THE WORLD BANK SEA COMMUNITY OF PRACTICE

Strategic Environmental Assessment in the World Bank

Learning from Recent Experience and Challenges

Fernando Loayza, editor

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ACRONYMS AND ABBREVIATIONS

AFR	Sub-Saharan Africa
CBA	cost-benefit analysis
CEA	country environmental analysis
CIA	cumulative impact assessment
COED	cost of environmental degradation
CoP	Community of Practice
CPP	consultation and public participation
CSO	civil society organization
DPL	development policy loan
DPO	development policy operations
EA	environmental assessment
EAP	East Asia and the Pacific
ECA	Europe and Central Asia
EEAA	Egyptian Environmental Affairs Agency
EER	energy-environment review
EIA	environmental impact assessment
EIB	European Investment Bank
EMAP	Environmental Management Action Plan
EMU	Environment Management Unit
ESMF	environmental and social management framework
ESMP	environmental and social management plan
EU	European Union
FCPF	Forest Carbon Partnership Facility
FPDP	Forest Protection and Development Plan
GDP	gross domestic product
GEF	Global Environment Facility
GEPAP	Gulf Environmental Partnership and Action Program
HPCD	Hubei Provincial Communication Department
HRNP	Hubei Road Network Plan
IAIA	International Association for Impact Assessment
IBRD	International Bank for Reconstruction and Development
IDA	International Development Association
IDB	Inter-American Development Bank
IFC	International Finance Corporation
IIRSA	Initiative for the Integration of Regional Infrastructure of South America
JMP	Joint Multipurpose Program
LAC	Latin America and Caribbean
Lao PDR	People's Democratic Republic of Lao
MARD	Ministry of Agriculture and Rural Development
MENA	Middle East and North Africa
METAP	Mediterranean Environmental Technical Assistance Program
MTSP	Manila Third Sewage Project
MW	megawatt
NEAP	National Environmental Action Plan
NGO	nongovernmental organization
NIS	newly independent states
NLTA	non-lending technical assistance
NSP	National Spatial Plan
NT2	Nam Theun 2
OP	Operational Policy
PDP	Power Development Plan
PPCR	Pilot Program for Climate Resilience
PRSP	poverty reduction strategy paper
PSIA	poverty and social impact analysis
RAP	Resettlement Action Plan
RDP	Regional Development Plan
REA	regional environmental assessment
REC	Regional Environmental Center

REDD	reducing emissions from deforestation and forest degradation
S&R	screening and ranking
SAP	Strategic Action Program
SAR	South Asia Region
SBA	strategic basin assessment
SCD	Southern Coastal Development
SDI	spatial development initiative
SDP	Sibovc Development Plan
SEA	strategic environmental assessment
SECHSA	strategic environment, cultural heritage, and social assessment
SEPSA	strategic environmental, poverty, and social assessment
SESA	strategic environmental and social assessment
SIA	strategic impact assessment
TA	technical assistance
TDA	Transboundary Diagnostic Analysis
UNDP	United Nations Development Programme
WAMSSA	West Africa Mineral Sector Strategic Assessment
WMP	Waste Management Plan

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FOREWORD

Mary Barton-Dock
Director
Environment Department

In recent years, the World Bank Group has seen an increase in client demand for support strategic environmental assessment (SEA) to integrate environmental considerations into policies, plans and programs. The drivers for this are multiple—ranging from the adoption of national SEA legislation by client countries, to support provided by donors, and the inclusion of SEA in the Bank's environmental safeguards policy OP 4.01 on Environmental Assessment. Increased client demand was marked by a simultaneous increase in demand from stakeholders to participate in decision-making around policies and plans affecting them. A process of learning and structured analytical work was necessary to be able to meet client and stakeholder demand.

The process resulted in considerable knowledge generation that informed national and regional approaches to planning and policy-making. For example, in West Africa, the regional SEA of the minerals sector in Guinea, Liberia and Sierra Leone established a multi-stakeholder dialogue that raised awareness and support for a regional approach to enhance environmental management and minerals sector governance. A strategic assessment in Colombia supported the preparation of a development policy program that improved Colombia's National Environmental System through integrating principles of sustainable development in key sectors' policies. This served to protect vulnerable groups and foster a debate that led to the passage of the Air Pollution Control bill in addition to strengthening regional environmental authorities. In Lao PDR the Hydropower Development Plan SEA resulted in the adoption of the "National Policy on Environmental and Social Sustainability for the Hydropower Sector" that improved resettlement and consultation practices, integrated river basin planning, and enhanced understanding of transboundary riparian risks along the Mekong.

The Bank's SEA Community of Practice (CoP) was established to develop and share knowledge building on the structured learning process on SEA. The Community enabled practical learning across Bank activities, at the country and regional level. *Learning by reflection* was based on a stock-taking exercise, examining SEA experience to date and assessing the relevance of SEA for existing environmental mainstreaming challenges at the regional level. *Learning by knowledge sharing* helped highlight lessons learned in SEAs, including identifying good practice within and across regions. *Learning by doing* is occurring through practical experience in applying SEAs to specific cutting-edge, innovative Bank projects. Lessons gleaned from the former two learning processes are analyzed and highlighted in this report.

Enhancing knowledge from the practical application of SEAs in the Bank's activities is consistent with the increasing trend to support client countries at the programmatic and policy level, and will remain a crucial focus across activities in the coming years. Because SEAs engage multiple stakeholders in an adaptive learning process they are an excellent vehicle for promoting green, clean, resilient and inclusive development, in line with the World Bank Group's Environment Strategy 2012–22*. I thank the SEA Community of Practice for their valuable work, and encourage them to continue moving the SEA learning agenda ahead in the World Bank.

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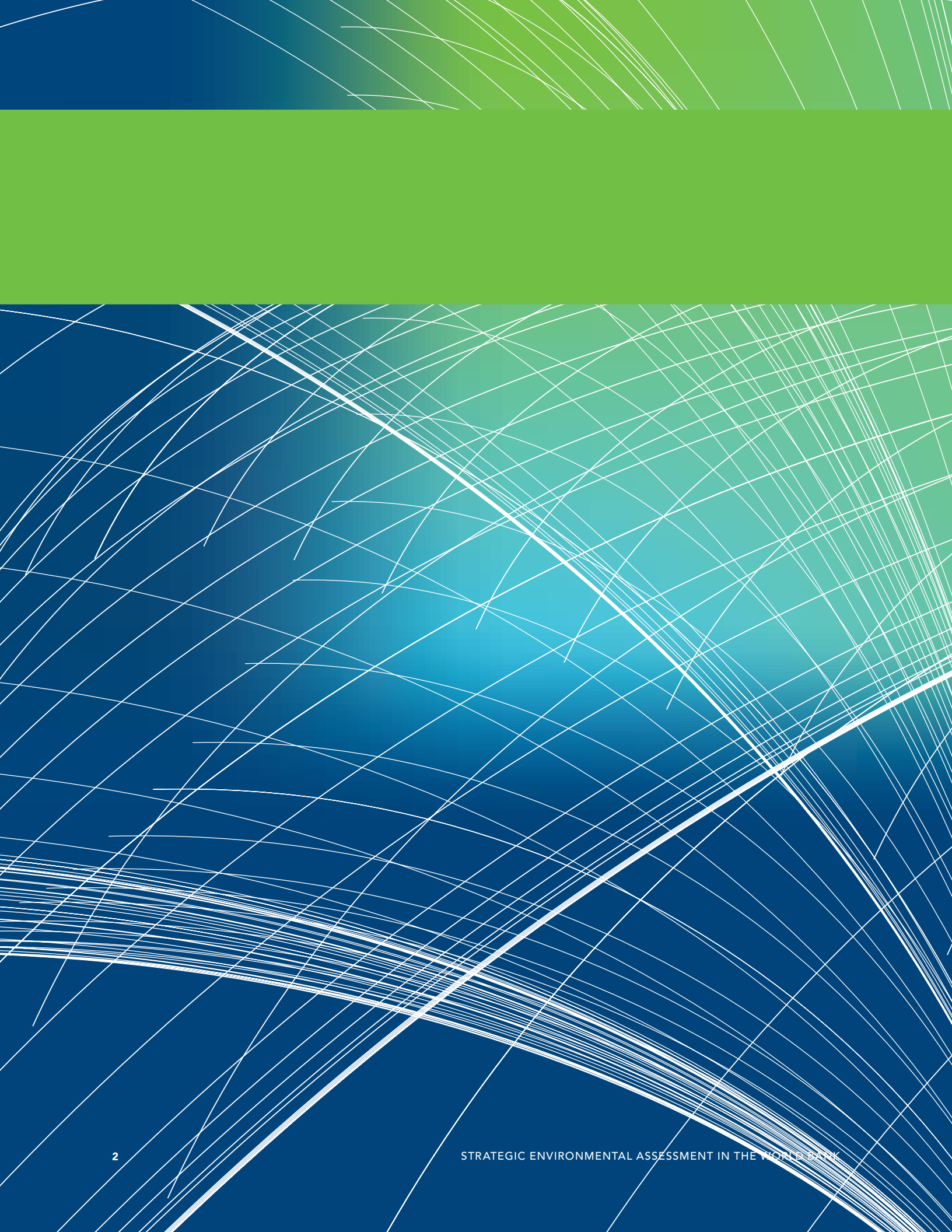
September 2012

* Available at: http://siteresources.worldbank.org/ENVIRONMENT/Resources/Env_Stratgy_2012.pdf



CHAPTER 1

Introduction

Fernando Loayza[1]

Objective and Scope

This report presents the results of a review of the World Bank's strategic environmental assessment (SEA) experience undertaken by the World Bank learning community—the SEA Community of Practice (SEA CoP). The review included regional reviews that analyzed the World Bank's SEA experience for all Regions in which the Bank is operating. These reviews were complemented by the production of a synthesis and conclusion chapter to draw lessons and good SEA practices.

The review has been a vehicle for environmental assessment and sector specialists to dialogue about SEA practice in the World Bank (see Box 1.1). Ultimately, the review is an attempt to launch a process of continuous learning in order to strengthen the World Bank SEA capacity in response to an increasing interest of client countries in upstream environmental and social analytical work. Thus this report is no more than a first step. Its findings and results cannot be treated as conclusive. Rather, they set a baseline upon which new and complementary learning activities can be undertaken over time.

Methodology

Despite its tentative nature, the regional and synthesis chapters were carried out following a common methodology and a systematic review process. Draft reports were circulated to the SEA CoP, the environmental assessment regional constituencies, and environmental specialists at the World Bank's Environment Department. Then the draft reports were presented in COP meetings by the authors and commented on by designated discussants, some of whom were members of the SEA CoP. The main results of these discussions were documented in minutes that were publicly disclosed to ensure transparency and to minimize potential inadequacies or inaccuracies. Verbal and written comments informed the preparation of final reviews that led in some cases to substantive revision of the chapters. This systematic review process was aimed not only at ensuring the quality of the analytical work but also, more important, at fostering dialogue and reflection within the SEA CoP.

1 Fernando Loayza is Senior Environmental Economist at the World Bank's Environment Department.

Box 1.1 What is SEA in the World Bank's Experience?

The World Bank follows the Organisation for Economic Co-operation and Development in describing SEA as "analytical and participatory approaches to strategic decision-making that aim to integrate environmental considerations into policies, plans and programmes, and evaluate the inter linkages with economic and social considerations" (OECD-DAC 2006). Originally, SEA was designed as an extension of environmental impact assessment (EIA) of projects to plans, programs, and policies. Over time SEA has become more strategic by bringing different groups of stakeholders into an environmental and social dialogue in an iterative and adaptive way. Most countries' SEA legislation falls under and extends existing EIA legislation to programs and plans. Many developing countries have recently adopted legislation or regulations on SEA, and the use of this assessment tool is increasing rapidly (Slunge and Loayza 2012).

In the World Bank, SEA is mainly but not exclusively known as SESA (strategic environmental and social assessment) to stress the inclusion and relevance of social issues as well as environmental ones. SEA/SESA is an umbrella term for assessment processes that aim to integrate environmental and social considerations into strategic decision making by using impact-centered approaches that originated in EIA practice or policy SEA approaches that are centered on institutions and systems for environmental and social management.

Impact-centered approaches to SEA best fit to integrate environmental considerations in plans and programs where environmental impacts and risks can be identified and predicted. In Bank practice, these approaches have been used for large infrastructure projects like dams, power generation investment plans, and land use plans. However, several of these SEAs have resulted in long descriptions of environmental conditions and potential risks that are of little use in decision making.

Regional and sectoral environmental assessments (REAs and sectoral EAs) are impact-centered SEAs that have been widely used at the World Bank to comply with its safeguard policies. They are instruments that examine environmental issues and impacts associated with a particular strategy, policy, plan, or program or with a series of projects for a particular region (e.g., an urban area, watershed, or coastal zone) or sector (e.g., power, transport, or agriculture); that evaluate and compare the impacts against those of alternative options; that assess legal and institutional aspects relevant to the issues and impacts; and that recommend broad measures to strengthen environmental management in the region or the sector. REAs and sectoral EAs pay particular attention to potential cumulative impacts of multiple activities.

Policy SEA is a process to establish a policy dialogue for mainstreaming environmental and social considerations in policy and sector reforms (see World Bank et al. 2011). Policy SEA can be applied for high-level plans and strategies and sometimes even for programs involving complex interventions that combine civil works with regulatory and policy reforms. Policy SEAs have been used at the World Bank to help in the preparation of technical assistance projects and adaptable program loans and to inform and implement development policy loan (DPL) operations. Policy SEA is process-oriented and influenced by institutional and political factors that shape policy formulation and implementation.

Country environmental analysis is a type of policy SEA developed to inform the dialogue between the Bank and client countries on national environmental priorities. "Rationales for preparation of CEAs can be broadly clustered in four areas: (a) to meet the requirements of the World Bank Operational Policy on [DPLs] (OP 8.60); (b) to provide an analytical basis for …environmental and sustainable development DPLs; (c) to strengthen or reestablish policy dialogue with a partner country on environmental issues; and (d) to integrate environmental issues into a range of Bank or country-level processes such as [country assistance strategies] and PRSPs" (Pillai 2008).

Hybrid SEAs that combine policy and impact-centered SEA approaches have been used for basin management (strategic basin assessment), REDD+ readiness, and development corridors. A development corridor is the coordinated and synergic development of investment projects to unleash the economic potential of a geographic area. In Mozambique, a programmatic SESA including an umbrella policy SEA and three corridor-specific SEAs is being undertaken to inform the preparation and implementation of the Mozambique Spatial Development Planning Technical Assistance project. SESAs are mandatory for receiving grants to support REDD+ readiness. They are undertaken in an integrated way with the preparation of the country's REDD+ strategy.

Authors of regional chapters had common terms of reference (see Box 1.2). There were three main questions to be addressed:

- What have been the main drivers of Bank-supported SEA in the Region?
- What are the main lessons learned and good practices for SEA effectiveness in the Region?
- What are the implications of the review for the future SEA agenda in the Region?

The review was based mostly on secondary information and complementary one-on-one interviews on selected cases. The African, East Asian and the Pacific, and South Asian reviews also included questionnaires that were disseminated to regional EA constituencies. As a result, they list for the first time all SEAs undertaken by these Regions with support of the Bank since the late 1990s. However, the regional reviews did not include fieldwork and gathering of primary information. The voices of governments and civil society could not be heard in the review. Thus, unless already documented information

Box 1.2 Generic Terms of Reference for Taking Stock of Bank Regional Experience in SEA

Objectives

The main objective is to strengthen Bank staff's capacity on SEA by fostering learning in applying SEA in World Bank–supported projects and thus contribute to sustainable development outcomes in programs, plans, and policies of client countries.

To achieve this objective, among other activities of the SEA CoP, there is a component to take stock of the Bank's recent regional experience with the following scope of work.

Scope

SEA regional chapters will be prepared for all regions in which the Bank is operating. *The first section* of the chapter will take stock of the evolution of SEA application in the Region with a view to selecting cases that illustrate good practices. This section would address the following questions:

- How has use of SEA in Bank activities evolved in the Region during the last decade? Have different approaches for policy SEA and SEA of plans, programs, and large projects been used? Has there been any cross-sector application of SEAs?
- What have been the main drivers for SEA? Have drivers of policy SEA and SEA of plans, programs, and large projects been different? Has use of SEA originated in the client country or in the Bank's requirements, such as compliance with OP 4.01, OP 8.60, etc.?
- What are good practice cases of SEA preparation, including consultation and disclosure?

