Environment Department The World Bank



October 1993 Number 4

Sectoral Environmental Assessment

Sectoral environmental assessment (SEA) is a much needed complement to project-specific EAs in development planning. Where project EAs focus on the impacts of specific investments and often treat sector strategic planning as a given, SEA offers an opportunity for sector-wide environmental analysis before investment priorities have been determined. It also supports integration of environmental concerns into long-term development and investment planning. SEA is most commonly applied in the context of sector investment programs involving multiple sub-projects. It can also be applied in conjunction with sector-oriented time-slice and line-of-credit projects, and even with sector adjustment operations or in evaluation of sector policies.

This EA Sourcebook Update, which belongs to Chapter 1: The Environmental Review Process (Update Binder), describes SEA in terms of advantages, operational context, selection criteria, and components. It also discusses what some of the challenges associated with SEA preparation are, and how SEA is being used in Bank operations. This Update expands on existing information in Chapter 1 (pp. 14-17) of the EA Sourcebook.

Background

World Bank guidance on sectoral EA was introduced in 1989 with the adoption of Operational Directive (OD) 4.00, Annex A: Environmental Assessment (amended in 1991 as OD 4.01). The *Environmental Assessment Sourcebook* (1991) provided more detailed advice that has helped the Bank and its borrowers to introduce SEA in project preparation, despite the lack of a tested methodology. On the basis of this accumulated experience, it is now possible to expand Bank guidance on SEA.

SEA avoids the inherent limitations of project-specific EAs in addressing issues related to policy and planning and the legal and institutional framework. By moving upstream in the planning process to a stage where major strategic decisions have not yet been made, SEA offers better opportunities not only for analyzing existing policies, institutions, and development plans in terms of environmental issues, but also for supporting environmentally sound sectorwide investment strategies. A SEA may, for example, allow for a more realistic environmental assessment of competing investment alternatives in the power sector, where one option might favor massive coal thermal and hydro-electric expansion; a second option, nuclear and hydro-electric power; and a third,

a combination of coal and gas thermal power coupled with demand-side management and development of renewable biomass energy. Similarly, where project-specific EA would analyze the impacts on ambient air quality around a new industrial estate, the sectoral EA might look at the cumulative effects of acid rain or other problems resulting from proposed industrial developments in terms of their regional, national or even trans-national impacts.

The Bank's increasing use of programmatic, sectororiented loans and time-slice investment programs has served to build demand for a sectoral EA approach, and has provided the best opportunities for developing SEA as a planning tool. An example of this approach is presented in Box 1. In other cases, sectoral EA may be the only EA output if the sub-projects do not require EAs individually. Environmental planning measures and/or guidelines developed by the SEA may then be applied (see Box 2 for a list of Bank-financed projects with a SEA component).

Advantages of Sectoral EAs

The growing Bank experience with SEAs has revealed several important benefits to be gained from use of this instrument in development planning (*see* Boxes 1 and 3–6). The following advantages are worth highlighting:

Box 1. State of Orissa, India: Water Resources Consolidation Project

India has begun increasing irrigation capacity through more efficient operation and maintenance of existing facilities, rather than through construction and development. A series of Water Resources Consolidation projects (WRCP) currently being planned by four State Governments and supported by the Bank will facilitate this change of direction. A sectoral EA approach is being adopted for these projects because: (1) they are substantially programmatic and not all activities will be fully defined at appraisal; (2) the main environmental issues concern monitoring and management rather than impacts from new construction projects; and (3) environmental considerations related mainly to water quality and quantity are becoming increasingly important in all these states. The governments need improved technical advice on how to cope with these challenges on the institutional and policy level.

