

Jenny Dixon, Department of Planning, University of Auckland, for information on the Resource Management Act and SEA in New Zealand

Sean Doolan, Jon Hobbs, Calire Ireland, Angus Mackay, Jean Paul Penrose and John Warburton, all Department for International Development, UK, for information on SEAs supported by DFID.

Jiri Dusik, for reviewing Chapter on SEA in Countries in Transition

Gerard Early, Department of the Environment and Heritage, Canberra, for information on SEA in Australia.

Dora Fu (Sustainable Development Unit, Hong Kong) for information on Computer-aided Sustainability Evaluation Tool

Thomas Fischer, University of Liverpool, for providing text on SEA in Germany, and for helpful comments on the first draft of the report.

Richard Fuggle, University of Cape Town, for comments on SEA in South Africa.

Clive George, University of Manchester, for information on sustainability impact assessment of WTO multilateral trade negotiations.

Linda Ghanime, United Nations Development Programme, for reviewing the section on SEA use by UNDP

Helene Gichenje, Canadian International Development Agency, for suggested edits to the information on SEA use by CIDA

Domingos Gove, Centre for Sustainable Development for Coastal Zones, Mozambique, for information on SEA in Mozambique and case study No. 17 .

Kogi Govender, CSIR Environmentek, South Africa, for comments on the manuscript and information on SEA in Mozambique.

Stuart Heather-Clark, Council for Scientific and Industrial Research, South Africa, for case study of SEA of the port of Cape Town./

Fabien Harel, for providing information on SEA use in France

Astrid Hillers, World Bank, for information on the Nile Basin Initiative.

David Howlett (DFID/UNDP) for information on SEA in Tanzania

Emma Kambewa for information on EA in Malawi

Kagiso Keatimilwe, CSIR, South Africa, for contributing to section on Botswana

Jan Joost Kessler (AIDEnvironment, The Netherlands) for drafting text on SEAN methodology and for comments on the draft text.

Bothepe Kgabung, University of Botswana, for contribution to section on Botswana

Young-Joon Lee (Korea Environment Institute) for information on PES system in Korea.

Themba Mahlaba, University of Swaziland, for information on SEA in Swaziland.

Jean Roger Merier, for comments on SEA experience at the World Bank

Joseph Milewski, for information on SEA experience at the Inter-American Development Bank

Julian Mlangeni for information on SEA in Swaziland.

Bore Moptsamai for information on SEA in Lesotho.

Mushibeyi Muliya (Roads Department, Zambia) for information on SEA in Zambia.

Felicidade Munguambe, Director, Ministry for Coordination of Environmental Affairs for information on SEA in Mozambique.

Sue Lane and Robin Carter (South Africa) for an SEA case study of diamond mining

Matt McIntyre, South Pacific Regional Environment Programme, Samoa, for information on SEA in the South Pacific

Peter Nelson, Land Use Consultants, Bristol, for information of SEA of Ghana PRSP and on the sustainability test.

Professor Raphael Mwalyosi (Institute of Resource Assessment, University of Dar es Salaam) for information on SEA in Tanzania and case studies.

Maria Partidario for providing a review of experience with SEA in Portuguese and Spanish speaking countries.

Stephanie Pfahl (Adelphi-consult) for suggested text on the integrative function of SEA.

Nigel Rossouw, Council for Scientific and Industrial Research, South Africa, for updating the section on SEA in South Africa.

Aboulaye Sene for information on SEA in Senegal.

Eugene Shannon, African Development Bank, for information on ADB activities on SEA.