The second section will focus on results and lessons learned. The discussion would be illustrated by SEA cases and guided by the following questions:

- What have been the results of using SEA? When possible, distinguish between policy SEA and SEA of plans, programs, and large projects. Have decision making and strategic planning and sequencing been influenced by the SEA? How? Has SEA created a space for stakeholders to participate and voice their needs in decision making? How? Has SEA been used to examine and consider alternatives or priorities? How? Has SEA been a vehicle for capacity building? How? Has SEA been a vehicle for strengthening environmental management systems such as the EIA system? How?
- What analytical and participatory approaches have worked best? Why?
- What are the main factors that influenced the success or failure of SEA? Have political and institutional factors such as involvement of civil society and nongovernmental organizations in SEAs had an impact on effectiveness?

The third section of the report will present the recommendations for moving the regional SEA agenda forward. It will identify regional priorities for action. It will also include a discussion on the role of the ENV anchor, the Region's environment sector, and the regional safeguards team in enhancing SEA capacity in the Region.

about results and impacts was publicly available, the reviews validated with key informants any additional information found on impacts of SEA activities.

Involving Bank staff based in the Regions in the review has proved difficult. While there is major knowledge and capacity potential to be mined in the country offices—for example, to collect primary information on the impacts of EA studies—there seems to be a lack of incentives for local staff to engage in knowledge-generating activities such as the SEA CoP. If the World Bank is to become a knowledge Bank, the incentive system to unleash this huge dormant knowledge potential in the country offices warrants attention. Undoubtedly, looking ahead a major challenge for the SEA CoP is how to reach out beyond environmental and social staff based at Headquarters.

Structure of the report

Chapter 2 presents the synthesis and conclusions from the cross-analysis of the regional reviews. Considering the variety of factors that influenced SEA practice in the different Regions, it attempts to address the following questions:

- Can a common trend in the evolution of SEA practice in the Regions be identified?
- If so, how has the role of SEA evolved in the Bank business process? Why?
- Has the time come for SEA to become mandatory for specific Bank activities?
- If so, what are the potential advantages and disadvantages of this change?

After addressing these questions, the chapter focuses on drawing lessons and good practices from SEA cases discussed in the chapters. Lessons based on robust evidence can be drawn from the regional reviews in four areas: SEA influence in decision making, promotion of multi-stakeholder dialogue, country ownership, and timing of the SEA. All these areas are relevant in the SEA literature. Other important issues in the literature, such as assessment of cumulative and induced environmental and social impacts, are also discussed in the chapter but the findings are not encouraging. The evidence points out that cumulative impact assessment and assessment of induced development impacts have not been fruitful, and this has been leading impact-centered SEA to a dead end. Uncertainty in predicting complex social phenomena and adaptive behavior would explain these poor results.

The last section of Chapter 2 discusses proposals for the World Bank's SEA agenda building on the proposals made by the authors of the regional reviews and the results of the meeting where the draft version of this chapter was discussed.

Chapters 3 through 8 present the findings and conclusions of the regional reviews. Each one presents a unique and distinctive case that can be read as a standalone story; altogether they provide a wealth of information on SEA practices. The chapters have been organized in a way that is consistent with the evolution of SEA practice. Chapter 3 on the SEA experience in East Asia and the Pacific focuses on the use of SEA mainly as a tool for environmental safeguarding. In contrast, Chapter 4 analyzes the use of SEA as a planning and policy tool drawing on the Middle East and North Africa experience. A mixed experience with impact-centered and policy SEA approaches is described by Chapter 5 on South Asia. Interestingly, this Region shows a clear evolution of SEA practices from impact-centered to policy SEA approaches. Likewise, Chapter 6 on Sub-Saharan Africa shows a trend of using SEA initially for environmental safeguarding but later for informing policy making. The economic policy and legal context in shaping SEA practices is a distinctive feature of the reviews in Latin America and the Caribbean and in Europe and Central Asia. Chapter 7 shows that sector reforms and infrastructure developments have influenced the use of SEA in Latin America. And the mixed results of promoting SEA practice by making it regionally mandatory through the European Union's SEA Directive are described in Chapter 8 on Europe and Central Asia.

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CHAPTER 2 SEA EXPERIENCE IN THE World Bank

SYNTHESIS AND CONCLUSIONS

Fernando Loayza[2]

People do behave in the same manner toward things, not because these things are identical in a physical sense, but because they have learned to classify things as belonging to the same group… In fact, most of the objects of social and human action are not "objective facts" in the special narrow sense in which this term is used by the [hard] sciences and contrasted to "opinions," and they cannot at all be defined in physical terms. So far as human actions are concerned the things are what the acting people think they are.

Hayek 1979, p. 44

2 Fernando Loayza is Senior Environmental Economist at the World Bank's Environment Department. The author gratefully acknowledges written comments to an early draft of this chapter received from Adriana Damianova, Diji Chandrasekharan, Paula Posas, and Kennan Rapp. Valuable feedback was provided by members of the World Bank SEA Community of Practice and other colleagues who attended the 11 June 2012 meeting where a draft version of this chapter was discussed.

The Evolutionary Nature of SEA Practice in the World Bank

A striking result of the regional reviews and the discussions of the strategic environmental assessment (SEA) Community of Practice (CoP) is that SEA practice in the Bank largely evolved spontaneously. Sometimes compliance with the World Bank's safeguards policies—mostly, but by no means exclusively, Operational Policy 4.01 (OP 4.01)—posed challenges to SEA practice in the Bank's operations. The need for SEA arose often from Bank projects with potential significant impacts at a regional scale (such as when a hydropower plan was prepared or river basin management was required), at a sectoral scale (such as when several changes were planned in the investment plan and the regulatory and institutional framework of the water sector), or when the sheer size of an investment project required the assessment of impacts at a national or regional level. These SEAs (regional EAs and sectoral EAs) mainly attempted to expand the understanding of potential environmental and social impacts beyond environmental impact assessment (EIA) practices in order to define adequate environmental and social mitigation plans. Almost invariably, however, they faced difficulties in assessing cumulative impacts from existing and future projects within the sector or region under study or in assessing induced or indirect impacts over time. Uncertainty about future developments has usually been the stumbling block. Also, access to information from other existing or planned projects has proved to be difficult.

The constraints on robustly predicting environmental and social impacts undermined in several cases the purpose for which SEA had been implemented in the first place. When SEA was unable to assess cumulative and induced impacts, the attempt to move environmental impact assessment to a higher level would be frustrated. Some SEA reports resulted in long and tedious descriptions of environmental and social conditions with little relevance for decision making (Chapters 3, 5, 6, and 8). In two out of five review meetings of the SEA CoP,[3] when the discussion about the added value of SEA was at its highest, the meeting attendants asked themselves whether SEA was distracting efforts and resources that could be best invested in enhancing EIA practice—as one participant put it, "from EIA to SEA and now back to EIA." There was no conclusive answer in these meetings. But, as argued below, this limitation could be inherent in the adaptive nature of the phenomena that SEA attempts to assess using EIA methods that were developed for the study of non-evolutionary phenomena such as investment projects.

The Strategic Role of SEA as a Priority Setting and Multistakeholder Dialogue Process

In other occasions, the push for SEA evolution has come out of the need to undertake upstream analytical work to inform policy reform and development strategies supported by the World Bank. This SEA work was largely disconnected from the World Bank's safeguard policies, which allowed Bank staff to try new approaches different from assessing impacts and risks. In these new approaches, the assessment of cumulative and induced impacts could be avoided as there was no link to specific projects, given the high upstream level of the decisions under consideration such as sector policies and development strategies. Not surprisingly, in SEAs such as the Water Sector Adjustment Loan in 1999, the Palar Basin (World Bank 2003), and the Colombia CEA, the approach taken was opportunistic as it meant using analytical and participatory approaches and techniques that best fit the issue under consideration. As Chapter 4 on the evolution of SEA in the Middle East and North Africa (MENA) so clearly illustrates, in some cases the gist of the SEA was simply to highlight the cost of environmental degradation of existing policies as a percentage

3 These were the meetings where the draft reviews of the South Asia review (16 February 2012) and the East Asia and the Pacific review (22 March 2012) were presented and discussed.

of the gross domestic product. This attracted the attention of policy makers and Ministers of Finance, leading to the incorporation of specific environmental considerations in reform packages to reduce pollution, such as reducing fuel subsidies in Egypt and Iran.

Fostered by the adoption of Operational Policy 8.60 (OP 8.60) on policy lending, which specifically excludes the application of OP 4.01 on policy loans, and the World Bank's 2001 *Environment Strategy*, an analytical tool known as country environmental analysis (CEA) was developed from this emerging policy SEA approach. In addition to being a vehicle to discuss national environmental priorities, CEA incorporates an institutional and policy gap analysis to identify key weaknesses affecting environmental management in countries and targeted sectors, and it recommends specific capacity building and institutional strengthening actions (Pillai 2008). CEA use has extended across all Regions in the World Bank. In parallel, policy SEA also evolved into elaborated policy dialogue approaches to support sector reforms in client countries by drawing attention to environmental priorities, fostering a policy learning process through sustained stakeholder interaction, and facilitating access to information and empowerment of environmental constituencies (World Bank et al. 2011). In sector policy SEA, socioeconomic assessment has gone hand-in-hand with environmental assessment (Chapter 5).

What Makes SEA Effective?

Flexibility and Multiplicity of SEA Approaches

As the first generation of SEAs that developed out of efforts to scale up EIA approaches to higher levels of decision making showed, the forecasting ability of practitioners has not improved significantly. There seem to be limits for the use of impact assessment methodologies in SEAs, particularly for assessing and forecasting cumulative and induced impacts. The greater the need for assessing the induced and cumulative impacts associated with a development decision, the stronger these limits are felt. From a different perspective, centered on policy processes and environmental management systems, policy SEAs are gradually increasing in Bank SEA practice (Chapters 4, 5, and 6). They are opening the policy process to a variety of stakeholders and influencing the policy dialogue between the World Bank and client countries and between governments and affected stakeholders.

But this evolution is not free of tensions. For instance, in some discussions within the SEA CoP, senior staff experienced in EIA perceived policy SEA as a planning tool with little if any relationship to environmental assessment practice. Also, senior staff experienced in policy SEA were concerned about regulating SEA in the context of OP 4.01 because it could undermine policy SEA effectiveness. There are, however, reasons to expect a constructive resolution of these tensions. The evolution of SEA practice in the Bank shows that these two approaches have also had successful meeting points and, under specific circumstances, can reinforce each other for enhancing SEA effectiveness.

Strategic basin assessment (SBA), an SEA-like assessment, combined elements of impact-centered and policy SEA even before policy SEA was developed. With the aim of setting a common framework for managing water resources, the SBA of the Palar Basin in Tamil Nadu, India, developed detailed information on the environmental situation of the basin through consideration of economic and social issues (Chapter 5). This information was widely consulted by key public and civil society stakeholders. The discussions set the basis for policy and institutional reforms that led, among other outcomes, to a shared vision of the problems and potential of the basin and an agreement on the subbasin development and management plan (World Bank 2003).

More recently, the Forest Carbon Partnership Facility (FCPF) supports countries' efforts to become ready for REDD+ (reducing emissions

from deforestation and forest degradation).[4] Building on the Bank's experience in environmental assessment and policy SEA, the FCPF requires beneficiary countries to conduct strategic environmental and social assessment (SESA). The SESA for FCPF consists of two largely sequential stages that combine policy SEA and impact-centered approaches. In the first stage, a policy SEA—which includes an extensive and comprehensive consultation and participatory process—is undertaken to integrate environmental and social considerations into the preparation of a country's REDD+ strategy. Out of a recognition that at that moment a comprehensive assessment of potential impacts and risks arising from the REDD+ strategy is not feasible, the preparation of an environmental and social management framework (ESMF) compliant with the relevant World Bank safeguard policies is left for the later steps of the SESA process. The ESMF lays out the processes and procedures for managing potential environmental and social impacts of specific policies, investments, and actions to be undertaken during subsequent phases of REDD+, when the country implements its finalized REDD+ strategy. SESAs for FCPF are now under way in at least seven countries, but it is in the initial stages in all but the Democratic Republic of Congo, and no ESMF has yet been drafted. While the effectiveness of this approach that combines policy SEA and ESMF remains to be seen, this adaptation by the FCPF shows that policy SEA and impact-centered SEA approaches can complement each other in order to promote environmental and social sustainability at different levels of the decision-making ladder.

The insight that comes out of studying the evolution of SEA practice in the World Bank is that although SEA originated in EIA practice, it is not a scaled-up version of EIA methods and techniques. As SEA practice accumulated, the limits of using EIA methods became evident, particularly when evaluation of induced and cumulative impacts is critical in the assessment. Consequently, in response to needs from client countries, SEA methods and process evolved away from EIA practice. Identification of environmental and social priorities, often highlighting the economic cost of pollution and natural resources degradation, substituted for impact scoping. Assessment of potential impacts and risks was replaced by analysis of the institutional framework and existing systems for environmental and social management. In lieu of project consultation, public participation as a process to engage multiple stakeholders in dialogue, negotiation, and deal making has been established in cutting-edge SEA practice.

A characteristic of this evolutionary path has been the variety of approaches that have been used and tested over time. This is reflected in the variety of names used for SEA approaches in the World Bank. Policy SEA approaches also have adapted to the boundaries set by the World Bank safeguard policies through the SESA for the FCPF, in which policy and impact-centered approaches complement each other.

Continuous Adaptation and Learning

SEA also evolved by adapting to changing circumstances in the political and cultural contexts in which it has been applied. Sometimes policy SEA was a response to the demand for structural reform, as in Latin America. In other cases policy SEA was confined to analytical work to inform the World Bank and country dialogue, as in MENA. But in this Region the Arab Spring is now permeating public participation in SEA practice. Ultimately, the adaptive evolution of SEA practice in the World Bank seems to originate in the fact that upstream decision making, such as development and sector policy, evolves through the actions of different persons and organizations in a process of mutual continuous adaptation. This may explain why potential cumulative and induced impacts can hardly be assessed in advance in SEAs.

4 Tropical forest countries from four major world regions are receiving support from the FCPF Readiness Fund for strategic planning, interinstitutional coordination, and capacity building activities of the type that will render them "ready" to receive performance-based payments for actions that will lead to reduced deforestation and forest degradation and better, more sustainable forest management (REDD+). The FCPF is structured as a multidonor trust fund for which the World Bank serves as Trustee, Secretariat, and one among several Delivery Partners.

Unlike project EIA, SEA is not under the control of an individual (the owner of the project) whose actions can be predicted or defined. Also, this is why SEA cannot be reduced to a procedure for the preparation of a report on which a permit can be issued. Public participation and social learning are as critical for effective SEA as they are for effective policy making (Ahmed and Sánchez-Triana 2008; World Bank et al. 2011). As the evolution of World Bank practice is demonstrating, SEA is a process that convenes multiple stakeholders through interactive modes of public involvement to facilitate adaptive learning.

As a result of this evolutionary adaptive approach, SEA has a dual role in the World Bank. First, it is an environmental assessment instrument that client countries can choose to comply with OP 4.01. During the discussion of the SEA CoP meetings, the question arose about whether to keep the optional character of SEA as a safeguard instrument or to make SEA a safeguard requirement for certain types of operations focusing on policy or upstream technical assistance. While there is no doubt that making SEA a requirement for certain types of World Bank operations would widen its use across the Bank, it would be counterproductive if it came at the price of curtailing SEA flexibility. As this analysis has shown, SEA's greatest strengths are its evolutionary adaptive nature and its ability to facilitate interactive modes of public involvement. Restricting SEA to a standard process would impair its effectiveness and potential, as happened with SEA practice in the European Union (EU), which was heavily regulated by the SEA EU Directive (Chapter 8). SEA is likely to continue evolving. As discussed in this report, the expected outcome of an effective SEA can be defined,[5] but the process to achieve this outcome is essentially a response to the internal and external factors that shape SEA adaptive behavior.

SEA, especially policy SEA, is also an environmental governance tool that feeds into planning and policy making. Its effectiveness is ultimately measured through its ability to integrate environmental and social considerations in plans, policies, sector reforms, and national development strategies. This report shows that SEA as an environmental governance tool has been increasingly used in sectors of high environmental and social risks, such as water, forestry, and mining (Chapters 5, 6, and 7). Here, the greatest strength of policy SEA has been to facilitate dialogue, negotiation, and agreements among multiple stakeholders on environmental sustainability that are supported by good analytics. Again, making this policy dialogue mandatory, as in the case of the SESA for the FCPF, would significantly increase the use of SEA across the Bank and would likely gain the support of civil society. But a mandatory process requires a clear definition of requirements, procedures, and standards, which directly affects the ability of SEA to adapt and evolve. The SESA for the FCPF cannot necessarily be adapted to other sectors or policy challenges.