The first of these projects was Orissa WRCP, and preparation of the SEA was divided into two phases. Phase 1, currently in progress, focuses heavily on the institutional and legal framework for the water sector and includes the following objectives and tasks:

- to assist in establishing an Environmental Group within the Orissa Irrigation Department's Central Planning Unit;
- to review the status of environmental legislation and its applicability to the water resource sector in general, and to proposed projects in particular;

- to provide guidelines for the approach to and the preparation of required Site Clearance and Environmental
 Clearance documents for various types of irrigation
 projects (such as dams, irrigation development, river
 basin plans, major drainage and flood protection
 works, and rehabilitation of major irrigation schemes);
- to provide initial training for the water resource sector and other related government staff in EA procedures, techniques and analyses;
- to establish the organization, staffing levels, responsibilities, operating procedures and budgeting for a proposed environmental sector unit;
- to prepare a comprehensive training and institutional strengthening program, including 2-3 case study EAs for representative projects; and
- to delineate procedures for interagency liaison and internal department clearances for water resource project EAs with departments such as Environment, Forests, and Health Service.

The total cost of the Phase 1 program was estimated at US \$446,700, with staff requirements estimated at 34.5 person months.

Phase 2 will be based on findings and recommendations of the first phase. It would probably include such components as preparation and completion of the case studies, long-term training in EA, preparation of monitoring plans for the irrigation sector, and upgrade of the environmental monitoring facilities.

- Sectoral EAs can prevent serious environmental impacts through analysis of sector policies and investment strategies upstream in the planning process, before major decisions are made.
- They can assist governments in forming a long-term view of the sector and can increase the transparency of the sectoral planning process (that is, show the reasoning behind development plans), thereby decreasing the opportunities for purely political decisions that might be environmentally harmful.
- They are suitable for analysis of institutional, legal and regulatory aspects related to the sector, and for making comprehensive and realistic recommendations regarding, for example, environmental standards, guidelines, law enforcement, and training, thus reducing the need for similar analysis in downstream EA work.
- They provide opportunities for consideration of alternative policies, plans, strategies or project types, taking into account their costs and benefits, particularly the environmental and social costs that are often ignored in least-cost project planning.

- SEAs help to alter or eliminate environmentally unsound investment alternatives at an early stage, thus reducing overall negative environmental impacts, while also eliminating the need for project-specific EA of these alternatives (see Figure 1).
- They are well-suited to consider cumulative impacts of multiple ongoing and planned investments within a sector, as well as impacts from existing policies and policy changes.
- They are valuable for collecting and organizing environmental data into information and, in the process, identifying data gaps and needs at an early stage, and for outlining methods, schedules and responsibilities for data collection and management during program or project implementation.
- They allow for comprehensive planning of general sector-wide mitigation, management, and monitoring measures, and for identifying broad institutional, resource and technological needs at an early stage.

Box 2.	Bank-financed Projects with Sectoral EA	
Components		

Sector	Country	Project	
Transport	Nigeria	Nigerian Multi-State Roads	
	Colombia	Colombia Highways	
	China	Henan Highway	
	China	Guangdong Provincial Highway	
	Indonesia	Eastern Indonesia Kabupaten Roads	
Agriculture	Chile	Irrigation Development	
J	Pakistan	National Drainage Program	
	China	Guangdong Agriculture Development	
	Morocco	Large-Scale Irrigation II	
Water/Sanitation			
/Urban	China	Rural Water Supply	
/ Crban	Cililia	and Sanitation	
	Brazil	Water and Sanitation	
	India	Water Resources Consolidation	
	Mexico	Solid Waste	
		Management II	
	Mexico	Northern Border	
		Environment	
Energy/Power	Poland	Gas Development	
C.	Russia	Oil Sector	
	Belize	Power Sector	
	El Salvador	Power Sector	
Industry	Bolivia	Environment, Industry and Mining	

- They provide a basis for collaboration and coordination across sectors, and help to avoid duplication of efforts and policy contradictions between sector agencies and ministries.
- They may strengthen preparation and implementation of sub-projects by recommending criteria for environmental analysis and review, and standards and guidelines for project implementation.