Steve Smith (Scott Wilson Kirkpatrick consultants, UK) for revising section on SEA in the UK.  
 Peter Tarr and Gudrun Denker, Southern African Institute for Environmental Assessment, for organising a regional workshop on SEA in southern Africa, and for contributing text and case studies on SEA in Namibia.  
 Urszula Rzeszot, Institute of Environmental Assessment, Warsaw, for case study of framework SEA of the Polish National Development Plan 2004-2006  
 Dewi Utami, Asian Development Bank, for information on SEA experience at ADB  
 Rob Verheem (Netherlands EIA Commission) for information on SEA in the Netherlands and for Box 3.18.  
 Bryony Walmsley, WSP Walmsley consultants, South Africa, for case study of SEA of Sperrgebiet Land Use Plan, Namibia.  
 Martin Ward (New Zealand) for comments on the text.  
 Mike Warren, Dirk Versfeld, Obed Baloyi and Gavin Quibell, Department of Water Affairs and Forestry, South Africa, for information on SEA for water use.  
 Edward Zulu (National Environment Council, Zambia) for information on SEA in Zambia.

The following provided information on SEA in Spanish- and Portuguese-speaking countries:

- Olivia Bina, Cambridge University, UK
- Miguel Carballo, Guatemala
- Maria João Coelho, New University of Lisbon
- Juan Carlos Garcia de Brigard, Colombia
- Fernando Garrote Garcia, Universidad Politecnica de Madrid, Spain
- Claudia Perazza, Inter-American Development Bank
- Lídia Biazzi Lu, Tetraplan, Brazil
- Joseph Maria Mallarach, Higher-Education Studies in Olot, Catalunya, Spain
- Rosa Maria Arce Ruiz, Madrid University, Spain
- Arcindo dos Santos, Inter-American Development Bank
- Izabella Teixeira, Federal University of Rio de Janeiro, Brazil
- Custódio Voabil, Ministry of Environment and SEACAM, Mozambique

Grateful thanks must also be extended to the participants of SEA workshops organised in association with our work in Namibia (covering southern Africa), and in Hungary (countries in transition). We have drawn from information tabled and discussions during these events:

***Southern Africa*** (Namibia, 13-16 May 2003):

John Boyle, World Bank; Susie Brownlie, consultant, South Africa; Alexander Chambi, CEARM, Tanzania; Mutsa Chasi, Ministry of Environment & Tourism, Zimbabwe; Zuma Chengeta, consultant, Botswana; Colin Christian, consultant, Namibia; Connie Claasen, Ministry of Environment & Tourism, Namibia; Eben Chonguica, IUCN-ROSA, Zimbabwe; Peter Croal, CIDA & SAIEA, Namibia; Gudrun Denker, SAIEA, Namibia; Wynand Foruie, EIA Directorate, South Africa; Stuart Heather-Clarke, CSIR, South Africa; Emma Kambewa, The World Fish Centre, Malawi; Sylvester Kamwi, National Planning Commission, Namibia; Kagiso Keatimilwe, CSIR, South Africa; Bertus Kruger, Desert Research Foundation of Namibia; Hartmut Krugmann, consultant, Namibia; Sue Lane, consultant, South Africa; John Langford, NamPower, Namibia; Themba Mahlaba, University of Swaziland; Johann Malan, consultant, Namibia; Lote Simione, Ministry for Coordination of Environmental Affairs, Mozambique; Julian Mlangeni, consultant, Swaziland; Pat Morant, CSIR, South Africa; bore Motsamai, consultant, Lesotho; Msego Mpotokwane, University of Botswana; Musimbeyi Muliya, Ministry of Works & Supply, Zambia; Felicidade Munguambe, Ministry for Coordination of Environmental Affairs, Mozambique; Raphael Mwalyosi, University of Dar es Salaam; Knut Opsal, NORAD, Norway; Reinoud Post, Commission for EIA, The Netherlands; Bernice Puling, National Environment Secretariat, Lesotho; Nigel Rossouw, CSIR, South Africa; Hespina Rukato, NEPAD Secretariat, South Africa; Vlady Russo, SADC REEC, Angola; Jan-Peter Schemmel, GTZ, Germany; Maitland Seaman, University of the Free State, South Africa; Peter Tarr, SAIEA, Namibia; Arne Tesli, Norsk Institutt for byog Regionforskning, Norway; Bryony Walmsley, WSP Walmsley, South Africa; Alex Weaver, CSIR, South Africa; Edward Zule, Environment Management Council, Zambia.