The trade-off between regulating SEA and keeping it adaptive and flexible cannot be considered in isolation from the evolutionary nature of SEA. This is a main finding of this report and the discussions of the SEA CoP. Yet the way in which this trade-off is addressed would likely affect the place that SEA could have in the World Bank's business model. All regional reviews confirm the need for SEA as an important sustainability tool. But whether SEA should be regulated under the umbrella of the Bank's environmental and social safeguard policies remains unclear, as the implications for SEA effectiveness are not yet fully understood. Continued application of an adaptive evolutionary approach in using SEA in the Bank's activities seems the most sensible way ahead. If a regulated SEA is restricted to specific and well-defined processes such as the FCPF-supported Readiness Preparation, the potential advantages and disadvantages of this course of action will be better understood over time. For other uses of SEA in the Bank's activities, keeping SEA flexible and using it as a development rather than a regulatory instrument would be consistent with the findings of this review.

5 For example, the process outcomes of policy SEA are greater attention to environmental priorities, strengthened constituencies, improved social accountability, and policy learning (World Bank et al. 2011).

Lessons and Good Practices

This section analyzes the results of the regional reviews from the perspective of SEAs' influence in decision making, their ability to establish multistakeholder frameworks, and their capacity to promote country ownership. The results provide lessons on how and when SEA approaches can be effective. The section finishes by challenging the assumption that timeliness is critical for SEA effectiveness because it shows that the higher we move up in the decision-making ladder, the more SEA faces a continuous process of decision making without a clearly defined beginning or end.

Influence in Decision Making

Although the regional reviews found mixed results on the influence of SEA in decision making, there is enough evidence to identify situations in which SEA is likely to be influential. Also, good practices on making SEA influential can be identified. In the following discussion, the analysis of these results is facilitated by discussing impact-centered SEA separately from policy SEA.

Impact-centered SEA: ESMF and Alternatives Analysis

Impact-centered SEAs have been influential when they provide a framework to assess environmental and social impacts of programs in which the investment activities are not fully defined and identified at appraisal (when the World Bank operation is assessed internally). This has been the case, for example, for the SEA for the Kenya Education Sector Support Program; the Strategic Environmental, Cultural Heritage and Social Assessment of the Regional Development Strategy of Kakheti; the sectoral EAs of Tamil Nadu, Karnataka, Kerala, Uttar Pradesh, Mizoram, and Manipur Highway Projects; and the regional environmental assessment for the Mindanao Rural Development Project. The SEAs contributed to decision making by providing an environmental management framework to screen potential investments under the Bank operation that informed the selection of investment projects down the pipeline.

Possibly influenced by the successful results of this type of SEA, EA practice in the Bank has evolved to include the increasing use of the environmental and social management framework. An ESMF establishes a unified process applicable to development project designs that entail subsequent funding for multiple, small-scale subprojects whose exact nature and location is not known at the time of project appraisal (World Bank 2005). This unified process addresses all environmental and social safeguards issues on subprojects—from preparation through review and approval to implementation. Effective implementation of an ESMF ensures that the substantive concerns of all applicable World Bank safeguards policies are satisfactorily addressed.

Less common across regional practice than the ESMF role has been the use of SEA as a tool for alternatives analysis, which has also been influential in decision making. In these SEAs, investment alternatives are identified and assessed against sustainability criteria in order to inform the selection of an optimal or adequate choice. Some relevant examples identified in the regional reviews are the SEA for the Ghana Micro, Small, and Medium Enterprise Project; the Santiago Urban Transport SEA; and the Water and Sanitation SEA for the Dominican Republic. A good practice in using SEA for alternatives selection is illustrated by the Nepal Medium Hydropower Sectoral EA (Chapter 5). In this exercise, screening and ranking of alternatives was the backbone of the sectoral EA. From a national inventory of 138 sites suitable for medium-scale hydropower, 7 sites were selected as of high acceptability through a two-staged assessment process that considered technoeconomic, social, and environmental parameters. The SEA added value by helping decision makers discard more than 90 percent of the sites, and only the selected 7 sites proceeded to the feasibility stage.

Policy SEA: Expanding Policy Horizons, Public Participation and Accountability

Analysis of the influence of SEA in policy making requires acknowledging the continuum of policy

making (Ahmed and Sánchez-Triana 2008; World Bank et al. 2011). Any policy SEA faces a situation in which the existing state of policy affairs is accepted (policy status quo), the existing policies are called into question (policy review), or the policy is being changed (policy reform). Influencing policy making will mean different things in each situation.

Under conditions of policy status quo, the regional experience shows that SEA could often bring about planning or policy recommendations to improve environmental and social sustainability through raising awareness and changing attitudes toward sustainable development. One example of this is the SEA of the National Spatial Plan in Montenegro that affected the attitude and capacity of some stakeholders positively, but it fell short of making an impact on institutional capacities (Chapter 8). Similarly, the SEA for the Hubei Road Network Plan 2002–2020 increased awareness of senior managers at the Hubei Provincial Communication Department about macro-level environmental implications of road transport. It also showed the advantages of sharing data in the context of a rigidly compartmentalized subsector planning culture (Chapter 3).

In some cases, when conditions for policy review are maturing, the SEA may widen an opportunity for policy reform. This appears to be the case in the India CEA that influenced policy on environmental governance by highlighting the need to improve access to information, empowering local governments, and establishing clear accountability mechanisms. As a result, the India CEA has been influential in several Bank projects, and it elevated environmental and social accountability priority issues in the country assistance strategy (Chapter 5).

Among the first policy SEAs supported by the World Bank are those that attempted to influence policy in a context of policy reform. Their strengths were translating environmental issues into economic and environmental health effects and the application of cost-benefit analysis to evaluate policy options. In these initial policy SEAs, the emphasis is still on the production of a report. It is assumed that in order to influence decision makers, a high-quality piece of analytical work is required (Sánchez-Triana and Enriquez 2006). Consultations are treated as instrumental to the preparation of the SEA report. Stakeholder analysis, political economy, and the strengthening of environmental and social constituencies are not yet at the core of the SEA process. Examples are the Water and Sanitation Sector SEA in Colombia, the Water Sector Reform in Argentina, and the Energy and Environment Reviews of Egypt and Iran.

Arguably the most influential policy SEAs are responsive to a situation of policy review by linking environmental and social priorities to economic or development outcomes, by giving centrality to the SEA as a process by engaging key stakeholders in a policy dialogue, and by sustaining the SEA process during policy reform through a policy loan. An emblematic policy SEA is the Colombia CEA that between 2005 and 2009 influenced a series of development policy loans (DPLs) by highlighting that pollution and environmental degradation had an estimated cost of 3.7 percent of gross domestic product and caused approximately 6,000 deaths annually, especially of children. The CEA also showed that the environmental priority setting process was disconnected from investments made in regional and local jurisdictions. Consequently, it suggested a set of policy and institutional strengthening recommendations that were taken on board by the DPLs. More recently, the Gulf Environmental Partnership and Action Program (GEPAP) incorporates the following key policy SEA principles in its design (Chapter 4):

- Address priority environmental issues at the regional level to be implemented at the national level
- Underpin policy and institutional issues of environmental sustainability on environmental asset valuation methods to clarify the importance of protecting and restoring environmental quality

- Expand the Gulf environmental community to include sector ministries, private and financial sectors, and civil society through environmental education and communications based on Gulf regional priorities

- Increase consultation and communications among Gulf countries and stakeholders to prioritize actions and define the GEPAP investment portfolio

- Share lessons with similar international waters initiatives.

Multistakeholder Dialogue

The critical role of public consultation and participation in effective SEA is now commonplace. Increasingly, SEA practitioners agree that the SEA process is more important than the SEA report for influencing decision making and planning (IAIA 2011). This sets public participation and multistakeholder frameworks at the core of SEA effectiveness. Not surprisingly, all the regional reviews stressed the importance of meaningful public participation in SEA. Even in MENA, where consultation at the strategic level was limited to government officials, public participation was an attractive SEA feature because it could help address the demand for civil society participation as a result of the changes brought about by the Arab Spring.

The regional chapters identified the main advantages of public participation processes. Public participation provides stakeholders with an entry point to voice their needs in planning and policy making. This was the case, for instance, in the Regional Environmental Assessment of the Manila Third Sewerage Project. More specifically, public participation at the policy level was found to empower weaker stakeholders, particularly the poor. In the Europe and Central Asia (ECA) Region, where SEA practice has been mostly impact-centered, public involvement has the potential to enhance quality control and assurance of the SEA process, as happened in the SESA of the Kosovo Lignite Power Technical Assistance Project. Accordingly, through effective public participation, SEA can open policy and planning processes to broader groups of stakeholders, empower traditionally sidelined constituencies, enhance quality of outcomes, and strengthen monitoring. If achieved, these outcomes by themselves justify the use of SEA.

However, the regional reviews and discussions about them within the SEA CoP also showed that effective SEA public participation is not free from challenges. Identifying who is to be consulted or who is "the public" is a major challenge in upstream SEA processes. Even when stakeholder analysis through techniques well known to social scientists (see, for example, World Bank et al. 2011) helps in identifying "the public," the reviews found that two problems were likely to emerge. Usually, stakeholders come to the policy or planning dialogue with vested or group interests. Distilling a common good from competing and sometimes conflicting interests is not easy. One way to ease political tensions could be stressing that SEA is a recommended rather than a mandatory process of policy dialogue, as happened in the SEA of the Nam Theun 2 in Laos (see also Morgan et al. 2009). Furthermore, SEA teams need to be strengthened by incorporating social and political specialists capable of managing political economy challenges.

Another problem that came up was how to attract the attention of grassroots stakeholders to SEA consultations, as environmental and social impacts from strategic decision making are not always tangible and may not affect them directly (Chapters 3 and 5). In the Strategic Environment, Cultural Heritage, and Social Assessment of the Kakheti Regional Development Plan in Georgia, local communities were not interested in the environmental aspects of the plan but were concerned about resettlement and job opportunities. One way to address such disinterest is to design the SEA process with attention to specific concerns of local communities, as in the SEA of the Palar Basin. Here the challenge was to strike a balance between strategic and local priorities and concerns. A balanced representation of civil

society between grassroots groups and institutional stakeholders such as nongovernmental organizations (NGOs) and civil society organizations (CSOs) can also help because institutional stakeholders are more are likely to have a broader and more strategic perspective. This requires, however, that the priorities of institutional and grassroots stakeholders are accounted for separately during the SEA process (see Box 2.1).

All in all, there is a need to invest considerable time and resources in the preparation and implementation of public participation in SEA. As reported in Chapter 5, a multistakeholder framework and a structured plan for stakeholder participation in the West Bengal Sundarbans established around agreed priorities are likely to be responsive to stakeholders' concerns and interests and to keep them engaged in the SEA exercise. They are also means to ensure stakeholders' representativeness and the legitimacy of the public participation process.

Good practices for SEA public consultation are being developed by the SESA for the FCPF. Among other elements, these consultations include the following.

- Existing stakeholder platforms for sector or thematic dialogue are used for SEA.

Box 2.1 Consultations in the West Africa Mineral Sector Strategic Assessment (WAMSSA)

Consultations for WAMSSA consisted of:

- Focus groups meetings for industry, government, and civil society in the capital cities of Guinea, Liberia, and Sierra Leone
- Mining community surveys in 10 communities selected across these three countries, which were representative of the breadth, depth, and diversity of communities affected by mining-infrastructure developments
- National workshops in capital cities to select WAMSSA's priorities, validate WAMSSA's main findings, and propose policy recommendations.

Seven priority issues were identified. The priorities of institutional stakeholders coincided only partially with those of community stakeholders. WAMSSA accounted for these differences throughout the SEA exercise. (A similar finding was reported for the Colombia CEA in the different cultural context of Latin America.)

Priority issues	Institutional stakeholders	Community stakeholders
Environmental Issues		
Deforestation and loss of biodiversity	X	
Land degradation and need for reclamation		X
Social Issues		
Poverty in mining areas	X	
Governance Issues		
Insufficient transparency/consistency of decision making	X	X
Lack of capacity	X	X
Disenfranchisement of local communities	X	X
Rent-seeking behavior		X

Source: Adapted from World Bank 2010 and Annandale 2011.

For example, in Mexico the SESA process is mainstreamed into the national climate change strategy preparation process.

- Depending on the scope and complexity of the consultation process, multistakeholder working groups are established to steer and oversee implementation of the consultation and public participation (CPP) activities.

- The CPP plan establishes rules for validating representativeness of stakeholders, criteria for engaging new stakeholders during implementation to ensure legitimacy of the CPP process, and rules to be followed to reach agreements in the course of the SEA implementation. The CPP plan is adopted during an initial workshop to launch the SEA process.

- In the selection of SEA priority issues or preferred alternatives, the preferences of grassroots stakeholders (communities) are distinguished from the preferences of institutional stakeholders (government, NGOs, CSOs, etc.).

- CPP activities are designed and implemented in a culturally sensitive way. Participatory rural appraisal is the main vehicle for identifying key environmental and social issues at the community level. While surveys and one-off meetings at the community level have been a step in the right direction, effective CPP in communities requires a longer "face-to-face" time and less intimidating surroundings. Reporting back is also critical for effectiveness (World Bank et al. 2011).

Country Ownership

In line with the literature on SEA, the regional reviews highlight the importance of country ownership for effective assessments. Although the reviews did not dwell on whether country ownership included civil society and the private sector as well as the government, country ownership in the reviews implicitly refers to government ownership.

A common feature in the reviews is the rather low demand for SEA compared to EIA from client countries, although this trend seems to be slowly but consistently being reversed. Most SEAs have been supported or required by the Bank, following a trend in which donors pushed for the SEA agenda during the 2000s. According to Cadman, Fragano, and Mathur (Chapters 6, 7, and 3), the main factor behind this sluggish demand is the absence of SEA as a legal requirement in the preparation of government programs, plans, and policies. For example, in the Bank's experience in East Asia and the Pacific (EAP), SEA is many times seen as an unnecessary and bureaucratic step that takes time and resources away from an already limited and overstretched EIA capacity. Although this perception relates to impact-centered SEA, it also reaches policy SEA because the benefits that the latter could bring to decision making are not well understood. The expectation is that by regulating SEA and making it mandatory for specific Bank-supported activities, the practice will increase, teething problems will be overcome, and SEA will be as accepted as EIA is today.

However, the ECA review calls this expectation into question. Even though SEA is mandatory in the European Union, Chapter 8 reports limited buy-in by East European countries, where common problems are delays and a lack of time and resources for undertaking SEA. According to the authors of this chapter, the problem originates in the limited awareness of decision makers and insufficient capacity and resources for undertaking SEA. While this might be so, it is also possible that impact-centered SEA approaches have fallen short of delivering the expected sustainability benefits at the strategic level in ECA. The need for systematically applying alternative approaches such as policy SEA could be part of the solution. The lesson here would be twofold. On the one hand, mandatory SEA does not ensure country or government buy-in of the SEA process but facilitates an enabling environment for SEA use. On the other hand, any legal basis for SEA that the World Bank may promote in client countries should be flexible enough to facilitate experimentation with different SEA approaches.

Over the last decade there have been some encouraging results with countries ownership of SEA and demand-driven SEA. The World Bank has learned that rather than Bank activities, SEAs and CEAs are more effective as country activities that need support for awareness raising and capacity building (World Bank et al. 2011). Climate change is posing challenges for risk and vulnerability management that require programmatic responses and modeling of future scenarios amenable to SEA methods (Chapters 3 and 7). This is creating a country-driven demand for SEA in EAP and in Latin America and the Caribbean (LAC), as attested by the CEA in Indonesia that focused on climate change and the broader use of SEA in Mexico for climate change adaptation in Michoacan and Campeche and for climate change mitigation through REDD+. As reported in Chapter 7 in LAC, following a reduction of Bank-supported SEAs (mainly through CEAs) as funds for supporting CEA activities dried up, there has been a modest revival in interest in SEA—but this time country-driven as, among other things, Brazil, Chile, and Peru have adopted the legal basis for SEA.

Timing

Critical Factor in Impact-Centered SEA

The Sub-Saharan Africa (AFR), EAP, ECA, and South Asia (SAR) chapters have identified the timing of SEA as an important factor in effectiveness. These reviews, however, do not differentiate timing in impact-centered and policy SEA. In line with the SEA literature on impact-centered SEA, it is assumed that the results of the SEA report are the main mechanism for influencing the preparation of programs and plans. Consequently, the usefulness of the SEA findings and recommendations would reduce significantly during plan and program implementation—as has happened in EAP, where the Bank has often been invited to participate at the project stage after strategic decisions have already been taken, particularly in China. Likewise, the influence of the Lake Victoria Regional Transboundary Diagnostic Analysis and Strategic Action Program was impaired due to delays in completing the assessment. The lesson here is not new: the appropriate time for undertaking impact-centered SEA approaches is when plans and programs are being prepared.

Less Important Factor in Policy SEA

Timeliness in policy SEA does not have a substantive meaning, however, as policy is a continuum. The timeliness in policy SEA could be linked to the special periods when a window of opportunity for policy review and reform is opened. It can be expected that policy SEA could be more effective if it started at a time when a window of opportunity is opened. But the regional reviews did not provide enough evidence to be conclusive on this matter. While this would be the case for the Pakistan Green Industrial Growth SEA and the strategic environmental, poverty, and social assessment of Pakistan Freight Transport Reforms (Chapter 5), policy SEA could still be influential during implementation, as in the SEA of the Kenya Forest Act (World Bank et al. 2011) and in the strategic impact assessment of the Nam Theun 2 Hydroelectric Project, Lao PDR (Chapters 6 and 3).