The Operational Context

Three broad operational contexts, or situations, may trigger SEA work. The need to interpret OD 4.01 varies according to these contexts.

The *first* type of situation is a category A or B investment program or a series of independent A and/or B projects in a given sector. In these cases, the process and timing and the scope of the SEA should follow the requirements of OD 4.01. For B projects a limited *sec*-

toral environmental analysis would normally be the appropriate form of SEA. Types of projects in this first context may include:

- a national or sub-national sector program;
- a series of projects in the same sector;
- a large project with sectoral implications;
- a sectoral intermediate credit operation; or
- a sectoral time-slice investment operation.

The *second* context is in projects and programs where a SEA is prepared to complement the planning process. These SEAs may be triggered by Bank environmental screening of a project; but they cover a broader set of issues than merely the impact of the project, and they proceed in parallel with the required project EA work. This SEA approach may, for example, be appropriate in sectors with widespread and well-known environmental damage although the project supported by the Bank may not create any significant additional problems. The Bank might help secure funding for such SEA work, but OD 4.01 does not directly apply (and subsequently the SEA does not have to be completed prior to appraisal). Box 6 provides an example of a SEA prepared in this context.

The *third* context is when sectoral environmental analysis is employed without any direct link to lending activities. In this case, the SEA is typically related to Bank economic and sector analysis for a country. OD 4.01 does not apply, and no particular procedures need to be followed although this *Update* may provide valuable information.

Criteria for Choosing SEA

The following questions will help identify where a sectoral EA approach may be particularly appropriate and useful in a project or program where OD 4.01 applies. If the answer to the following question is positive, SEA should be seriously considered:

Is the Bank considering any of the investment types listed in the section on Operational Context (above), in a sector with significant environmental issues?

If the answer to the next three questions is also positive, SEA is highly recommended:

 Are there major existing environmental problems associated with the sector, and/or sector-wide potential environmental impacts resulting from the proposed program or series of projects?

- Is there a clear potential for significant environmental improvement or avoidance of major problems in the sector?
- Are there clear policy, regulatory and/or institutional weaknesses relative to environmental management in the sector?

In addition, there are conditions that increase the potential value of SEAs but are not sufficient or completely necessary requirements:

- Is the borrower at an early planning stage or at a new major investment phase, where important strategic decisions have not yet been made?
- Are conditions in the sector relatively stable and predictable (rather than tending to rapid and unpredictable change), so as to allow for a medium to long-term planning horizon and therefore better chance of gaining long-term value from the SEA?
- Is the borrower willing to pay for the SEA and likely to give weight to the findings and recommendations?

Sections of a Sectoral EA Report

SEAs will vary in scope and content according to the types and significance of issues and the operational context. A general outline for a full (category A) SEA can be constructed, however, using the guidance provided in OD 4.01, Annex B, for a full project-specific EA (see also Box 5 for a sector-specific example).

Executive Summary. As in a project-specific EA, a SEA should contain an executive summary (in English), with a concise discussion of significant findings and recommended actions.

Policy, Legal and Administrative Framework.

This section is one of the most important parts of a sectoral EA. It is helpful to analyze both (1) the national environmental legal, regulatory and institutional framework, and (2) sector-specific policies, regulations and institutions (*see* Box 3). If other, recent studies have already analyzed these dimensions in an adequate way, the SEA should draw on this work rather than duplicate it.

• The national framework. The relevant national environmental policies, laws and regulations should be assessed for completeness and appropriateness in light of the particular conditions and problems of the sector, and gaps and weaknesses noted. Non-environmental laws and policies that have significance for the sector's utilization of resources, production processes, or pollution should also be identified. Similarly, the national

- regulatory framework for EA preparation and review should be assessed. The SEA should look closely at the institutional capacity of the main environmental ministry or agency, in terms of effectiveness and capacity for providing guidelines, setting and enforcing standards, and reviewing environmental assessments. The capacity and performance of agencies responsible for specific environmental services such as nature protection and cultural heritage should also be reviewed when relevant.
- The sector framework. The SEA should analyze sector-specific policies, laws and regulations that have environmental implications. It should also identify how environmental responsibilities are distributed among (public or private) sector institutions and assess their capacity to administer these tasks. The sectoral investment planning process, in terms of objectives, methodology and procedures for review and approval of plans and projects, should be carefully reviewed. The relationship between timing of project review, issuance of licenses and permits, and the sectoral planning process should be clearly indicated. The SEA should assess whether environmental and social issues are adequately covered by current procedures.