***Hungary*** (at Regional Environment Centre, Szentendere, 28-30 April 2003):

Irena Brnada, REC, Croatia; Hana Peterova, Michal Petru & Martin Smutný, Ministry of Environment, Czech Republic; Jana Svobodova, Centre for Community Organising Middle Bohemia, Czech Republic; Simona Kosikova Sulcova, REC, Czech Republic; Veronika Versh, Ministry of Environment, Estonia; Ahto Oja, Institute for Sustainable Development/SEI, Estonia; Peep Mardiste, Green Movement/FoE, Estonia; Jaak Tambets, Wildlife Estonia; Tuuli Rasso, REC, Estonia; Anna Radnai and Edina Dancsókné Fóris, Ministry of Environment & Water, Hungary; Urszula Rzeszot, Institute for Environmental Assessment, Poland; Malgorzata Koziarek, REC, Poland; Ingrid Belcakova, Slovak Technical University, Slovakia; Vladimir Hudek, REC, Slovakia; Milena Marega, REC, Slovenia; Michelle Audoin, CSIR, South Africa; David Aspinwall, European Commission, Brussels; Heli Kask European Commission, Estonia; Gentaro Nakayama, Ministry of Environment, Japan; Rita Hamm, IAIA, USA; Wiek Schrage and Nick Bonvoisin, UNECE, Switzerland; Jiri Dusik, Rec, Czech Republic; Magda Tóth Nagy, Agata Miazga, Austra Jurkeviciute & Orsolya Szalai, REC, Hungary.

Thanks are also due to following the members of **OECD DAC Task Team on SEA**: Hussein Abaza (UNEP); Kulsum Ahmed, Charles Delfieuz, David Hanrahan, Magda Lovei and Jean-Roger Mercier (World Bank); Stephen Bass, Jon Hobbs, Andrew McCoubrey, John Warburton and Zoe Wildig (UK DFID); Karr I Elgar and Ellen Shipley (OECD, Australia); Tomas Andersson (Sida, Sweden); Miriam Ciscar (AECL, Spain); Peter Croal (CIDA, Canada); Josef Gamperl (KfW, Germany); Inger-Marie Bjonness (Ministry of Foreign Affairs, Norway); Georg Caspary and Remi Paris (OECD); Anders Ekbohm and Daniel Slunge (University of Gothenberg, Sweden); Jouko Eskelinen and Matti Nummelin (Ministry of Foreign Affairs, Finland); Finton Farrelly (Ministry of Foreign Affairs, Ireland); Marianne Fernagut (Brussels Free University, Belgium); P. Gent, Stefan Morel and Rob Verheem (EIA Commission, The Netherlands); Linda Ghanime, Ndey Njie and Gregory Wordsworth (UNDP); Kaoru Kobayashi (Ministry of Environment, Japan); Petter Koren (Ministry of Environment, Norway); Simona Kosikova (REC, Czech Republic); Knut Opsal (NORAD); Stephan Paulus, Jan-Peter Schemmel and Volkjer Kleinschmidt (GTZ, Germany); Jan Riemer (DANIDA); Elizabeth Smith (EBRD); Henk van Trigt (DGIS, The Netherlands); Carlos Valenzuela (Bolivia); Robyn Whittaker (CIDA, Canada)

Finally, we are very grateful to Rob Verheem (EIA Commission, The Netherlands) and to Professor Chris Wood (University of Manchester) for reviewing and critiquing the final manuscript. If we have inadvertently failed to acknowledge anyone who has helped us in this work, we are sincerely sorry.