The lesson is that timing in policy SEA is a less critical factor for effectiveness than other factors, such as the establishment of multistakeholder frameworks or country ownership of the SEA process. The operational implication for the World Bank's operations would be that policy SEA can be used more flexibly than impact-centered SEA whenever conditions are favorable to include environmental and social considerations in the policy dialogue right from the preparation of country partnership strategies through to the implementation of DPLs or other lending instruments, such as technical assistance loans.

Strengthening the World Bank's SEA Agenda

The regional chapters propose regional SEA agendas. Summarizing these agendas is not straightforward because they are influenced by an array of different factors, such as the history

of the World Bank's support on SEA in the Region, the level of development of the Region, and regional priorities. Any cross-regional trend should therefore be approached with caution. Nevertheless, it is possible to identify some broader cross-regional elements of interest for the SEA CoP in promoting an SEA agenda for the World Bank.

Table 2.1 shows that potential entry points for the Bank to support SEA are varied across Regions. In Africa, the priority would be strengthening environmental safeguarding yet moving beyond it toward supporting decision making for sustainable development. In LAC and SAR, climate change offers a concrete opportunity for moving the SEA agenda ahead. In EAP, ECA, and MENA, the agenda on SEA would be dominated by Region-specific issues. Given the impressive growth of several EAP countries, not just China, the environmental assessment agenda in EAP centers on large infrastructure projects. The implementation of the EU SEA Directive and the Espoo Convention will continue driving SEA in ECA. In MENA, the value of SEA would likely be tested for its ability to introduce public participation approaches in countries unfamiliar with these practices at the planning and policy-making levels.

Unlike the disparate entry points at the regional level, all regional reviews point to the need for SEA capacity building. In AFR, EAP, and MENA, this need would be strong. Capacity building is largely seen as the vehicle to reverse critical constraints to scale up SEA, such as weak capacity for environmentally and socially sustainable planning, lack of resources in client countries and the Regions to expand SEA use, very limited use of SEA during the preparation

Table 2.1 Key Elements of Proposed Regional SEA Agendas

Region	Potential Entry points	Awareness raising	Capacity building	Knowledge sharing	Comments/ priorities
AFR	Environmental safeguarding of development initiatives Upstream tools for sustainable development	X	XX		Focus capacity building on core growth sectors Promote SEA as a tool for strengthening country systems
EAP	Upstream (macro-level) decision making Large infrastructure projects and programs		XX	X	Establish "centers of excellence" on social and environmental issues in infrastructure
ECA	Assist in the implementation of the SEA EU Directive and Espoo Convention	X	X		Several Bank projects already identified
LAC	Subnational planning (state and municipal levels) Climate change mitigation and adaptation		X	XX	Enhance coordination on SEA with IDB and IFC based on complementary strengths*
MENA	Existing strong engagement in supporting national EIA systems		XX	X	Focus on facilitating public participation in strategic decision making
SAR	Addressing environmental health impacts in sector reforms Vulnerability to extreme climate change events	XX	X	XX	Policy SEAs offer great potential Assist countries in developing National SEA systems

XX: strongly recommended; X: recommended
* IDB–Inter-American Development Bank; IFC–International Finance Corporation

of country partnership strategies, and poor enabling context for the emergence of SEA champions. Awareness raising appears today to be less important, possibly as a result of previous work undertaken by the donor community, the multilateral development banks, and the World Bank itself.

The interesting element is that four regions—EAP, LAC, MENA, and SAR—have given priority to intra- and inter-regional SEA knowledge sharing. This is an indicator of the potential demand for South-South knowledge exchange on SEA. In discussions of the SEA CoP, it was highlighted that South-South lessons and knowledge efforts can focus on social learning. This would facilitate the creation of adaptive mechanisms for reviewing the impacts of policies, plans, and programs on priority social and environmental issues. As an adequate social learning space is required for achieving the long-term sustainability impacts of SEAs, enhancing the understanding of how such space is created when most country systems do not allow for it is important. This requires drawing not only on lessons from SEA experiences but also on other efforts, whether in the broader governance space, the disaster risk management space, or somewhere else. In the United States, for example, the Bureau of Land Management applies adaptive land management. There may be lessons from this experience applicable to SEA.

Considering that SEA is being legally adopted by client countries as a tool for environmental and social integration into programs, plans, and policies, assessing the role of SEA in enhancing the environmental and social sustainability of DPLs and program-for-results operations was suggested. This would require the SEA CoP to help develop a platform for common analysis and reflection between the environmental and operations policy and country services families of the World Bank.

Reasonably in line with the regional SEA agendas, the role of the Environment Department would be to facilitate the learning SEA agenda.

The following is expected to come from this department:

- Dissemination of global knowledge on SEA
- Promotion of South-South knowledge exchange
- Development of SEA guidance and tools for specific sectors and assessment challenges, such as climate change adaptation
- Continued high-level support and access to resources such as trust funds for capacity strengthening in SEA and CEA.

Final Remarks

When the draft version of this chapter was discussed by the SEA CoP, the following issues for a future knowledge and dissemination agenda of this community were suggested:

- How does SEA practice in the Bank compare with international practice?
- What innovations in SEA are on the horizon?
- Should SEA use in the Bank be reframed to achieve more sustainable development?
- How does SEA relate to emerging issues and tools such as green economy, low-emission development strategy, and natural capital accounting?
- What are the sectors in which SEA has not taken off? Why has this happened?
- How can influence be sustained after an SEA is completed?
- What can be learned from SEAs that have informed country partnership strategies?
- How can the work in the report be used for SEA training? How can the report be transformed into a learning tool?

- Would it be possible to create a positive and negative list of when to use and not use SEA?
- Are there any improvements that can be made to the OP 4.01 policy references to SEA to strengthen SEA/SESA practice?
- How can the Bank be more systematic in maximizing SEA's potential for effective monitoring and follow-up?
- How should new champions for SEA be found and supported in the poverty reduction and economic management vice-presidency—the "unusual suspects"?
- How can the SEA CoP best advocate for and locate funds for continued financing and support of SEAs?

As this chapter was being prepared, the regional reviews of Africa and Latin America were presented at the 32nd Annual Conference of the International Association for Impact Assessment (IAIA) held in Porto, Portugal (27 May – 1 June 2012) and at the Symposium on SEA held in Maputo, Mozambique (25–27 April 2012). Also, dissemination of this report outside the World Bank is initially planned at the 17th Annual Conference of the IAIAsa (IAIA South African Affiliate) to be held in August 2012 in Cape Town, South Africa. These are indicators that the SEA CoP could become a hotbed of SEA champions within the Bank. If this momentum is sustained, this may be the dawn of a new wave of adaptive development evolution in World Bank-supported SEA activities.

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CHAPTER 3

WORLD BANK SEA EXPERIENCE IN East Asia AND THE Pacific

A TOOL FOR ENVIRONMENTAL SAFEGUARDING

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Introduction and Methodology

This chapter aims to take stock of the evolution of strategic environmental assessments (SEAs) in the East Asia and Pacific Region (EAP), discuss lessons learned using SEA case studies, and provide recommendations for SEA moving forward in EAP. This diverse region includes Cambodia, China, Fiji, Indonesia, Kiribati, the Republic of Korea, the People's Democratic Republic of Lao (Lao PDR), Malaysia, Marshall Islands, FS Micronesia, Mongolia, Palau, Papua New Guinea, the Philippines, Samoa, Solomon Islands, Thailand, Timor-Leste, Tonga, Vanuatu, and Vietnam.

The chapter builds on published literature on SEA within the East Asia and Pacific Region as well as on SEA publications within the World Bank. It focuses only on World Bank–supported projects in the Region during the past decade. Information presented is based on extensive literature review, interviews, and correspondence with technical staff in the EAP Region and at World Bank Headquarters in Washington, D.C. A questionnaire was developed that formed the basis of the interviews and correspondence with technical staff in the Region (see Annex 3.1).

This review includes sectoral environmental assessments, regional environmental assessments (REAs), cumulative impact assessments (CIAs), strategic environmental and social assessments (SESAs),[7] and country environmental analyses (CEAs).[8] Here, all these types of environmental assessments are considered SEAs to the extent that they enable scrutiny of environmental and social concerns at broad decision-making levels and the integration of these concerns into decision making.

7 SESA explicitly refers to social issues along with environmental ones. As environment comprises the natural and social environment of human activities, SESA is synonymous with SEA.

8 Country environmental analysis is identified as one of the key country-level diagnostic tools to evaluate systematically the environmental priorities of development, the environmental implications of key policies, and countries' capacity to address their priorities. CEAs have been referred to as a type of SEA or "SEA tool," and although not all CEAs can be considered as SEA, those included in this paper have a more strategic focus (Dalal-Clayton and Sadler 2005; Posas 2011).

Evolution of SEA in East Asia and the Pacific

Environmental legislation has existed in the EAP Region since the 1970s. Environment impact assessment (EIA) legislation has matured and evolved over the years, with the degree and quality of environmental assessment practices varying greatly between countries. SEA has evolved from EIA experiences, and as a result SEA practice also varies from country to country. SEA as an assessment tool has existed since the early 1990s, and the past decade has seen a growth in its application. SEA has been institutionalized in the Region either as an application of EIA principles for plans or programs (for example, in China, Vietnam, and the Philippines) or as a more flexible approach for integrating environmental considerations into the planning process, such as in Indonesia and Malaysia (Dusik and Xie 2009).[9]

The World Bank has actively supported the SEA process in the Region and piloted a few SEAs, such as the hydropower SEA in Lao PDR, the REA in sanitation and sewerage in metro Manila, and the SEA of China's Western Region Development Strategy. SEA in the Region includes both impact-centered SEA and institution-centered or policy SEA. The Bank's 2001 *Environment Strategy* for the EAP Region highlights the need for SEAs to be undertaken in areas where projects and programs may have cumulative and sector-wide environmental and social implications (World Bank 2006).

Since the late 1990s, the Bank has emphasized the need for mainstreaming environment into sector reform and policy design. Notably, in 2004 the World Bank updated its Operational Policy for Development Policy Lending (OP 8.60),

9 In China, the EIA Law of 2003 regulates the environmental impact assessment of projects and plans, referring to the latter as "Plan Environmental Impact Assessment." In Vietnam, the 1993 Law on Environment Protection, its implementing Government Decree 175/CP, and Circular No. 490/TTBKHCNMT mandated that EIA must be carried out not only at project level but also for master plans for development of regions, sectors, provinces, cities, and industrial zones. In Indonesia, in 2009 Law No 32 on Environmental Management and Protection requires SEA for spatial plans. A bill intending to make SEA a legal requirement is pending in the Philippines.

emphasizing "upstream analysis of social and environmental conditions and risks" and mentioning SEA, CEA, and other analyses (Dusik and Xie 2009). In 2005, a multiyear SEA program entitled "Developing Practice and Capacity of Strategic Environmental Analysis in East Asia and Pacific Region" was launched. This project aimed to mainstream environmental concerns into sectoral, national, and regional development policies, programs, and plans through Bank operation–related SEA applications, knowledge sharing, and capacity building (World Bank 2011a). More recently, in 2011 the Operational Policy on Environmental Assessment (OP 4.01) was revised to include SEA and SESA. For the first time SEA and SESA are listed as possible instruments to be used to satisfy the Bank's environmental assessment requirement.

Additionally, other studies have reviewed SEA practice in East Asia, including legislative requirements and case studies (e.g., Dusik, and Xie 2009; World Bank 2006). China and Vietnam, in particular, have been the focus of a number of publications, workshops, and international conferences (e.g., Carew-Reid and Dusik 2011; Spengler 2009). In fact, the 30th Annual Conference of the International Association for Impact Assessment in 2010 celebrated a China Day, focusing on the state of SEA and EIA in China.

Annex 3.2 lists SEAs in the Region supported by the World Bank in the last decade. Six of these have been chosen as case studies, two are described within the chapter and four in Annex 3.3. The case studies presented were chosen to illustrate drivers of SEAs, different approaches to conducting SEA, the application of SEA across different sectors, and lessons learned based on SEA recommendations.

Findings

Drivers of SEA

SEA is a set of tools meant to integrate environmental considerations into upstream decision making. Though the specifics and boundaries of SEA are debatable, it is increasingly recognized as a continuum of approaches rather than a single, fixed approach (Ahmed and Sánchez-Triana 2008; OECD-DAC 2006). This is reflected in the drivers for SEAs undertaken in EAP. The drivers can be grouped into four categories. The first two can be seen as requirements while the other two are better thought of as objectives driving SEA.

1. *Comply with national legal requirements* (SEA of Tourism Development in the Guizhou Province, China; SEA of the National Forestry Master Plan, Vietnam).

   In China, Indonesia, and Vietnam, SEA and SEA-type studies are conducted at all levels of decision making to comply with the legal framework. In China plan EIAs, in Indonesia EIA for spatial plans, and in Vietnam EIA of master plans for development of regions, sectors, provinces, cities, and industrial zones are required.

2. *Fulfill donor requirements*[10] (REA Mekong Delta Water Management for Rural Development Project, Vietnam; SEA Trung Son Hydropower Project, Vietnam; CIA and SIA Nam Theun 2 (NT2), Lao PDR).

   Several SEAs have been driven by donor requirements and pilot programs. As a number of safeguard policies were triggered by the Mekong Delta Water Management for Rural Development Project, an REA was prepared to comply with the safeguard policies and to ensure that the project does not have adverse impacts.[11] Similarly, a cumulative impact assessment and a wider hydropower strategic impact assessment (SIA) were conducted for the Nam Theun 2 hydroelectric project to address the nature and scale of the impacts,

10 Within the World Bank, SEA has been used as a tool for environmental safeguarding, as part of analytical and advisory activities, for capacity building and training, and in the context of OP 8.60 relating to development policy lending (Ahmed et al. 2005).

11 The project triggered the following safeguard policies: environmental assessment (OP 4.01), pest management (OP 4.09), indigenous peoples (OP 4.10), involuntary resettlement (OP4.12), and international waterways (OP 7.50).

which attracted international scrutiny. The SEA of the Trung Son Hydropower project aims to address a number of issues required for World Bank financing appraisal, including the preparation of an EIA and an environmental management plan compliant with World Bank safeguard requirements.

3. *Inform existing or draft policies and plans* (SEA of Tourism Development in the Guizhou Province, China; SEA of the National Forestry Master Plan, Vietnam).

   The SEA of the tourism sector in Guizhou Province was undertaken to inform the Plan EIA that the provincial government needed to undertake for its proposed tourism development strategy. In the forestry sector SEA of Vietnam, a rapid SEA was conducted to inform the preparation of the forestry master plan (2010–2020). A rapid assessment of three Provincial Forest Protection and Development Plans was undertaken, and the SEA provides guidance for developing a National Forestry Master Plan and wider government decision making in the forestry sector.

4. *Inform about cumulative impacts of programs or subprojects* (REA for Manila Third Sewerage Project; REA for Mindanao Rural Development Program-I).

   In such cases, the purpose of the SEA is to plan future subprojects better and to minimize and mitigate impacts by incorporating the findings into the project-specific EIAs. This was seen in the case of the REA for Manila Third Sewerage Project, where lessons learned informed future subprojects and the Global Environment Facility (GEF) Manila Third Sewerage Project. The REA for Mindanao Rural Development Program-I formulated environmental policies to enhance the positive impacts of Mindanao Rural Development Program-2 and identified a negative list of subprojects and activities in order to safeguard the environment from any potential negative impacts. In both cases the REAs proved influential in the selection of projects down the pipeline.

Timing of SEA

The timing of an SEA can be critical for influencing planning and policy making. Often policy and macro issues are discussed and defined by client countries in the Region prior to Bank involvement. In many cases, the Bank is invited to participate at the project stage after strategic decisions have been taken. At that stage it becomes too late to influence plans, let alone policies. When an SEA is conducted early in the planning process, it has a greater chance of influencing decision making. SEA should be adapted to the planning and the situation, not vice versa. For example, with the Nam Theun 2 CIA and SIA studies, initially concerns were raised about the timing of the studies. Many stakeholders felt there was limited ability to influence project design since the two studies came late in the planning and decision process, after many decisions had already been taken (Morgan et al. 2009). In this case, as the project evolved the studies did prove valuable, and the environmental measures undertaken are cited as an exemplary case of environmental protection (see Annex 3.3 for more details). Moreover, they played a role in influencing a range of environmental practices in Lao PDR. With the strategic assessment for spatial planning in Papua province, because it was conducted to inform spatial planning and different development scenarios prior to plan development, the recommendations proved beneficial.