Project Description. The nature and objectives of the program, plan, series of projects or other context to which the SEA is attached should be described, and the main environmental issues associated with the sector and these programs, identified.

Baseline Data. This section should describe and evaluate the current environmental situation in the sector. Where a project-specific EA would describe conditions such as ambient air and water quality or existing impacts from pollution around a proposed project site, the SEA should concentrate on the issues and problems that are typical of the sector as a whole. For example, occupational health may be a concern across enterprises within a specific industry; seepage of heavy metals into streams and groundwater may be a recurring problem in the mining sector; or deforestation may result from activities in the agriculture sector. Another important function of this section is to note major data gaps.

Environmental Impacts. The single most difficult challenge in SEAs is to produce a sufficiently precise impact analysis, often in the face of uncertainties related to the final investment decisions and their individual and combined impacts. In recent years, advances have been made in the methodologies for assessing cumulative impacts, in relation to development plans and programs. Means include quantitative modelling, forecasting and various qualitative analyses. If any

Box 3. Bolivia: Sectoral EA for Industry and Mining

The purpose of this EA was to help design the Environment, Industry and Mining Project (EIMP), proposed to begin about mid-1995. A sectoral approach was chosen to strengthen capability in planning new industrial and mining investments and to build institutional capacity for environmental management. The SEA was prepared by a Swedish team and a counterpart group appointed by the National Environmental Secretariat (SENMA).

The EA report included all the components described in OD 4.01—Annex B, with an emphasis on (1) the *policy, legal and institutional framework*, generally and specifically, for the two sectors; (2) *assessment of impacts* from on-going activities and planned investments (covering natural resources and the environment, occupational health and safety, social structures, and heavily affected regions); and (3) recommendations for a *mitigation plan*. There was also a separate chapter on *public participation* in the EA process, which documented consultations with some 40 governmental and nongovernmental organizations, including several NGOs at the local level.

Policy, Legal and Institutional Framework

The analysis of the cross-sectoral policy, legal and institutional framework was comprehensive and covered the following aspects: (1) organization of the State (branches of government, key ministries and major legal instruments); (2) economic policy; (3) national policies, laws and institutions for the environment; (4) environmental impact assessment requirements; (5) policies and laws for the use of natural resources; (6) environmental manage-

ment in areas such as water quality, solid waste, pesticides and air pollution; (7) occupational health and safety; and (8) foreign assistance.

Major issues related to the policy, legal and institutional framework included: (1) unclear environmental law about institutional responsibilities, which leads to weak enforcement; (2) almost no environmental laws regarding mining, and poor enforcement of the few provisions in place; (3) no regulations specifically for hazardous waste or industrial air emissions; and (4) no effective regulation of industrial water pollution except in a few municipalities.

EA Recommendations

The EA preparers were able to produce a series of concrete recommendations that were directly related to the environmental problems caused by activities in the two sectors. Recommendations for changes fell into three areas: (1) broad policy, legal and institutional changes (e.g., setting goals for ambient environmental quality, implementing new EIA regulation, and improving laboratory capacity); (2) major mitigation activities (e.g., addressing environmental issues in privatization of stateowned mines on the basis of environmental audits, extending sewerage systems in Cochabamba, and addressing problems related to alluvial gold mining in the Bolivian Amazon basin); and (3) additional priorities (e.g., encouraging broad public participation, building a coherent national environmental database, and introducing environmental audits, first voluntarily and eventually as a requirement, of industrial and mining facilities).

proposed sub-project is expected to cause particularly significant impacts, the SEA should recommend an appropriate course of action to address them, including carrying out a project-specific EAs (*see* Box 4).