# CONTENTS

Preface  
Acknowledgements  
Acronyms and abbreviations

## Page No.s to be added

<b>1</b>	<b>SEA in international perspective</b>	<b>*</b>
<b>2</b>	<b>Surveying the field of SEA</b>	<b>**</b>
2.1	Overview of the SEA literature and key references	
2.2	Terms and definitions	
2.3	SEA principles	
2.4	Rationale, benefits, capacity requirements and preconditions for SEA	
2.5	Opportunities and constraints	
2.6	Evolution and trends in SEA	
2.6.1	SEA in the context of EIA history	
2.6.2	The status of SEA systems	
2.6.3	International legal instruments	
2.6.4	Evolution of para SEA, including global and integrative approaches	
<b>3</b>	<b>SEA experience in developed countries</b>	<b>**</b>
3.1	Brief overview of SEA institutional arrangements in developed countries	
3.2	SEA experience in the European Union	
3.2.1	EU legal and policy frameworks	
3.2.2	New areas of application	
3.2.3	The EU SEA Directive in perspective	
3.2.4	Toward implementation	
3.3	National experience with SEA	
3.3.1	Australia	
3.3.2	Austria	
3.3.3	Canada	
3.3.4	Denmark	
3.3.5	Finland	
3.3.6	France	
3.3.6	Germany	
3.3.8	Japan	
3.3.9	Korea	
3.3.10	The Netherlands	
3.3.11	New Zealand	
3.3.12	Norway	
3.3.13	Portugal	
3.3.14	Spain	
3.3.15	United Kingdom	

### 3.3.16 USA

## **4 SEA experience in development cooperation** **\*\***

- 4.1 SEA in multi-lateral development agencies
  - 4.1.1 The World Bank
  - 4.1.2 African Development Bank
  - 4.1.3 Asian Development Bank
  - 4.1.4 European Bank for Reconstruction and Development
  - 4.1.5 United Nations Development Programme (UNDP)
  - 4.1.6 United Nations Environment Programme (UNEP)
- 4.2 SEA in bilateral aid agencies
  - 4.2.1 Canadian International Development Agency
  - 4.2.2 Department for International Development (DFID), United Kingdom
  - 4.2.3 The Netherlands
  - 4.2.4 OECD Development Assistance Committee
  - 4.2.5 Swedish International Development Agency (Sida)
  - 4.2.6 United States Agency for International Development (USAID)

### *Cases*

- 4.1 Application of the Strategic Environmental Analysis (SEAn) methodology in Cameroon, and in Honduras and Nicaragua

## **5 SEA experience in countries in transition** **\*\***

- 5.1 Newly Independent States
  - 5.1.1 Main features of SER/OVOS systems
  - 5.1.2 Regional trends and variations
  - 5.1.3 Implementation of SER provision and procedure
  - 5.1.4 SEA practice in NIS
  - 5.1.5 Recent developments and issues in the Russian Federation
- 5.2 Central and Eastern Europe
  - 5.2.1 Origins of SEA in CEE
  - 5.2.2 Recent developments in SEA arrangements and implementation
  - 5.2.3 SEA practice in land use planning
  - 5.2.4 SEA of sector plans and programmes
  - 5.2.5 SEA of programming documents for EU structural funds in all EU accession countries
  - 5.2.6 SEA of policy
- 5.2 Future development of SEA in the NIS and CEE regions

### *Cases*

- 5.1 SEA of Slovak Energy Policy (EP 2000)
- 5.2 Framework SEA of the Polish National Development Plan 2004-2006
- 5.3 SEA of Energy Policy of the Czech Republic (EP-CR)

## **6 SEA experience in developing countries**

\*\*

- 6.1 SEA in southern Africa
  - 6.1.1 South Africa
  - 6.1.2 Botswana
  - 6.1.3 Lesotho
  - 6.1.4 Malawi
  - 6.1.5 Mozambique
  - 6.1.6 Namibia
  - 6.1.7 Swaziland
  - 6.1.8 Tanzania
  - 6.1.9 Zambia
  - 6.1.10 Zimbabwe
  