Stakeholder Participation

Undertaking meaningful public consultation at an early stage of decision making is identified as one of the key requirements of SEA (Shi 2011; Ahmed et al. 2005). One of the challenges of SEA is to ensure that public participation is meaningful and not just a case of providing detailed, rigorous, and comprehensive information. The participation process must provide an opportunity for stakeholders to voice their needs and influence decisions accordingly (World Bank 2012). A comprehensive public consultation program took place for the Manila Third

Sewerage Project (MTSP) REA (see Box 3.1). Two rounds of consultations along with site visits were undertaken. The consultations also validated and updated the results of the environmental assessment. The process was highly participatory, allowing participants to voice their opinions and concerns and feed into the SEA process.

The general observation from the Region is that often the public or local communities are not interested in the SEA consultation process, as impacts are not tangible and may not directly affect them. It has often proved difficult to get grassroots engagement in Bank-supported SEAs, particularly where the linkage between policy issues and impacts is unclear. This was evidenced in the NT2 case, where local groups potentially affected by decisions yet to be taken in some years were loosely engaged in the strategic studies. Similarly, experience with the SEA for the Forestry Master Plan in Vietnam indicates that it is difficult to conduct consultations on broad agenda issues. Generally, the process of consultation, especially involving local stakeholders, is weak in all countries. Li et al. (2012) point that it is not necessary to develop a complex public consultation process; what is important is to involve key stakeholders who play critical roles in the decision processes. This usually includes national nongovernmental organizations, government agencies, academia, and other interested stakeholders.

Ownership

Ownership matters and importance are reflected in the SEA's outcomes. A majority of the SEAs were World Bank–driven, thus clients were not highly invested in the process. This influences implementation of the recommendations.

Box 3.1 REA for Manila Third Sewerage Project, Philippines (2005)

The regional environmental assessment was conducted to assess compliance of proposed World Bank investments in Manila Third Sewerage Project. As the proposed project could potentially have significant environmental benefits and impacts at the regional level, a regional assessment was needed. It was felt that a project-specific EIA would not adequately address the cumulative and interactive impacts of the project components. Project documents note that the REA was a complementary strategic document to the project.

The REA focused on environmental issues such as noise, air and water pollution, flora and fauna, health benefits, and water quality. It also looked at socioeconomic issues and at water, sewerage, and septage management facilities. No project scenario was considered while assessing cumulative impacts. The REA concluded that the MTSP would have net benefits on the region as compared with no project scenario.

A comprehensive public consultation program was undertaken, including two rounds of consultation. This included scoping workshops and focused group discussions. Prior to the consultations, site visits to the affected communities and their representatives were undertaken to get familiar with the sociocultural environment. First-level consultations with community representatives included a scoping workshop and focal groups, while the second round included 12 public consultations with the concerned communities.

The consultations greatly increased the community knowledge regarding sanitation, sewerage treatment, environmental impacts, and project benefits. The consultations also validated and updated the results of the environmental assessment. The REA demonstrated the benefits of regional/sectoral studies bringing to light the cumulative impacts of projects. The government has appreciated the value of such regional studies and has beefed up capacity of the Environment Department in order to support such studies and follow up on implementation. Specialized environmental engineers have been recruited. Moreover, lessons learned from this REA have informed another wastewater management project in Manila. The REA helped the government "sharpen its lens," leading to a more focused approach. In addition, the REA facilitated and informed the GEF Manila Third Sewerage Project.

Source: Based on Manila Water Company, Inc. 2005.

Ownership needs to be addressed in the relationship between the donor/multilateral agency and the partner countries, on the one hand, and internally within governments and key constituencies of partner countries on the other hand (World Bank et al. 2011). The NT2 studies illustrate this point. Initial support for these studies was not uniform, as the government, the Nam Theun 2 Power Company, and the NT2 project's Panel of Experts expressed skepticism at various times regarding the relevance and utility of the CIA/SIA process, which they saw primarily as a donor-driven requirement (Morgan et al. 2009). The Manila sewage project SEA made the client realize the value of such studies. There is a greater involvement and willingness to undertake audits and report outcomes. The client is more receptive toward the GEF component of the project.

Learning Process

SEAs can facilitate policy and social learning. Literature on this subject suggests that an institution-centered approach to SEA places special emphasis on improved governance, social accountability, and social learning, bringing attention to environmental issues and improving the design of public policies (OECD-DAC 2006). This could be illustrated with the Hubei road transport planning SEA, in which people agreed that sharing data from baseline analyses was the most useful aspect of the SEA and that learning was facilitated through this sharing (World Bank et al. 2011). According to Dusik and Xie (2009), the consultations for the Manila wastewater REA greatly increased community knowledge regarding sanitation, sewerage treatment, environmental impacts, and project benefits.

Environmental Awareness and Capacity Building within Institutions

SEA can influence environmental management systems and building capacity within governments. Increased awareness can have a positive impact on giving priority to environmental issues. For example, the Hubei pilot SEA provided an overall holistic picture of the possible environmental impacts of planned transport projects. This increased the awareness of senior managers at the Hubei Provincial Communication Department (HPCD) about macro-level environmental implications of the proposed development of road transport. As per the review conducted on the Hubei pilot SEA, the HPCD management now pays more attention to environmental issues, as evidenced in detailed investigations carried out during the design stage of each road project (World Bank et al. 2011).

In all projects, the evidence suggests that SEAs raised awareness about environmental issues within government institutions, although the extent to which SEA facilitates capacity building and encourages interagency cooperation varies across projects. In the Philippines, for example, the government has appreciated the value of regional studies. It has beefed up capacity of the Environment Department in order to support such studies and to follow up on implementation, in part due to experiences from the Manila wastewater REA. While interagency cooperation still has a long way to go, it is moving in a positive direction. In China, there is a low capacity in sector agencies, which manifests itself in the lack of effective consultation and stakeholder participation. This is compounded by an absence of institutional coordination (Quintero and Sun 2010).

Often it is the recommendations of the SEA that give impetus to capacity building, as seen with the recommendations of the SEA on tourism development in Guizhou Province (see Box 3.2). As per the recommendations of the Hubei SEA, institutional strengthening was undertaken as part of the YiBa highway project.

The capacity to conduct SEA is weak within sector agencies. But in countries where SEA and SEA-type activities are part of the regulatory framework, SEA has raised awareness about environmental issues and the importance of including environmental considerations in decision making, especially at the national level. The legal requirement has led to the training of consultants and government staff.

Box 3.2 SEA of Tourism Development in Guizhou Province, China (2007)

This SEA arose from World Bank project entitled Guizhou Natural and Cultural Heritage Protection and Development Project for the tourism sector of Guizhou Province, China. The objective of the SEA was to enhance the sustainability of Guizhou's tourism sector through assessing environmental and socioeconomic impacts of tourism development and improving the design and implementation of tourism development policies, plans, and programs. This was the first tourism sector SEA in China. The SEA was meant to inform the Plan EIA that the provincial government needed to undertake for the proposed tourism development strategy.

Stakeholder consultations included interviews with government authorities, mostly to gather data; consultations with various contracted or independent consultants on key environment and social issues; a workshop with government authorities, including provincial and municipal/prefecture authorities; and a workshop with a selection of local community representatives from proposed project villages.

Generally, government officials were supportive of tourism development in Guizhou, and community representatives were also satisfied with the economic benefits that tourism development had brought to their villages. Some key issues that arose from the consultations include:

- Poor interdepartmental cooperation and institutional arrangements for the protection of nature reserves and scenic areas
- Deforestation due to infrastructure construction without proper planning
- Water pollution and the absence of wastewater treatment facilities
- Wildlife protection problems
- Cultural conflict in the effect of tourism on traditional culture
- Equitable distribution of project benefits, making sure that local communities benefit economically from tourism development
- Private sector regulation to avoid illegal and uncontrolled construction, and the management of tourism assets.

Accordingly, the recommendations of the SEA touch on strengthening interdepartmental coordination and capacity building, especially technical expertise in heritage protection and planning, including carrying capacity assessments for sensitive and popular sites, equitable distribution of benefits, and regulating private sector investments.

Source: ERM 2007.

Shifting Priorities

Except when legally required, the impetus to conduct SEA is low. SEA is not given priority, and the motivation to conduct SEA is weak within most countries and sectors. Typically SEA is seen as a bureaucratic and unnecessary process with limited added value to decision making, possibly delaying projects. Examples have been cited where the Bank team has proposed an SEA or REA but clients refuse to arrange it as it is seen as an exercise in addition to the EIA.

In the recent past, a shift in government priorities due to the changing global and economic climate is influencing how governments in EAP view SEA. Climate change is one of the biggest factors affecting strategic planning. In the Philippines, for example, climate change is becoming a priority, with government Action Plans being evaluated through this lens. Earlier, instruments such as modeling scenarios were typically used, but now the scope is being broadened to include other tools like EIA. SEA is increasingly viewed as a tool to evaluate climate-related risks and vulnerabilities and to develop appropriate programmatic responses (Herron et al. 2011). In Indonesia and Vietnam, priorities are shifting—with climate change mitigation and reducing emissions from deforestation and forest degradation (REDD) gathering momentum and resources. The Indonesia CEA identified

climate change as a new national priority that is relevant to Indonesia's development. REDD projects with the Forest Carbon Partnership Facility (FCPF) are being initiated with Terms of Reference for SESAs being drafted.

Applying Recommendations from SEA

The results of SEAs are not free of controversy. SEA ought to influence positive development results and help enhance the effectiveness of development. Development involves complex processes, and it is not easy to isolate those outcomes that are solely due to the application of SEA (IIED 2009). For example, for the forestry sector in Vietnam there is a master national plan to 2020 as well as five-year and one-year plans. Each province also carries out planning, and there are specific plans for subsectors (such as mangroves or plantations). But the extent to which these plans are influenced by the National Forestry Master Plan 2010–2020 SEA is uncertain. However, the FCPF project presents an opportunity to revisit the environmental and social issues and make sure the best recommendations are being taken forward. The Hubei SEA indirectly contributed to a new circular, issued by the HPCD management, that encourages the enforcement of environmental protection requirements during expressway construction (World Bank et al. 2011). In Mongolia, after the REA a number of publications—including Important Bird Areas, Fencing Options for Liner Infrastructure, Ground Water Management, and Ground Water Isotope Study—have been published. Components of the Second Wuhan Urban Transport Project have been designed based on the environmental assessment of the Wuhan Urban Transport Master Plan (see Box 3.3).

Generally, complex monitoring and evaluation frameworks along with poor follow-up by the Bank after project completion appear to play a large role in the information gap. SEAs where the output is focused, with clear-cut recommendations, have a greater chance of influencing decisions.

Box 3.3 Environmental Assessment for Wuhan's Urban Transport Development Strategy

The strategy was launched as part of the Wuhan Urban Transport Project and updated in 2006 during the project's implementation. The environmental assessment comprehensively assessed the rationale of the strategy from an environmental perspective and confirmed the importance of public transport as one of the core priorities for Wuhan's urban transport development, based on which the Wuhan Second Urban Transport Project was scoped. The assessment helped to identify environmentally sensitive sites and terrains and confirmed that the larger transport plan was consistent with sound environmental principles.

Source: World Bank 2009, 2010.

The importance placed on environmental issues by governments while making long-term policy decisions plays a role in determining if the recommendations are carried forward. This relates to the earlier point of government priorities. For example, in Vietnam importance is placed on forestry sector and REDD. The REA of the Mekong Delta Master Plan concluded that the existing development of land for agriculture and aquaculture had adverse impacts on soil and water quality, reducing agricultural yields. As a result of the study, forest clearance is now more strictly controlled, and the application of prohibited pesticides has been reduced. Crop diversification has been adopted and recommended as an important measure to avoid soil degradation.

Looking at the Future of SEA in the Region

Based on the results of the case studies and literature reviewed, Table 3.1 is an attempt to summarize indicators of conditions that can steer SEA in a positive direction to influence decision making.

The view of most regional staff interviewed in the Region is that SEA can be a useful tool. SEA

Table 3.1 Status of SEA Indicators in the Region

Country	Political will	Legal mandate	Institutions	SEA procedure/ guidelines	Public involvement	Remarks
Cambodia	x	x	x	x	NA	Lack of staff in MOE for SEA.
China	√	√	√	√	–	Plan EIAs are legally required. Public involvement is legally mandated in EIA law.
Indonesia	√	√	√	√	–	SEA required for strategic plans.
Lao PDR	x	x	x	x	NA	Not applicable.
Mongolia	√	√	x	x	NA	Not applicable.
Philippines	√	x	√	x	–	SEA bill pending. SEA expertise existing in administration and academia.
Thailand	√	x	x	–	NA	Not applicable.
Vietnam	√	√	√	√	–	EIA regulation is SEA inclusive.

√ Positive, x Negative, – Neutral, NA Not Available

The government's introduction and application of SEA is used as evidence to confirm political will. Legislation on SEA is the most appropriate indicator of a legal mandate. Establishment of a Ministry of Environment and Planning or other authorities, including staffing to be responsible for SEA, is used for institutions. Existence and quality of official documents to guide SEA implementation are used to describe the statutes of SEA procedure, guideline, and methodology. Public involvement is evaluated by both regulations and practical implementation.

Source: Adapted from World Bank 2006.

can—and does in the best of cases—add value to decision-making processes in the Region. It can bring together stakeholders at a strategic level. However, undertaking SEA can be a major challenge. SEA is still in its infancy in several countries with regard to government agencies awareness and understanding of its benefits and added value. In reality, several countries are struggling with project-level EIAs.

Within the EAP Region of the World Bank, there can be reluctance to undertake SEA because often within the investment loan operations there is not enough time for such an assessment or it is considered too late in the decision-making process for an SEA to provide added value. Pressure to address project-specific safeguard requirements and time act as a disincentive toward working on an SEA. The lending portfolio does not always lend itself well to working on SEA within the context of a project preparation schedule.

A more upstream and proactive approach toward SEA in the Region would help increase the number of SEAs undertaken and their usefulness to the decision-making process. In particular, there should be a focus on sectors and clients with which the Bank has continued engagement through multiple projects over a long period of time. This would allow a system to be put in place for follow-up or monitoring SEA that is necessary to better integrate SEA recommendations into actions that influence decision making. SEA should be promoted where the World Bank has leverage to follow up on the recommendations. Such opportunities present themselves where there is long-term engagement with the client and follow-up is possible either through the same lending operation or different ones.

As timing of an SEA is critical, in particular in EAP, given its type of portfolio, there is a need to better articulate the added value of SEA and how to undertake such a study when engaging

upstream in policy dialogue with counterparts in ministries/sectors such as transport, energy, or water. Often the Bank is involved at the project level after decisions have been taken and it is too late to undertake an SEA. A more holistic and integrated approach that aligns SEA as much as possible with the macroeconomic policy decision-making process would be helpful to ensure that environmental and social considerations are prioritized in the planning process.

To further develop SEA, technical assistance that is responsive to contextual country conditions should be provided to government agencies where SEA can be proposed as an appropriate instrument. Some countries, such as Vietnam and the Philippines, are increasingly realizing the potential added value of SEA. Supporting the governments in conducting SEA using various analytical tools in a systematic manner could lead to better integration of environmental issues into the planning process.

Several countries are carrying out SEA-type studies incorporating elements of SEA but not necessarily calling the studies SEA. These studies are mainly focused on regional effects and cumulative impacts in areas or sectors or between sectors. It is important to recognize these activities and engage in dialogue as early as possible to effectively use such instruments. Furthermore, methodologies should be adapted to meet the client needs within the Region. It is necessary to get more involved, tailoring methodologies and linking SEA with client practices and country-specific needs. Many counterparts are at the regional or municipal level within the Region. Thus methodologies have to be calibrated according to the concerns of the regional entities, which may differ from those at the national level.

Within the Region, there is a need to raise awareness and build technical capacity on SEA. This can partially be achieved through the ongoing capacity-building initiative for safeguards under development in which SEA is part of the curriculum. Centers of excellence (learning centers) on environment and social sustainable infrastructure would be promoted by this initiative. Technical assistance for strengthening environment and social assessment capacity during the preparation and implementation of infrastructure projects will also be provided.

A comparative study of lessons learned and good practices from infrastructure projects within the Region will be completed in the first part of FY13. This will provide lessons on how to enhance the integration of environmental and social dimensions upstream in the planning and design stage of infrastructure development as well as how to more effectively integrate such dimensions during implementation. The results would inform technical support to the SEA process in EAP.

With climate change increasingly becoming a priority, the SESA studies in progress provide an opportunity to review and assess the effectiveness of social and environmental assessment as a tool for better planning of projects that will be developed for REDD projects.

The EAP Region is one of the fastest-growing economic regions of the world. This rapid economic development coupled with an increase in demand for goods and services presents a challenge to mainstreaming environment into decision making. The World Bank SEA approach therefore must cater to the fluid and dynamic planning cycles, highly compartmentalized administrative responsibilities, and increasing decentralization and devolution of decision making (Dusik 2008).