All cumulative effects should be considered: positive and negative, direct and indirect, long-term and short-term. Aggregate problems such as sewage discharge, acid rain, ozone depletion and deforestation are usually the result of several activities, sometimes stemming predominantly from a single sector. Cumulative impacts on environmentally important and sensitive areas and assets such as coastal zones and wetlands, or freshwater resources, are also important in cases where the sector activities heavily affect these areas and/or resources.

The sectoral EA is an appropriate instrument for considering issues related to long-term sustainable development. Specifically, the SEA may contain a discussion of how a proposed investment program may influence long-term productivity of environmental resources affected by the program.

Analysis of Alternatives. A major purpose of a SEA is to do a thorough analysis of alternative investment options and strategies in terms of environmental costs and benefits. For example, if a proposed agricultural program emphasizes conversion of wetlands to rice production, an alternative approach such as intensification of production in existing fields, conversion of other land types, or crop rotation may be considered.

All major investments under consideration, besides the option being considered by the Bank, should be considered at this stage, whether complementary or alternative to the Bank option. The other options may include investments by the private as well as the public sector.

A comparative analysis of alternative programs is highly recommended, applying indicators of environmental and social impacts and methods to evaluate and compare the indicators and ultimately the alternative options. Where several donors are involved in the sector, the SEA should review their existing and/

Box 4. Procedures for Sectoral EA: Asia Region

Extensive experience with program and time-slice lending in the highway sector, particularly rural areas, has spurred development of informal procedures for sectoral EA in the Bank's Asia region, to ensure consideration of all possible impacts on the environment. According to the informal procedures, a sectoral EA should contain:

- a screening process designed to identify subprojects having potentially significant issues that would need to be addressed in a sub-project EA;
- a general assessment of the kinds of impacts that might be associated with the different types of rural road sub-projects; and
- a sectoral environmental action plan to eliminate, minimize or mitigate the impacts identified in the sectoral EA, and provide general guidelines for long-term monitoring.

Two categories are used in environmental screening of sub-projects:

- sub-projects that may create a few minor and easily recognizable environmental problems, but no significant ones; and
- sub-projects with potentially adverse impacts on environmentally sensitive areas, defined as zones of significant human habitation; ecologically important areas such as wetlands and primary forests; archeological, historical and cultural sites; and terrain with slope greater than 50%.

The second category of sub-projects requires project-specific EA, while the first category is addressed primarily through the sectoral EA in the form of general impact assessments, sectoral action plans, and codes of engineering practice for environmentally sustainable road development. These codes apply to both categories of sub-projects and cover such issues as construction practices, site selection, resettlement and compensation, and public consultation/participation.

or planned activities and, if necessary, suggest ways to coordinate efforts.

The sectoral EA can also be used to evaluate the environmental effects of sector policy alternatives. For example, changes in tax and subsidy rates on the use of natural resources may greatly influence rates and methods of extraction.

The analysis could conclude with a list of sector proposals, ranked according to environmental preference. The analysis of impacts and alternatives should result in a recommendation for an optimal investment strategy, in terms of environmental and social costs and benefits.

Mitigation Plan. Mitigation measures are usually of a detailed, technical nature, and therefore normally addressed in project-specific EAs. However, if planned or existing production and process technologies in a sector are relatively uniform, the SEA could recommend broad options for eliminating, reducing to acceptable levels, or mitigating environmental impacts. Such solutions could include a complete production system design as well as end-of-pipe cleaning technologies. SEA mitigation recommendations should draw on findings from the analysis of policy, legal and institutional issues as well as the analysis of impacts and alternatives.