- 6.2 SEA in Francophone Africa
  - 6.2.1 Benin
  - 6.2.2 Burkina Faso
  - 6.2.3 Cote d'Ivoire
  - 6.2.4 Cameroon
  - 6.2.5 Djibouti
  - 6.2.6 Guinea-Conakry
  - 6.2.7 Madagascar
  - 6.2.8 Mali
  - 6.2.9 Morocco
  - 6.2.10 Niger
  - 6.2.11 Senegal
  - 6.2.12 Togo
  - 6.2.13 Tunisia
  
- 6.3 SEA in the rest of sub-Saharan Africa
  - 6.3.1 Cape Verde
  - 6.3.2 Ghana
  - 6.3.3 Uganda
  
- 6.4 SEA in Latin America and the Caribbean
  - 6.4.1 Bolivia
  - 6.4.2 Brazil
  - 6.4.3 Chile
  - 6.4.4 Guatemala
  - 6.4.5 Ecuador
  
- 6.5 SEA in Asia
  - 6.5.1 China
  - 6.5.2 Hong Kong
  - 6.5.3 Indonesia
  - 6.5.4 Korea
  - 6.5.5 Nepal
  - 6.5.6 Pakistan
  - 6.5.7 Thailand
  
- 6.6 SEA elsewhere
  - 6.6.1 Lebanon
  - 6.6.2 Pacific islands

## **Cases**

- 6.1 SEA for the Proposed East London Industrial Development Zone, South Africa
- 6.2 General Management Plan for Kilimanjaro National Park, Tanzania
- 6.3 Ngorongoro Conservation Area General Management Plan, Tanzania
- 6.4 SEA of Tofo, Barra, Tofinho and Rocha (TBT) beaches area, Mozambique
- 6.5 SEA of the Great Western Development Strategy, China
- 6.6 SEA for Second National Development Plan, Namibia
- 6.7 SEA for Water Use, South Africa
- 6.8 Transboundary SEA of the Nile Basin
- 6.9 SEA of the port of Cape Town, South Africa
- 6.10 Land use Plan for the Sperrgebiet, Namibia
- 6.11 Sectoral SEA: Generic Environmental Management Programme for Marine Diamond Mining off the West Coast of South Africa

## **7 SEA and strategies for sustainable development \*\***

- 7.1 The dichotomy in SEA
- 7.2 Scenario planning
- 7.3 Learning from strategic planning frameworks
- 7.4 The role of SEA in sustainable development and poverty reduction strategies

## **8 Advances and conclusions \*\***

- 8.1 Points of departure
- 8.2 Conclusions and recommendations
  - 8.2.1 SEA revisited and reconsidered
  - 8.2.2 Key trends in SEA process development
  - 8.2.3 *Status of SEA and experience in different parts of the world*
- 8.3 Future directions and ways forward
  - 8.3.1 Improving SEA quality and effectiveness
  - 8.3.2 Towards a sustainability approach
  - 8.3.3 Promoting integrated assessment and planning
- 8.4 Challenges to real progress?

## **References \*\***

## **Appendices \*\***

- 1 SEA legal and policy benchmarks
- 2 Some Examples of SEA Training Initiatives
- 3 The Situation regarding SEA in Countries in Transition prior to 1997
- 4 Millennium Ecosystem Assessment
- 5 Recommendations for SEA of regional development plans in CEE countries
- 6. Principles, their implications for CIDA and key factors for SEA
- 7. Sub-national economic and environment planning (E-c-E)
- 8. Legal requirements for SEA in selected Spanish regions
- 9. Principles, their implications for CIDA and key factors for SEA
- 10. Sustainability Impact Assessment of WTO Multilateral Trade Negotiations