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ANNEX 3.1: QUESTIONNAIRE

A questionnaire was developed to guide interviews and to email technical experts in order to review the SEA practice in the Region. The questions were tailored to each country.

SN.	Question	Response
1	Please list the SEAs undertaken in your country that have involved the World Bank in the past decade	
2	Of the SEAs undertaken does any one in particular stand out and why?	
3	Is there a legal requirement for undertaking SEA in your country?	
4	If yes, when did it come into force and how has it influenced the SEA process?	
5	How has use of SEA in Bank's activities evolved during the last decade?	
6	What have been the main drivers for the SEAs undertaken?	
7	What factors contributed to the success or failure of the SEAs?	
8	What were the outcomes of using SEA? Did they inform the planning process?	
9	Were recommendations from SEA applied?	
10	Have decision-making and environmental management systems been influenced by SEAs?	
11	Has SEA been a vehicle for capacity building?	
12	Have the SEAs proved valuable to client countries?	
13	Has SEA created a space for stakeholders to participate and voice their needs?	
14	How was stakeholder participation undertaken in the SEAs? Did it inform the process?	
15	Recommendations for moving forward on the regional SEA agenda	
16	Any other comments or observations regarding SEAs?	

ANNEX 3.2: SEAs IN EAST ASIA AND PACIFIC REGION

SNo	Name of project	Country	Year*	Sector
1.	Environmental Assessment for Wuhan's Urban Transport Development Strategy	China	2005	Transport
2.	SEA of Tourism Development in the Guizhou Province	China	2007	Tourism
3.	SEA for Hubei Road Network Plan (2002–2020)	China	2008	Transport
4.	SEA for Sino-Singapore Tianjian Eco-City	China	2008	Cross-sectoral
5.	SEA Scoping Study on China's Railway Sector	China	2006	Railway
6.	Cumulative Impact Assessment for Nam Theun 2 Hydroelectric Project	Lao PDR	2005	Hydropower
7.	Strategic Impact Assessment for Hydropower	Lao PDR	2004	Hydropower
8.	Strategic Assessment for Spatial Planning in Papua Province	Indonesia	2008	Cross-sectoral
9.	SESA FCPF REDD Readiness	Indonesia	In progress	Forestry
10.	Investing in a More Sustainable Indonesia: Country Environmental Analysis	Indonesia	2009	Country
11.	Southern Gobi Regional Environmental Assessment	Mongolia	2010	Mining
12.	REA for Manila Third Sewerage Project	Philippines	2005	Sanitation
13.	REA for Mindanao Rural Development Program-I (Adaptable Program Loan 2)	Philippines	2006	Cross-sectoral
14.	EA Second Women's Health and Safe Motherhood Project	Philippines	2010	Health
15.	Country Environmental Analysis	Philippines	2009	Country
16.	Pilot Strategic Environmental Assessment in the Hydropower Sub-sector: Risks to Biodiversity from the 6th Power Development Plan	Vietnam	2007	Hydropower
17.	SEA of the Hydropower Master Plan in the Context of the Power Development Plan VI	Vietnam	2009	Hydropower
18.	SEA to Inform the National Forestry Master Plan 2010–2020	Vietnam	2011	Forestry
19.	REA Mekong Delta Water Management for Rural Development Project	Vietnam	2011	Water management
20.	SEA Trung Son Hydropower Project	Vietnam	In progress	Hydropower
21.	SESA for REDD+	Vietnam	In progress	Forestry

*Year the report was prepared.
Source: World Bank.

ANNEX 3.3: CASE STUDIES

Strategic Environmental Assessment for Hubei Road Network Plan 2002–2020, China (2008)

The Hubei Provincial Communication Department (HPCD) requested the World Bank's support to conduct a strategic environmental assessment (SEA) for the Hubei Road Network Plan (HRNP) for 2002–2020. As the plan was already written and approved when the SEA was undertaken, the assessment focuses on social and environmental priorities associated with implementing the plan and on strengthening institutional capacities in the HPCD for managing these priorities.

Impacts in relation to the road network were assessed for air, water, energy consumption, climate factors, ecological issues, socioeconomic issues, and road safety. The relatively open sharing of baseline data was considered unusual, and it led to technical and social learning on the part of participating institutional stakeholders.

Stakeholders including Hubei government sector bodies, transport service users' organizations, transport service providers, and nongovernmental organizations (NGOs) were consulted on the significant impacts of the HRNP and to obtain baseline information, identify impacts, and identify priorities and scenario development. However, the SEA points out that the team was not able to carry out a broad public participation process or sufficiently engage stakeholders in consultations in order to obtain detailed views on the various issues in the analysis. It further adds that the SEA did not undertake stakeholder analysis in accordance with best international practice.

The SEA assessed the environmental management capacity for road projects of the HPCD and interinstitutional linkages between the HPCD and other relevant organizations at the provincial level. A number of gaps were found, including unsystematic environmental data collection methods and monitoring of environmental performance of plans or projects, limited coordination between agencies, and a lack of awareness on SEA within the HPCD.

As a result, the SEA proposed several actions to strengthen the environmental management capacity in the HPCD and its cooperation with other sector authorities as well as other stakeholders in road plan development. Institutional strengthening proposals, and especially those that challenged current internal arrangements within the responsible authority, were the most sensitive topics that arose during the SEA.

Outcomes: The SEA provided an overall, holistic picture of the possible environmental impacts of planned transport projects. It positively influenced wider decision making on road planning in Hubei province. According to the report on SEAs in sectoral and policy reform (World Bank et al. 2011), the SEA increased awareness of senior managers at the Hubei Provincial Communication Department about macro-level environmental implications of the proposed development of road transport. The HPCD management is paying attention to environmental issues, as evidenced in detailed investigations carried out during the design stage of each road project. The SEA also indirectly contributed to a new circular, issued by the HPCD management, that encourages the enforcement of environmental protection requirements during expressway construction. All those interviewed during the evaluation of the SEA agreed that sharing data from baseline analyses was the most useful aspect of the SEA pilot and that learning was facilitated through this sharing. The evaluation indicated that policy SEA approaches ran up against the legal processes prescribed for the plan environmental impact assessment (EIA) in Chinese law. The evaluators

describe these processes as being very rigid and with corresponding institutional arrangements that do not necessarily support the flexibility and inclusiveness sought by policy SEA approaches (World Bank et al. 2011).

Some of the lessons learned from the SEA process include:

- Limited awareness of and engagement in environmental issues are a challenge that takes time to overcome.
- SEA is far from being integrated into decision-making processes.
- Stakeholders are interested in impacts, not in institutions.
- Lack of transparency is a general challenge for an effective use of the SEA.
- One should be very careful about how to present methodologies/results.
- How to consult with the really affected stakeholders and NGOs is a considerable challenge in countries with limited traditions for formal consultation procedures.
- Given the limited experience with SEAs at the local level, communication, coordination, and consultation are the areas where inputs and support from international experts are critical.
- Access to good data, especially time-series data, is a challenge.
- SEA should put the emphasis on starting a process rather than on the output of the analysis.

Source: SEA Centre et al. 2008; World Bank et al. 2011.

Cumulative Impact Assessment and Strategic Impact Assessment for Nam Theun 2 Hydroelectric Project, Lao PDR (2005)

Although the cumulative impact assessment (CIA) and the strategic impact assessment (SIA) were not explicitly called strategic environmental assessments, their approaches and the issues addressed exemplify the use of environmental assessment at the regional and watershed levels in response to the complex analytical and participatory requirements of large-scale infrastructure projects. The level of international scrutiny of the Nam Theun 2 (NT2) project acted as a powerful driver for the government of Lao PDR, the World Bank, and other lenders to undertake the environmental assessments.

The Lao Hydropower Sector SIA was prepared to identify, at the sector level, strategic opportunities to avoid impacts and improve environmental and social management. It was meant to consolidate, update, and expand previous work related to hydropower and the environment and to clarify the broader issues faced due to hydropower development in Lao PDR. It assessed the sector-wide implications, including environmental and social impacts, from 22 planned hydropower developments over a 20-year period to 2022. The report recommended general mitigation approaches and broad management programs as well as approaches to planning, training, monitoring, and capacity building suited to the Lao context.

The CIA assessed the impacts of the NT2 project along with the potential impacts of existing, planned, and proposed developments in the NT2 project area and in the Greater Mekong subregion. The study summarized these potential cumulative impacts at 5-year and 20-year horizons over five regions in the vicinity of the NT2 project.

The SIA engaged government, stakeholders, and donors in discussions on institutional and capacity needs for long-term sector growth,

and the CIA engaged stakeholders in discussions on regional impacts and development issues at different spatial and temporal scales. The CIA was primarily a desk study by a team of international experts with diverse social and environmental specialist skills, although an initial workshop was held with government ministry staff and NGOs.

Both assessments were triggered by and were part of a project-level EIA. As such, they were not necessarily customized to the decision-making process for the NT2 project, and although the assessments were available they were not influential in this process.

Outcomes: The participatory approach of the two strategic studies was a key factor in creating an open dialogue among relevant stakeholders. The advisory nature of the assessments facilitated the government's ability to discuss and receive feedback on environmental and social policies for the hydropower sector. The studies contributed to the adoption of the "National Policy on Environmental and Social Sustainability for the Hydropower Sector." It also led to improved resettlement and consultation practices and the creation of the Watershed Management and Protection Authority for NT2, the mandate of which is conservation of the project's designated protected area and building capacity at the local level. Other benefits included an understanding of riparian risks of the international river system of the Mekong and compliance with World Bank and Asian Development Bank safeguard policies.

Sources: NORPLAN and EcoLao 2004; NORPLAN A/S 2004; Hirji and Davis 2009; Morgan et al. 2009.

Using Strategic Environmental Assessment to Inform the Forestry Master Plan 2010–2020 of Vietnam (2011)

In conjunction with the Investment Reform Development Policy Loan, the government of Vietnam agreed to incorporate a strategic environmental assessment in the development of master plans for two regions and two key sectors. One of the key sectors is forestry. The Ministry of Agriculture and Rural Development (MARD), as the implementing agency, is responsible for incorporating the SEA into the development of a master plan to implement the National Forestry Development Strategy.

A rapid SEA that would inform the development of the forestry master plan (2010–2020) was conducted. The SEA undertook a rapid assessment of three Provincial Forest Protection and Development Plans (FPDPs) and provided guidance for the development of a National Forestry Master Plan and wider government decision making in the forestry sector. The three FPDPs are considered representative of various forest management practices in Vietnam. The logic of the assessment was that provincial plans form the basis of the master plan and, therefore, they may provide a good illustration about the key social and environmental implications of the planned forest management practices that may be included in the national forestry master plan. The SEA notes that since none of these provincial plans requires a formal SEA under the legal framework, this SEA should be treated as a donor-supported pilot SEA project that does not fully operate in the Vietnamese SEA legal framework.

The following activities were undertaken as part of the SEA:

1. Determining the national environmental and socioeconomic priority concerns that should be considered in the elaboration and approval of Provincial Forest Protection and Development Plans and the National Forestry Master Plan 2010–2020

2. Outlining a national baseline for each identified environmental and socioeconomic priority

3. Assessing impacts of three provincial forestry plans

4. Reviewing and fine-tuning the initial assessment and preparing generic suggestions for wider decision making related to the National Forest Master Plan

5. Preparing an overview of the main economic implications of identified impacts and proposed recommendations

6. Presenting outcomes of the SEA for endorsement by the Forestry Directorate, Ministry of Agriculture and Rural Development, and other national authorities and stakeholders.

Fifty-two recommendations were formulated in consultation with national and provincial officials, experts, and stakeholders. The recommendations touched upon the following:

- Forestry land-use planning and land allocation
- Forest development
- Forest protection
- Forest utilization (including harvesting, processing, and marketing of forest products)
- Interinstitutional cooperation
- Financing solutions
- Integration of environmental and social issues into future forest protection and development plans
- Other recommendations (science and technology, monitoring and evaluation, and human resource management).

Source: World Bank 2011b.

Pilot Strategic Environmental Assessment in the Hydropower Subsector: Risks to Biodiversity from the 6th Power Development Plan, Vietnam (2007)

This was the first pilot SEA in Vietnam dedicated to assessing the biodiversity risks (vulnerability and impacts) from any infrastructure development / hydropower. The report was not an input into a decision process about Bank support for a specific investment project or for the hydropower sector as a whole. Instead, it was intended to help strengthen government capacity to undertake SEAs in the hydropower sector and to support and guide the ongoing dialogue between the World Bank, Electricity of Vietnam, and the government on a long-term capacity-building program in the hydropower sector.

The study focused on the potential effects of planned hydropower on biodiversity. The SEA provided a methodology and set of tools for assessing biodiversity effects of hydropower at the strategic level. A detailed methodology was developed to assess potential impacts of individual projects for basins, and a qualitative assessment of "cumulative zones of influence" was undertaken in basins where location data were too sparse or of limited accuracy. Each project or cumulative zone of influence was classified into one of four categories, based on the biodiversity values of the affected area(s) and significance of impact/comparative risk to these values. Category 1 projects combine very high biodiversity values and very high impacts on them; Categories 2 to 4, respectively, have high, moderate, and low combinations of biodiversity value and significance of impacts.

The SEA also identified geographic areas and groups of projects in the 6th Power Development Plan (PDP) that require more-intensive appraisal and mitigation to ensure their sustainability and minimize their negative side effects on biodiversity and the economy.

The SEA underlined the potential cumulative risks and impacts on biodiversity of the 73 hydropower projects being constructed or proposed under the 6th PDP, both in terms of their aggregate footprint and their spatial concentration in nine major river basins. A key output of the study was the strong recommendation to keep intact (undammed) rivers within each basin and to focus future dams on rivers already dammed, rather than damming currently free flowing (wild) rivers.

As the SEA was focused on biodiversity issues related to hydropower development, it did not assess impacts of other types of development or other areas of concern. Other developments would have impacts that interact with hydropower development, often in a cumulative fashion, so the assessment of hydropower in isolation may have overestimated some of its impacts. Conversely, the overall impacts of hydropower may have been underestimated by a focus solely on biodiversity impacts in the study.

Source: World Bank et al. 2007.

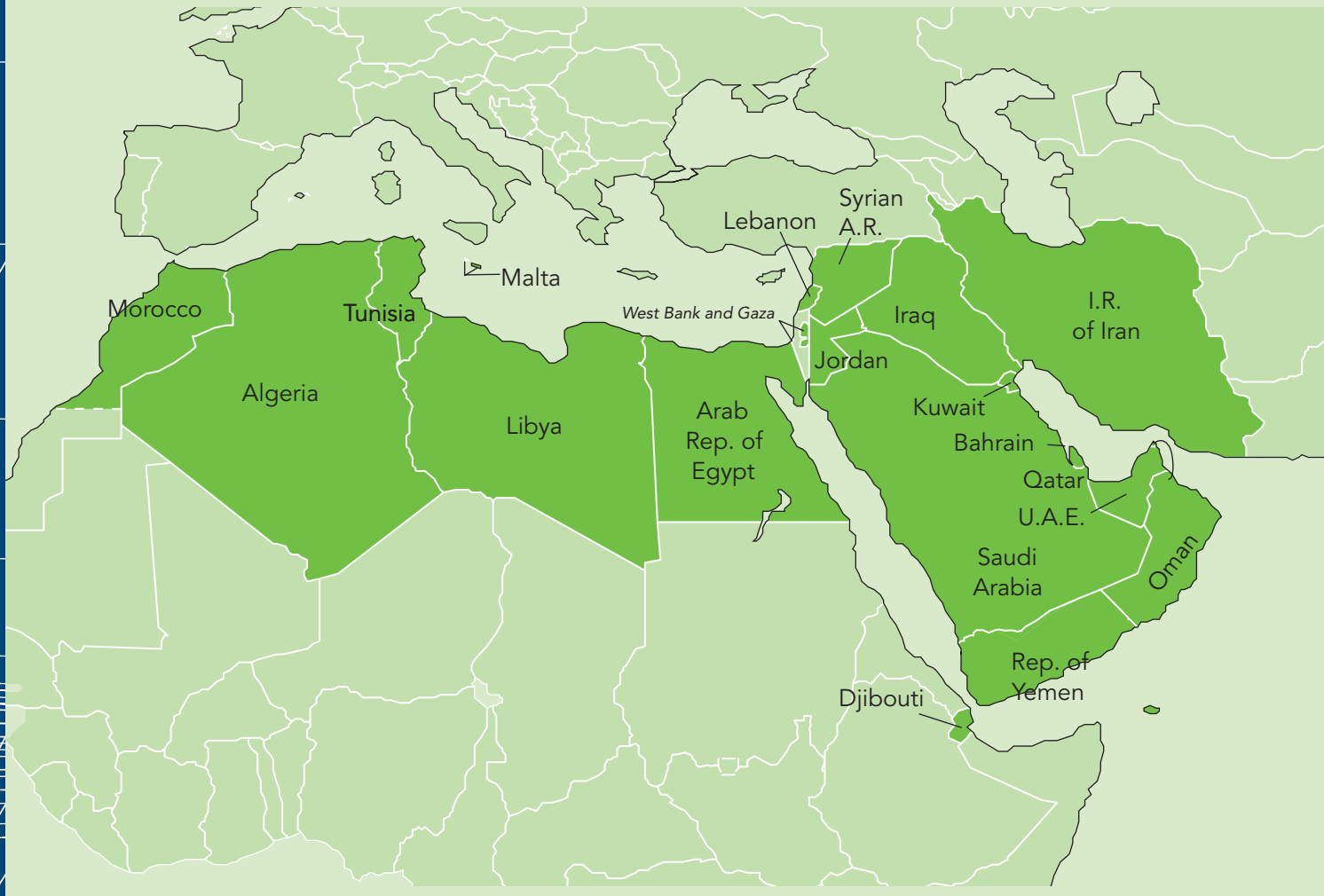
CHAPTER 4

WORLD BANK SEA EXPERIENCE IN

Middle East AND North Africa

A POLICY AND PLANNING TOOL

Suiko Yoshijima[12]



12 Suiko Yoshijima is Environmental Specialist, MNSEN. The author would like to acknowledge the guidance and assistance provided by Kulsum Ahmed (Sector Manager, ECSS3), as well as valuable inputs provided by Maged Hamed (Senior Environmental Specialist, MNSEN), Sherif Arif (Senior Consultant, MNSSD), and Nathalie Abu-Ata (Operation Analyst, MNCMI). The author is also grateful for the review and comments provided by Fernando Loayza (Senior Environmental Economist, ENV) and Francis Fragano (Senior Environmental Specialist, LCSDE).