A SEA is an effective tool for designing and recommending mitigation measures that can be implemented only at the national or sectoral level for regulatory or economic reasons. In an urban transportation program, for example, automobile emission limits could be recommended if the level of emissions were found to supersede acceptable standards for air quality. Similarly, in a sector program involving multiple investments, the SEA may be better placed than project-specific EAs to consider sector-wide mitigation solutions that require economies of scale in order to be cost-effective. Construction of a solid waste recycling plant for an entire country is one such example.

Environmental Management and Training. One of the main outputs of a SEA should be an institutional plan for improving environmental management in the sector, based on findings of the previous sections (see Boxes 1 and 6). The plan might recommend training of existing staff, hiring of additional staff, reorganization of units or agencies, or redefinition of roles and responsibilities. This section might also include recommendations on policy and regulatory instruments for environmental management and enforcement in the sector. A screening process to separate those subproject needing a project-specific EA from those not requiring further analysis should be designed, if it is not already in place (see Box 4).

Environmental Monitoring Plan. The SEA should provide general guidelines for long-term sector-wide environmental monitoring to ensure adequate implementation of investments. A monitoring plan should use the findings of the baseline data section as a basis to measure progress in mid-term review and final evaluation. The plan should also recommend measures needed to collect and organize missing data.

Public Consultation. Public consultation is an integral part of the EA process, whether a project-specific or sectoral EA is being prepared (see OD 4.01

Box 5. Technical SEA Guidelines in the Electricity Sector: LAC Region

The Bank's Latin American and Caribbean (LAC) region has developed technical guidelines for sectoral EA in the electricity sector, based on its extensive experience in this sector. The guidelines stipulate that a sectoral EA is recommended where project-specific EAs are not appropriate, due to:

- minimal preparation of individual project components at the time of Bank appraisal (e.g., hydropower developments may be at very preliminary stages of planning);
- the nature of the lending operation, such as timeslice operations involving a large number of projects at varying stages of development; and/or,
- the nature and scale of the projects or programs under consideration.

The guidelines describe the principal sections of a SEA for the power sector: (1) description of the current situation of the power sector; (2) review of the country's environmental institutional framework; (3) review of the power sector's regulatory framework and planning procedures; (4) analysis of planned and alternative power sector strategies; (5) choice of an optimal investment strategy; (6) review of institutional capacity of power sector agencies; (7) public consultation; and (8) action plan (for mitigation, management and monitoring).

and *EA Sourcebook Update* No. 5: *Public Involvement in Environmental Assessment* for more specific guidance). However, since a SEA normally covers an entire sector (in a national or subnational context) and is conducted before concrete investment decisions are made, it may not always be possible to consult representatives of all potentially affected people during preparation of the SEA. Often, it is more feasible and appropriate to carry out consultations with national NGOs (for example, for nature protection), scientific experts, relevant government agencies, and perhaps also industrial and commercial interests. A successfully implemented consultation process will help ensure public support for the final sector program.

Challenges in SEA

Timing and Status

In order for a SEA to reach its full potential as a planning tool, it must be undertaken in concert with the overall investment planning in the sector. In practice, this is sometimes difficult to achieve because Bankfinanced projects and programs are often prepared after government sector planning and strategic decision-making. This makes any consideration of strategic alternatives difficult. Early coordination between

Box 6. Morocco: Large-Scale Irrigation II (Sectoral EA as Part of Sector Planning)

The Government of Morocco and the Bank agreed to conduct a sectoral EA as a complementary activity in the preparation of this project. Although a full EA or SEA was not required for the proposed project under OD 4.01, both parties saw the potential added value a SEA could bring to the integration of environmental concerns into the long-term development of the irrigation sector. Concurrently, the investment component of the project, focusing on the rehabilitation of existing irrigation infrastructure, was placed in environment screening category B and was thus the subject of a field-based environmental review. A joint venture of two French consulting firms, financed with a Japanese grant, was hired (following a competitive selection process) to prepare both the SEA and the environmental review.