11. Examples of Integration Mechanisms and Role of Environmental Assessment from Selected EU Member States
12. Step-by-step guidance on application and use of procedures and methods in SEA good practice
13. Considerations for UNDP quality programming

## **Boxes**

- 1.1 References to EIA and integrated assessment in the WSSD Plan of Implementation
- 2.1 Some Definitions of SEA
- 2.2 Trends in the evolution of SEA conceptions
- 2.3 Examples of commonly used acronyms for SEA-type approaches
- 2.4 Some Principles for SEA
- 2.5 Performance Criteria for SEA
- 2.6 A Pre-Screening Procedure for Determining SEA Requirements
- 2.7 Rationale, benefits, capacity requirements and preconditions for SEA
- 2.8 Some Initiatives Towards SEA in Development Cooperation and Assistance
- 2.9 The Global Environment Outlook project
- 2.10 State of the environment reporting
- 3.1 Protocol on Strategic Environmental Assessment (SEA) to the UNECE Convention on EIA in a Transboundary Context
- 3.2 The EU Environment Action Programme and Strategy for Sustainable Development
- 3.3 Integration of the environment in European Commission policy-making
- 3.4 Impact assessment in EC policy-making
- 3.5 Information to be provided in an Environment Report (as specified in Annex 1 of the EU SEA Directive)
- 3.6 The ANSEA project
- 3.7 The Central Highlands RFA/CRA Process, Australia
- 3.8 Forest and Timber Inquiry, Australia
- 3.9 Pilot SEAs in Austria
- 3.10 Pilot SEA for Vienna's waste management plan
- 3.11 Use of the SEA round table approach in Austria
- 3.12 Generic framework for ex ante SEA for trade negotiations, Canada
- 3.13 Pilot SEA in North Jutland, Denmark
- 3.14 Finnish experience in assessment of Bills compared with the assessment of policies, plans and programmes
- 3.15 Japan Study of SEA Methodology
- 3.16 Preliminary Environmental Scan (PES) in Korea: A SEA-like system
- 3.17 Netherlands environmental test of draft legislation
- 3.18 Tiered Management of Waste Management in the Netherlands
- 3.19 The challenge of implementing the European SEA Directive in the Netherlands: A personal reflection
- 3.20 Environmental assessment for hydroelectric power plans in Norway
- 3.21 SEA in land use planning: experiences from five pilot projects
- 3.22 Draft guidance on SEA for land use planning in Portugal
- 3.23 UK guidance on SEA for national policies
- 3.24 UK guidance on SEA of development plans
- 3.25 Bonneville Power Administration Business Plan EIS
- 3.26 Proposed SEA of Point of Immigration Entry Enhancements, USA
- 4.1 SEA of Gujarat State Highways Programme, India

- 4.2 Regional environmental assessment of Argentina flood protection
- 4.3 The World Bank's Environmental Strategy
- 4.4 Draft strategic impact assessment guidelines for the African Development Bank
- 4.5 SEA of Slovenia's transport system
- 4.6 The proposed six-step SEA methodology for the IADB
- 4.7 Trialing the Environmental Overview approach
- 4.8 UNEP manual on integrated assessment of trade-related policies
- 4.9 Steps in Integrated Coastal Area and River Basin Management
- 4.10 Proposed comprehensive SEA system for multi-lateral development banks
- 4.11 CIDA process for SEA
- 4.12 DFID's screening guide
- 4.13 Andhra Pradesh: Operationalizing Vision 2020 Environmental Management
- 4.14 Strategic Environmental Analysis (SEAN): The AIDEnvironment Approach. The Main steps
- 4.15 SEA in Development Cooperation
- 4.16 Sida's strategic questions on economic policy and the environment
- 4.17 USAID's regional environmental threats and opportunities assessment for Africa
- 4.18 Elements in Strategic Environmental Planning: Proposed to USAID
  