Introduction

The Middle East and North Africa (MENA) Region covers countries with diverse economic and social characteristics. The Region covers 12 recipients of lending and knowledge support: Algeria, Djibouti, Egypt, Iran, Iraq, Jordan, Lebanon, Morocco, Syria, Tunisia, West Bank and Gaza, and Yemen—with per capita incomes that range from $1,070 (Yemen) to $8,880 (Lebanon) (World Bank 2011). MENA is a predominantly middle-income region with mainly IBRD countries but also two IDA countries (Yemen and Djibouti).[13] Eight high-income developing countries (Bahrain, Kuwait, Libya, Malta, Oman, Qatar, Saudi Arabia, and the United Arab Emirates) have access to the Region's fee-based advisory and technical assistance services (Reimbursable Technical Assistance).

Because of its diversity, the level of capacity in terms of environmental governance varies. Since the early 1990s, countries in MENA have made significant progress in environmental planning and environmental institutional and legal frameworks; however, enforcement still remains as an issue.

Strategic environmental assessment (SEA) has historically been used as an instrument to mainstream environment into the development agenda in the MENA Region. One of the recommendations from the Regional Environmental Strategy 2001 (World Bank Middle East and North Africa Region 2001) was to strengthen analytical and advisory activities by identifying priority cross-sectoral issues and to use SEAs more systematically to influence planning and decision-making processes at an early stage. This chapter attempts to take stock of the experiences in applying SEA in the MENA Region, assess the drivers of SEA application, analyze how the drivers have shifted, and draw lessons from good practices. Recommendations for moving the regional SEA agenda forward are made at the end of the chapter.

13 IBRD (the International Bank for Reconstruction and Development) countries are middle-income and creditworthy poorer countries, while IDA (the International Development Association) countries include the world's 79 poorest countries, which have little or no capacity to borrow on market terms.

Evolution of SEA in Middle East and North Africa

In this section, the history of the application of SEA in the MENA Region is introduced, explaining the SEA drivers and how the drivers have changed.

Initial Drivers

SEA evolved in the MENA Region in response to demand from client countries to incorporate environmental considerations into strategic decision making. The countries' strong interest in addressing environmental issues strategically originated in the increased awareness nurtured by the Mediterranean Environmental Technical Assistance Program (METAP).[14] METAP played a major role in evaluating national environmental strategies and helped establish environmental impact assessment units in various countries. The World Bank 2001 *Environment Strategy* noted that "the third phase [of METAP] would also build capacity to carry out strategic impact assessments and to assess the implications of international trade for the environment" (World Bank 2001).

There was another internal Bank driver that contributed to promoting SEA in the MENA Region. In the World Bank 1999 publication *Fuel for Thought: An Environmental Strategy for the Energy Sector*, energy-environment reviews (EERs) were introduced as an important policy tool. EERs can be considered as a type of SEA because they focus on identifying priority investments and policy reforms needed for

14 Initiated jointly by the World Bank and the European Investment Bank (EIB) in 1990, METAP aimed to reduce environmental degradation in the Mediterranean basin countries by providing technical assistance on strengthening the institutional and legal structure of environmental management, formulating environmental policies, and developing a pipeline of environmental projects.

the incorporation of sustainability considerations into energy planning. Rather than simply extending project-based environmental assessments, EERs were expected to take place well upstream of operations and therefore help in the setting of operational priorities. As discussed in more detail later, typically cost-benefit analysis was to be used to evaluate damage costs from energy consumption, assess the effectiveness of proposed actions, and arrive at recommendations for a set of priority investments and policy reforms. In Egypt, for example, the country environmental analysis (CEA) was largely influenced by the result of the Egypt EER conducted in 2003 (World Bank 2005; World Bank/EEAA 2003).

In other cases, CEAs played a significant role promoting SEAs. CEAs have been prepared for several countries: Tunisia (2004), Egypt (2005), Jordan (2010), and Lebanon (2011). The first CEA in the MENA Region was initiated when the government of Tunisia decided to conduct a study, with World Bank assistance, to assess progress achieved thus far by the National Environmental Action Plan (NEAP) and to identify the required conditions for a greater and deeper integration of environmental sustainability into social and economic policy (World Bank 2004). This CEA recommended that "SEA, which focuses on sectoral and regional aspects and on economic policies, should be used in a more systematic way as an analytical tool for addressing complex environmental problems, as well as for the integration of environmental considerations upstream into the decision-making process and sectoral planning" (World Bank 2004, p. 72). SEAs were recommended of water resources management, agricultural development and water conservation, agricultural development and soil conservation, tourism development, and environment and trade. However, cost of environmental degradation (COED) studies in those areas were prepared instead of SEAs (see Box 4.1).

In summary, there were two main trends that influenced the evolution of SEA in the MENA Region. The first was client demand based on the need to develop a systematic way of integrating environmental aspects into national policies or development plans supported by capacity building provided through METAP. The second were internal Bank strategies emphasizing different SEA-like approaches (EERs and COEDs) as instruments to mainstream environment into the development agenda and specifically in the energy and environment sectors. Hence it is worth noting that in MENA, SEA was not introduced as an extension of environmental impact assessment (EIA) for an individual World Bank investment project.

New Drivers

The current drivers for SEA continue to come from the countries' demands to strengthen SEA capacity, which has been increased by the passage of the European Union (EU) SEA Directive (2001/42/EC). According to the Directive, which came into force in 2001 for EU countries, SEA is mandatory for plans and programs.[15] MENA's Mediterranean countries are influenced by this because of the development support provided by EU countries. The EU also established the LIFE-Third Countries Program that contributes to the establishment of capacities and administrative structures needed in the environmental sector and in the development of environmental policy and action programs in third countries bordering the Mediterranean and the Baltic Seas (Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, Syria, Tunisia, and West Bank and Gaza). For example, the Ministry of Environment in Jordan is developing an SEA framework with assistance from the EU to enhance the environmental mainstreaming process and further strengthen its role as a coordinating institution for environmental protection and promotion of sustainability (World Bank 2010).

The Global Environment Facility Regional Governance and Knowledge generation project[16]

15 See SEA Directive at http://ec.europa.eu/environment/eia/sea-legal-context.htm.

16 The project development objective is to foster the integration of environmental issues into sectoral and development policies of the beneficiaries through the production of innovative knowledge on environmental issues, with specific reference to water-related topics (freshwater, coastal, and marine resources), and the organization of trainings where this knowledge will be used to strengthen the capacity of key stakeholders at local, national, and regional levels.

Box 4.1 Cost of Environmental Degradation

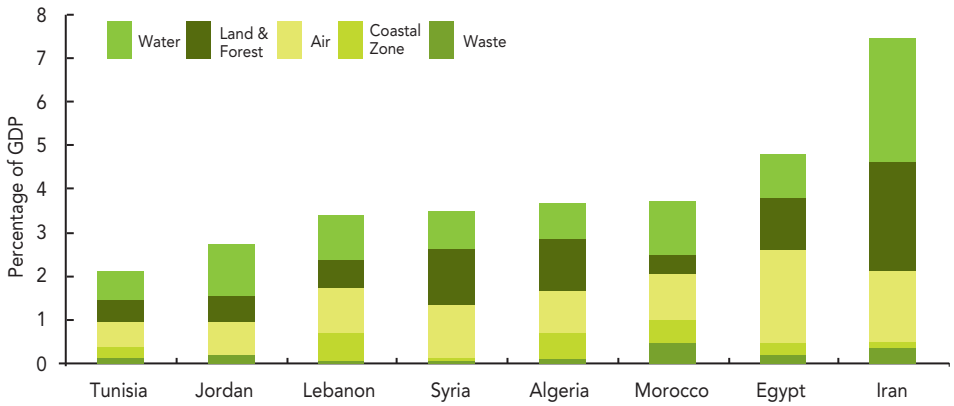
Since the early 1990s, National Environmental Action Plans have been used to address major environmental issues and build environmental capacity, providing qualitative assessments of the state of the environment and natural resources. Around 2000, it was clear that the NEAPs did not succeed in either demonstrating the economic importance of the environment sector or mainstreaming the environment into the productive sectors of the economy. MENA took the lead in designing a tool (a methodology) to assess the cost of environmental degradation at the national and sectoral levels. This new approach went beyond the descriptive and qualitative analysis of environmental issues and focused on the economic and financial implications of environmental degradation for countries' economies.

COED often takes a three-step process:

- Quantification of environmental degradation
- Quantification of the consequences of the degradation (such as health impacts of air pollution, changes in soil productivity, changes in forest density/growth, reduced natural resource–based recreational activities, reduced tourism demand)
- A monetary valuation of the consequences (for example, estimating the cost of ill health, soil productivity losses, reduced recreational values).

COED can serve as an instrument to identify areas where environmental degradation imposes the largest costs to society, identify areas that most significantly undermine social and economic development processes, provide a basis for integrating environmental issues into the financial and economic evaluation of investment projects as well as in sector-wide and economy-wide policies and regulations, provide a monetary basis for allocation of scarce private and public resources toward environmental protection, and enhance the role of environment ministries in demonstrating the importance of environmental protection by using the same "language" as finance and economy ministers. COED helped MENA countries and the World Bank agree on priorities for environmental interventions in Country Partnership Strategies and contributed to the decision making for environment-related investments of $1 billion.

Cost Assessment of Environmental Degradation in the MNA countries



Source: Based on Croitoru and Sarraf 2010.

under the Sustainable MED Program[17] was approved by the Bank's Board in November 2011. Under this project, beneficiaries (Lebanon, Morocco, and Tunisia to date) identify activities to be financed that are consistent with the project objectives. At the first Project Steering Committee Meeting held in January 2012 in

17 Sustainable MED is a natural follow-up program to METAP, which aims at facilitating mainstreaming environmental issues in the economic development agenda of Mediterranean countries. (See Box 4.3.)

Marseille, beneficiaries consistently put forward requests for support on specific SEAs (for example, for water sector strategy in Lebanon) and for SEA capacity building.

The second driver for SEAs is the natural evolution of clients' environmental assessment systems that were strengthened by METAP. Over the last decade, the quality and effectiveness of environmental assessment systems has improved significantly in the Region. There is therefore a natural desire to take these systems to the next level and to introduce and strengthen SEA as a tool for upstream and regional development strategic analysis. This is, for example, the case for some of the Gulf countries under the Gulf Environmental Partnership and Action Program (GEPAP). This has been initiated due to the interest of the Gulf countries, which requested similar assistance based on the success of METAP. The fee-based services program has the objective to preserve, protect, and promote long-term sustainable development for the Gulf region and its waterways (see Box 4.2).

The most recognized SEA approach in MENA Region is EER. The methodology and achievements of two EERs conducted in Egypt and Iran are discussed in the rest of this section.

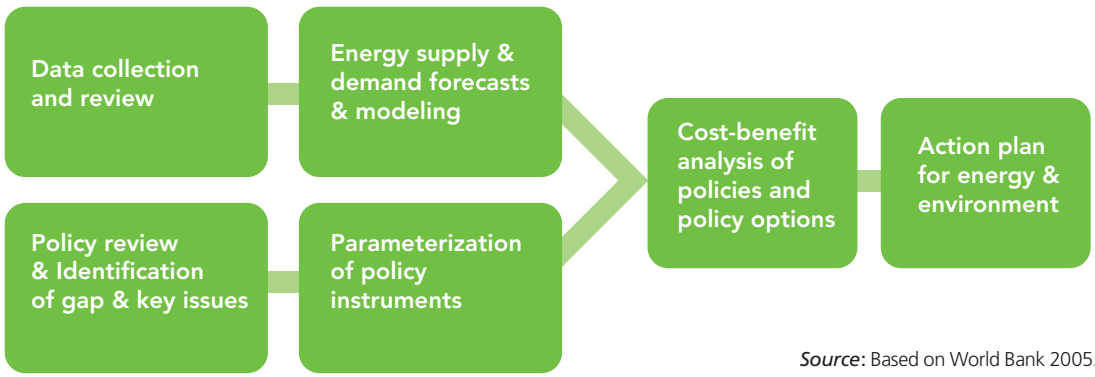
Energy-Environment Review for Egypt (2003)

Air pollution is a serious issue in Egypt. The negative impacts not only reduce the quality of life of the population, they also result in lost economic productivity. The assessment of the cost of such environmental degradation showed that the annual damage from air pollution was about LE (Egyptian Pound) 6.4 billion/year, corresponding to 2.1 percent of Egypt's 1999 gross domestic product (GDP) (Sarraf et al. 2002). The energy and agricultural residues sectors are significant contributors to overall damage costs, principally due to their major contribution to air pollution and the subsequent impacts this pollution has on human health. Any policy response to reducing damage costs clearly needs to take into account the links between energy and the environment. As a result, an EER was conducted by the World Bank and the Egyptian Environmental Affairs Agency (EEAA).

As mentioned earlier, EERs were introduced in the World Bank's *Fuel for Thought* (World Bank 2000) as a specific tool to help countries better integrate environmental objectives into energy sector development and investment. This EER was the first in the Region to use cost-benefit analysis (CBA) to assess policy options.

As shown in figure 4.1, a "dual track" methodology was employed: the top track involved the collection of data and the modeling of energy supply and demand; in the bottom track, a review of policies was undertaken to identify existing gaps and key issues. These policy options were parameterized to enable them to be analyzed using CBA informed by the data and projections

Figure 4.1
Egypt: EER Methodology Flowchart



Source: Based on World Bank 2005.

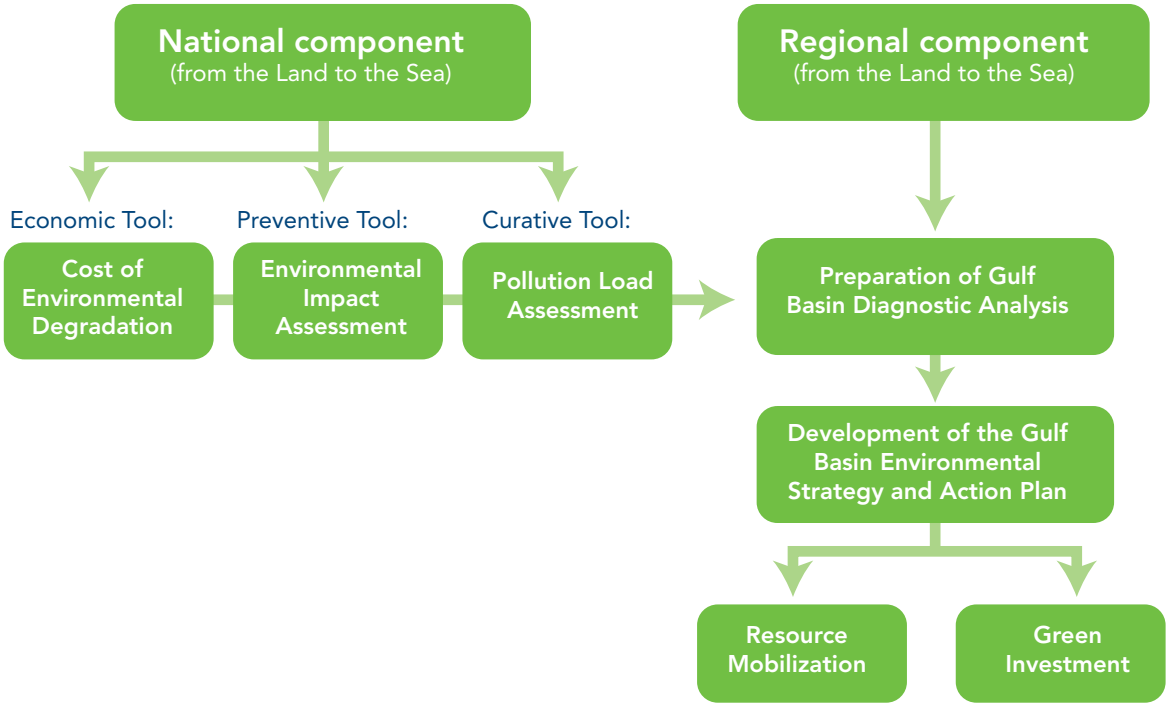
Box 4.2 GEPAP

The Gulf Basin countries are particularly concerned with further development and management of their water resources, as they use the Gulf as a source of water for their desalinization plants and as fisheries and shrimp harvesting have been less profitable than oil development in the economic importance of the Gulf. The health of the Gulf clearly depends not only on better control of oil pollution but also on better water management in terms of both quantity and quality of the waterways and estuaries that feed freshwater to the northern Gulf as well as on the protection of marine resources from transboundary pollutants.