The SEA examined the long-term environmental implications of proposed future investments in the sector; evaluated environmental concerns associated with system operation and maintenance; and analyzed institutional, legal and regulatory aspects. The SEA proposed an environmental management framework focused on development of environmental units for irrigation at both the national and district levels. Support for the initial phase of implementation of the institutional strengthening and training recommended in the SEA was included in the project. It should be noted that the SEA preparation and review process resulted in significantly increased awareness of the diversity and complexity of environmental issues in this sector by the Moroccan study coordinators and participants.

The SEA provided an analysis of legal, regulatory and institutional aspects of environmental management in the irrigation sector, including recommendations for: (1) creation of new institutions responsible for policy and strategy formulation, environmental monitoring, and training; and (2) development of new laws and regulations for improving management and overall performance in the sector. Major technical activities recommended in the SEA included: (1) protection of watersheds; (2) water use planning; (3) soil conservation; (4) protection of ecologically sensitive habitats and species; (5) public health programs and monitoring; and (6) training and special studies.

the planning processes of the borrower and the Bank is the best way to overcome this constraint.

If a SEA is undertaken, its relevance to sector planning should be ensured through preparation of terms of reference (TORs) and coordination between preparers and sector planners. If SEAs over time demonstrate high quality and usefulness as a planning tool, they likely will have growing acceptance.

Costs

A sectoral EA is generally more costly to undertake than project-specific EA. For this reason, some borrowers may be reluctant to choose the SEA option unless the SEA can be expected to so improve the quality of sector planning that the need will be reduced for project-specific EA work—and associated costs—downstream.

Appropriate TORs and Consultants

Experience and special skills are required to do adequate SEA work, especially in cumulative impact assessment and in analysis of alternative options and the policy, legal and institutional framework. At the same time, TORs for the EA need to be realistic in their requirements and manageable. TORs should narrow the scope of analysis to issues that are most significant and widespread within the sector, rather than require coverage of all aspects. TOR preparation and EA team selection should also support development of in-country capacity for SEA work.

Adjusting to Circumstances

A sectoral EA approach may be useful even in cases where major sector decisions have already been made. For example, the SEA can be adjusted to the purposes of a time-slice or financial intermediary loan involving numerous sub-projects in which the primary issue is setting up appropriate mechanisms for sub-project screening, review, impact analysis, and moni-

toring. In these cases, doing a more limited SEA may reduce the amount of EA work needed for individual sub-projects, while facilitating more effective review and monitoring at the sectoral level.

In many developing countries, economic and social changes are often rapid and unpredictable, as are changes in technological opportunities (for example, with regard to pollution abatement). On the other hand, planning time frames tend to be long-term due to difficulties in raising capital and limited absorptive capacity. Because of this tension, a full SEA may not always be the optimal option. An alternative approach, currently used by Kenya in the energy sector and supported by the Bank, is to identify major investment options within the sector, rank them by environmental and social criteria and impacts, and provide a general overview of mitigation requirements for each option. This approach allows for gathering of essential data and can serve as a "preamble" to project-specific EAs where needed.

Ensuring Specificity and Follow-Up

Doing a SEA should not become an excuse for overlooking site-specific environmental issues, even though the emphasis is primarily on issues generic to the sector. The SEA should be employed to identify prevalent problems in the sector as a whole *and* major site-specific problems, which might subsequently be addressed in project-specific environmental assessment. The SEA should help determine where more EA work is needed downstream.

EA SOURCEBOOK UPDATE is designed to provide the most up-to-date information on the Bank's policy and procedures for conducting environmental assessments of proposed projects. This publication should be used as a supplement to the *Environmental Assessment Sourcebook*, which provides guidance on the subjects covered in Operational Directive 4.01. Please address comments and inquiries to Olav Kjørven, Managing Editor, EA Sourcebook Update, ENVLW, The World Bank, 1818 H St. NW, Washington, D.C., 20433, Room No. S-5123, (202) 473-1297.