- 5.1 Sofia Initiative on Strategic Environmental Asses
- 5.2 State environmental review (SER) in NIS Countries
- 5.3 Status of SEA practice in Belarus
- 5.4 SEA application in the Russia Federation
- 5.5 SEA of the Moscow City Master Plan for the Period to Year 2020
- 5.6 Examples of legal provision for SEA in CEE countries prior to transposition of Directive 2001/42/EC
- 5.7 Second generation of SEA arrangements in the Czech Republic
- 5.8 SEA of the Jurmala Territorial Development Plan, Latvia
- 5.9 SEA of the Varna Municipality Development Plan, Bulgaria
- 5.10 SEA of Bratislava land use plan
- 5.11 Methodology and approach to SEA of major transport routes in Slovenia
- 5.12 SEA of Waste Management Plan of the Czech Republic
- 5.13 SEA of National (Regional) Development Plans in CEE
- 5.14 SEA of development plans from the perspective of decision-makers
- 5.15 Use of environmental objectives in SEA of plans and programmes
- 5.16 SEA of energy policy in Czech and Slovak Republics
- 5.17 Recommended principles for SEA Application in the CEE region
- 5.18 Priorities for the development of national SEA systems in the CEE region
  
- C5.2.1 Sustainability criteria for assessing the Polish National Development Plan, 2004-2006
  
- 6.1 Examples of legal entry points for SEA in southern Africa
- 6.2 Socio-economic and political context for planning and SEA in southern Africa
- 6.3 EIA<sup>3</sup> in the Southern African Development Community (SADC)
- 6.4 Preliminary SEA for the KwaZulu-Natal Trade and Industry Policy, South Africa
- 6.5 Provisions for SEA in South Africa's policies, legislation and programmes
- 6.6 Okavango delta management plan
- 6.7 SEA of Caprivi Sugar Project, Namibia
- 6.8 Rössing uranium mine Sustainability Assessment
- 6.9 Some SEA-like processes in Swaziland
- 6.10 Management Zone Planning/EIA in Tanzanian National Parks
- 6.11 SEA of road development in national parks, Tanzania
- 6.12 SEA of Development Around Victoria Falls, 1996
- 6.13 Proposed procedure for an SEA of the coastal management programme (Côte

- d'Ivoire)
- 6.14 Sectoral environmental assessment of Moroccan agriculture
- 6.15 Environmental assessment of the Second Transport Sector Programme (PST II), Senegal
- 6.16 SEA of Ghana's Poverty Reduction Strategy
- 6.17 Use of SEA-type approaches to inform the development of the Poverty Eradication Action Plan, Uganda
- 6.18 Examples of SEAs in Latin America and the Caribbean led by the Inter-American Development Bank and the World Bank
- 6.19 SEA of Santa Cruz – Suarez Road, Bolivia
- 6.20 SEA of Programme for the Rehabilitation of Downtown Sao Paulo, Brazil
- 6.21 Brazil: SEA of Regional Development Priority Areas (Axes)
- 6.22 Challenges to introducing SEA in Chile
- 6.23 The new EIA Law in China
- 6.24 SEA of Territorial Development Strategy, Medium-Term Options, Hong Kong
- 6.25 Bara Forest Management Plan, Nepal
- 6.26 Assessing the potential to introduce SEA in Nepal
- 6.27 SEA of Thermal Power Generation Policy, Pakistan
- 6.28 SEA and land use Planning project in Lebanon
- 6.29 Promoting SEA in Pacific Island Co
- 6.30 Strategic Environmental Assessment of the Fiji Islands National Tourism Plan
  
- C6.4.1 Steps in SEA in (Tofo, Barra, Tofinho and Rocha Beaches) area, Mozambique
- C6.9.1 Vision for the sustainable development of the Port of Cape Town
- C6.9.2 Strategic issues for detailed investigation during the SEA
  
- 7.1 A Framework for Sustainability Analysis
- 7.2 Futurology: Experience from India
- 7.3 Uses of Scenarios in Environmental Assessments
- 7.4 Global Scenarios
- 7.5 Steps in the European Environment Agency's 'Story and Simulation Approach'
- 7.6 Scenario-Planning in South Africa
- 7.7 National Conservation Strategies and National Environmental Action Plans
- 7.8 Poverty Reduction Strategies
- 7.9 Illustrative steps for starting, managing and continually improving a strategy for sustainable development
- 7.10 Scenario Planning and the Dutch National Environmental Policy Plan
- 7.11 Progress with PRSPs: Key points of the comprehensive review by World Bank and IMF
  
- 8.1 Work programme of the OECD DAC Task Team on SEA/Sustainability Appraisal
- 8.2 The leverage of donors: A personal reflection
  
- A4.1 Aims of the Millennium Ecosystem As
- A4.2 Integrated ecosystem assessment
- A7.1 Refined sub-national E-c-E planning model used by the Asian Development Bank

## Tables

- 2.1 SEA: constraints and opportunities to overcome them
  
- 3.1 SEA institutional frameworks and their scope of application in selected countries
- 3.2 SEA models and approaches

- 3.3 Stages of Stages, decisions and outputs of SEA and sustainability appraisal
- 4.1 A summary matrix for Poverty and Social Impact Analysis of policy change
- 5.1 SER/OVOS systems in NIS
- 5.2 OVOS/SER application to strategic proposals
- 5.3 Overview of the status of SEA provision in CEE countries
- 5.4 Proposed options for incorporating SEA into strategic planning processes in the CEE region
- C5.1.1 Relationship of SEA to policy development
- C5.1.2 Evaluation of major components of SEA of Energy Policy 2000
- C5.3.1 Indicators for analysing the Energy Policy
- 6.1 The conceptual differences in understanding and emphasis between EIA and SEA in South Africa
- 6.2 Examples of SEAs in Mozambique
- 6.3 SEA in developing francophone countries
- 6.4 EAs carried out in Madagascar
- 6.5 Possible roles for the development and use of SEA in Nepal
- 6.6 Summary of process for SEA of Fiji's Tourism Development Plan
- C6.4.1 TBT SEA: Specific alternatives
- C6.6.1 Phases in NDP2 support project, Namibia
- C6.7.1 Key elements of the SEA process for SFRAs
- 7.1 Changing approaches to strategies
- 7.2 Environmental review of Vietnam PRSP
- 7.3 SAIEA PRSP assessment framework
- 8.1 Elements of SEA capacity and their development
- 8.2 Elements of review of SEA quality and effectiveness
- A10.1 SEA Examples in Central Europe

## **Figures**

- 1.1 Typology of sea approaches
- 2.1 The menagerie of SEA terminology
- 2.2 EA practice within the tiered transport planning system in Germany
- 3.1 Procedural steps for the ANSEA framework
- 3.3 Stages in the environmental assessment process proposed for evaluating State – Regions planning contracts (CPERs) in France
- 4.1 Proposed comprehensive SEA System for multi-lateral development banks
- 6.1 Key requirements for implementing decision-focused SEA in southern Africa
- 6.2 SEAs in South Africa: 1996-2003
- 6.3 Example of how SEA elements can be integrated and used to support the municipal development planning process
- 6.4 Framework for Environmental Audit of District development Plans



- C6.1.1 Process for SEA of East London IDZ
- C6.7.1 Usutu to Mhlathuze WMA: Location
- C6.9.1 Policy process and CSIR's interaction with the process
- C6.9.2 SEA Process for the Port of Cape Town
- C6.10.1 Sperrgebiet. Location
- C6.10.2 Process for planning the sustainable development of the Sperrgebiet
  
- 7.1 Rationale for a systematic approach to sustainable development strategies
- 7.2 A 'continuous improvement' approach to sustainable development strategies
- 7.3 Constellation of mechanisms contributing to a sustainable development strategy