In designing GEPAP, the World Bank took into consideration the experience and lessons learned from the regional environmental programs particularly used in the Red Sea and METAP. The following underpins GEPAP's approach:

- "Thinking Regionally, Acting Nationally"—Gulf Basin countries are expected to address a few fundamental environmental issues to be strategically planned at the regional level but implemented at the national level and also within a multi-country context.
- By highlighting environmental asset valuation methods that can be used to underpin policy and institutional issues of environmental sustainability, decision makers can better understand the economic importance of protecting and restoring environmental quality as well as improving environmental performance.
- Expand the Gulf environmental community beyond the traditional environmental constituency to include other sectoral ministries, private and financial sectors, and civil society through improved environmental education and communications programming based on Gulf regional priorities.
- Increasing consultations and communications among the Gulf Cooperation Council countries and stakeholders in the regional prioritization of actions and creation of a GEPAP investment portfolio will strengthen cooperation in Gulf basin management.
- Strengthen Gulf Basin countries' working relationship with other international waters initiatives by sharing lessons learned and experiences.

The proposed structural design of GEPAP is as follows:



Source: GEPAP proposal documents.

made under the top track. The results of the CBA then led to the proposal for an Action Plan for energy and the environment.

The EER looked at policies designed to reduce environmental impacts relating to six areas: refineries, power generation (including new and renewable energy), fuel switching, energy efficiency, transport, and agricultural residues. The opportunity and damage costs were assessed, and 19 policies aimed at reducing damage costs were proposed (see Table 4.1). These policies were categorized by cost-effectiveness. The EER also recommended that policy makers reduce fuel subsidies.

Reduction in local damage costs was calculated depending on three different packages of policy implementations, as shown in figure 4.2.

The three achievements of the EER were reducing subsidies, which may have contributed to price increases for gasoline, heavy fuels, and diesel fuel; enabling the World Bank to advance policy dialogue in the pollution control sector and to finance the Second Pollution Abatement Project in Egypt; and providing an additional argument that enabled Egypt to ratify the Kyoto Protocol in 2005.

The EER was prepared through an intensive process of consultation between the EEAA

Table 4.1 Egypt: Assessment of Policies to Reduce Damage Costs

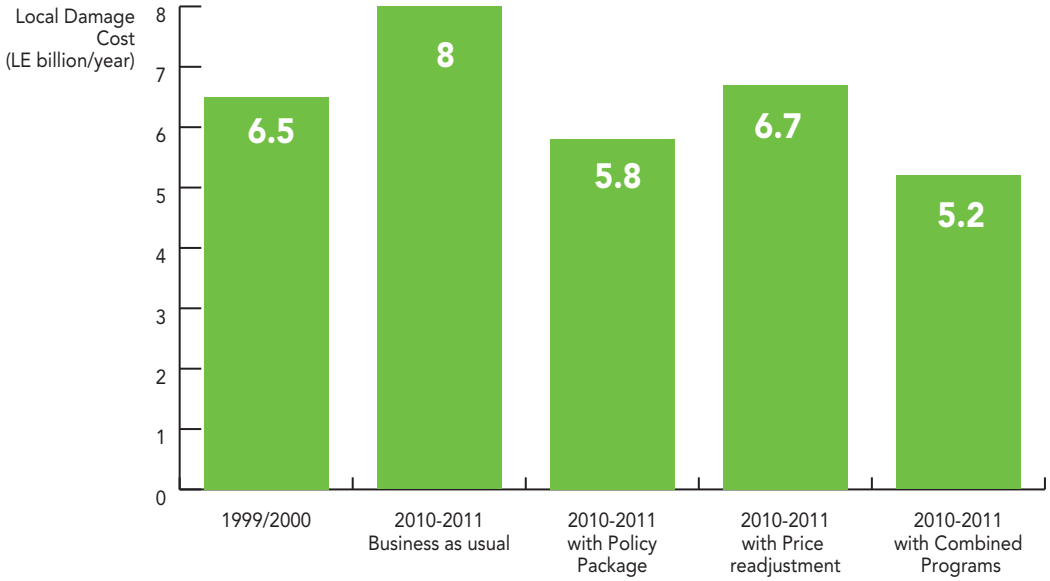
#	Policies	Sector	Cost effectiveness
1	Mainstreaming of the Environment	All	A
2	Demand Side Management	Energy Efficiency	A
3	Standards and Labeling	Energy Efficiency	A
4	Promotion of Industrial Energy Efficiency (Fund)	Energy Efficiency	A
5	Promotion of Industrial Energy Efficiency (ESCOs)	Energy Efficiency	A
6	Fuel Substitution: Fund for Conversion of Industrial Facilities	Fuel Substitution	A
7	Reduction of Transmission and Distribution Losses	Power Generation	A
8	Promotion of Generation from Wind	Power Generation	C
9	Exhaust Emissions Standards for Existing Vehicles	Transport	B
10	Inspection and Maintenance of Vehicles	Transport	A
11	Incentives for Conversion of Vehicles to CNG	Transport	A
12	CNG Microbuses	Transport	B
13	Catalysts for New Gasoline Vehicles	Transport	B
14	Rationalized Burning of Agricultural Residues in the Field	Agricultural Residues	B
15	Centralized Collection of Agricultural Residues	Agricultural Residues	B
16	Market Enabling of Agricultural Products from Residues	Agricultural Residues	B
17	Briquetting of Maize.	Agricultural Residues	B
18	Support for Building Materials using Agricultural Residues	Agricultural Residues	B
19	Promotion of Refinery Energy Efficiency	Refineries	A

Key:
A – "win-win," cost-effective without including damage cost reductions
B – cost-effective to Egypt if reductions in local damage costs are included
C – cost-effective to Egypt if reductions in global damage costs are also included

Source: World Bank 2005.

Figure 4.2

Egypt: Estimated Local Damage Costs



Source: Based on World Bank 2005.

and the World Bank. Unlike SEAs produced as part of project preparation in response to the Bank's safeguard policies, the Egypt EER was an analytical and advisory activity that was prepared to guide implementation of the country's national environmental action plan, particularly relating to the energy and agricultural residues sectors (Pillai and Mercier 2007).

Energy-Environmental Review for Iran (2004)[18]

The challenge before Iran was how to improve environmental protection while promoting economic growth in a context where energy has been traditionally subsidized due to its relative abundance and the low income levels of most of the population. The government accordingly requested World Bank assistance in reforming Iran's energy policy to enhance economic and environmental sustainability. An EER was selected as the tool for carrying out the necessary analysis.

The EER estimated that without price reform and policy intervention, environmental damage costs would grow to $12 billion, or 6.6 percent of nominal GDP, by 2019. The main underlying cause for this significant cost was the use of subsidized fossil fuels. A combination of two policy interventions—price reform and sectoral measures, plus different time sequences for implementing price reforms—was used to construct 12 scenarios. Each scenario was then evaluated in terms of local environmental damages, cumulative opportunity costs, and impact on inflation. The latter was selected as an indicator of the political feasibility of implementing the proposed measures.

The scenario analysis showed that only a combination of price reform and sectoral measures can bring environmental damage costs below the 2001 level in 2019. Furthermore, it demonstrated that phasing out subsidies by 2009 held the greatest benefits for the environment but corresponded to a larger increase in inflation. After holding a consultation workshop with governmental officials, the EER concluded that early price reform would be politically difficult, and it therefore proposed scheduling the elimination of subsidies for 2014 or 2019. Some of the recommendations contained in the EER—notably, those

18 This section is a summary of Environment Strategy Note No. 17 (Kobayashi et al. 2006).

on price policy instruments—were included in the country's Fourth Five-Year National Development Plan (2006–2010).

The most important lesson from the EER for Iran is that environmental considerations can influence energy policy if their economic and welfare relevance is highlighted and if they are presented in a format adapted to the mindset and outlook of policy makers. In particular, assessment of environmental impacts by estimating environmental damage costs in monetary terms plus analysis of alternatives for environmental protection through a range of scenarios using cost-benefit analysis can form the basis for a compelling argument that has the potential to influence strategic decision making. Not only are environmental issues presented on an equal footing with economic and growth indicators, but this type of assessment provides policy makers with a set of straightforward, comparable alternatives for consideration in the light of both national goals and political feasibility.

Interestingly, Iran recently began eliminating energy subsidies. On December 18, 2010, Iran increased domestic energy and agricultural prices by up to 20 times, making it the first major oil-exporting country to reduce implicit energy subsidies substantially (IMF 2011). Although there is no evidence to show the direct link between the recommendation of the EER and the current policy reform, it is certain that the EER contributed to expanding the policy horizons of the main stakeholders, which facilitated opening up a discussion on energy pricing and subsidies among public officials.

Lessons Learned

Although the number of SEAs conducted in MENA is relatively small, the lessons learned were drawn from the regional experience on SEA. Four lessons learned—on ownership, being an instrument to mainstream environment, regional technical assistance, and as a supplemental quantitative tool—are discussed here.

Strong Link between Country Ownership and Effective Implementation of SEA

Strong country ownership in environmental mainstreaming underlies SEA effectiveness in MENA. For example, an EER recommended reducing damage costs through readjusting pricing policies and a set of policies. The recommendations were taken seriously by the government and some of them implemented. As a result, fuel substitution was accelerated and use of the Clean Development Mechanism for pollution abatement was promoted in Egypt. Country ownership is essential for achieving results through SEA implementation.

SEA as an Instrument to Mainstream Environment to Promote Policy Dialogue

SEA in MENA was not introduced as an instrument for environmental impact assessment but as an instrument to mainstream environment into the development agenda. The Egyptian and Iranian EERs were SEA-type activities that were prepared to guide implementation of national environmental action plans. Therefore the EER contributed to advancing policy dialogue and identifying new areas of collaboration. For example, the EER contributed to promoting dialogue in the pollution control sector, which led to the Egypt Second Pollution Abatement Project.[19]

Regional Technical Assistance that Facilitates Donor Partnership and Contributes to Capacity Building

Regional cooperation and technical assistance have provided support for MENA countries to improve their capacity to conduct SEA. A well-structured learning program for the use of SEA as a decision-making tool was established through METAP. Training workshops on environmental strategic assessments for water and the coastal zone, implementation of a solid waste regional

19 The pilot Egyptian Second Pollution Abatement Project was implemented in 1996, and the second phase of the project was expanded to a scale of $160 million cofinanced projects to demonstrate, in the Egyptian context, the applicability of market-based financial/technical approaches for achieving significant pollution abatement in selected hot spots areas in and around the Alexandria and Greater Cairo areas.

project by the regional group within NEAP, and training on water quality management and coastal zone management were carried out.

Regional coordination also facilitated the donor partnership. In Tunisia, for instance, coordination with development partners in the preparation of the CEA was achieved through engagement with METAP, the European Commission, the European Investment Bank, the United Nation Development Programme, and the governments of Finland and Switzerland to promote a regional technical assistance program for water quality and coastal zone management, municipal waste management, and the development of environmental policy tools. Donor coordination was strengthened through CEA and METAP, as indicated by a number of joint follow-up activities (Pillai 2008).

Supplemental Quantitative Tools that Make SEA More Effective in Priority Setting

Quantitative approaches, conducted as part of the SEA, have been crucial for more effective priority-setting. Despite the difficulties involved in assigning monetary costs to environmental degradation, such estimates can be a powerful means of raising awareness about environmental issues and facilitating progress toward sustainable development. With that intention, cost assessments of environmental degradation and adjusted net savings, which take into account loss of wealth such as fish, groundwater, and soil resources, were developed to quantify environmental externalities (for example, effects on health or natural capital) and to assess these costs and benefits and their impacts on sectoral policies.

The COED reports were prepared under METAP as a first step in a process toward using environmental damage cost assessments for priority setting and as an instrument for integrating environmental issues into economic and social development in the MENA Region. These reports were prepared for Algeria, Egypt, Iran, Jordan, Morocco, and Syria during 2001–2005. COED has helped generate government interest and raise awareness of environmental issues because it is far easier for decision makers to incorporate and prioritize environment when the issues can be cast in clear economic terms (Sarraf 2004). In Tunisia, the COED study was presented to the Council of Ministers in a session chaired by the president of the country. The 2006 Quality Assurance Group report found that the COED was well received by policy makers in Tunisia and that the Bank's CEA was still frequently being used and quoted (World Bank QAG 2006).

Way Forward

The Arab Spring has resulted in an increasing demand for participation of stakeholders in decision-making processes. As we have seen in Eastern Europe, this process is one that takes time to mature, especially when the concept is fairly new to the countries. In that regard, SEA provides a formal basis for facilitating a structured consultation between the public sector and a broader range of stakeholders, as happened in Eastern Europe and South Asia. SEA particularly has been increasingly used as a formal mechanism to involve different stakeholder groups in strategic decision making at the policy, program, and plan levels. In MENA, the World Bank has played a major role during the last 20 years in helping to put in place and strengthen EIA systems in countries in the Region. This strong previous engagement provides a real opportunity to support countries taking EIA implementation to a different level through strengthening participatory approaches and through supporting the introduction and implementation of SEAs at a more strategic level of decision making. The entry points for use of SEA are two existing shared programs: the Gulf Environment Partnership and Action Program described in Box 4.2 and the Sustainable MED program briefly described in Box 4.3.

In MENA, though the concept of SEA is widely shared as a process for environmental integration in policies, plans, and development

Box 4.3 Sustainable MED

The Mediterranean Environmental Sustainable Development Program—Sustainable MED—was conceived by the World Bank and the Global Environment Facility to help governments in the Mediterranean region ensure the sustainability of their natural resource base in support of their economic development. Sustainable MED is one of the foundational programs of the environment and water cluster of the Marseille Center for Mediterranean Integration. In its first phase, Sustainable MED focuses on water resources and coastal zone management, while future phases will ideally broaden the spectrum of focal areas.

Sustainable MED will achieve its objective through a combination of policy dialogue, investment lending, and technical assistance:

- Policy dialogue: Sustainable MED will promote coordination at the beneficiary level (cross-sectoral dialogue between Ministry of Environment, Ministry of Finance, and other sector ministries); among donors and partners (Agence Française de Développement; European Community (EC); EIB; United Nations Environment Programme); and among regional initiatives (Barcelona Convention, Mediterranean Action Plan, Strategic Partnership for the Mediterranean Sea Large Marine Ecosystem, EC- and EIB-funded programs and facilities, Union for the Mediterranean).
- Projects: Sustainable MED will promote on-the-ground environmentally sound development through investment lending and technical assistance. Various projects (including the Governance and Knowledge generation project) can be conceived, prepared, and/or implemented under the Sustainable MED Program.

strategies, environmental mainstreaming activities supported by the Bank often utilize tools with different names, such as EERs and COED. EERs, in particular, can be considered a policy SEA approach. COED has become quite popular and has established its brand among the Region, especially because of its quantitative nature. However, there is a window of opportunity for SEA to build upon COED if the SEA participatory component is stressed. At the first Project Steering Committee Meeting of the Governance and Knowledge generation project, held in January 2012 in Marseille, there was strong demand for a participatory approach to promote the effective involvement of local actors in environmental management from Morocco and support for civil society participation and nongovernmental organizations from Tunisia. While consultations were conducted when the Egyptian EER was developed, the stakeholders consulted were limited to government agencies. Establishing how best to introduce wider participatory approaches to countries unfamiliar with these practices would be critical to further promotion of SEA in the MENA Region.

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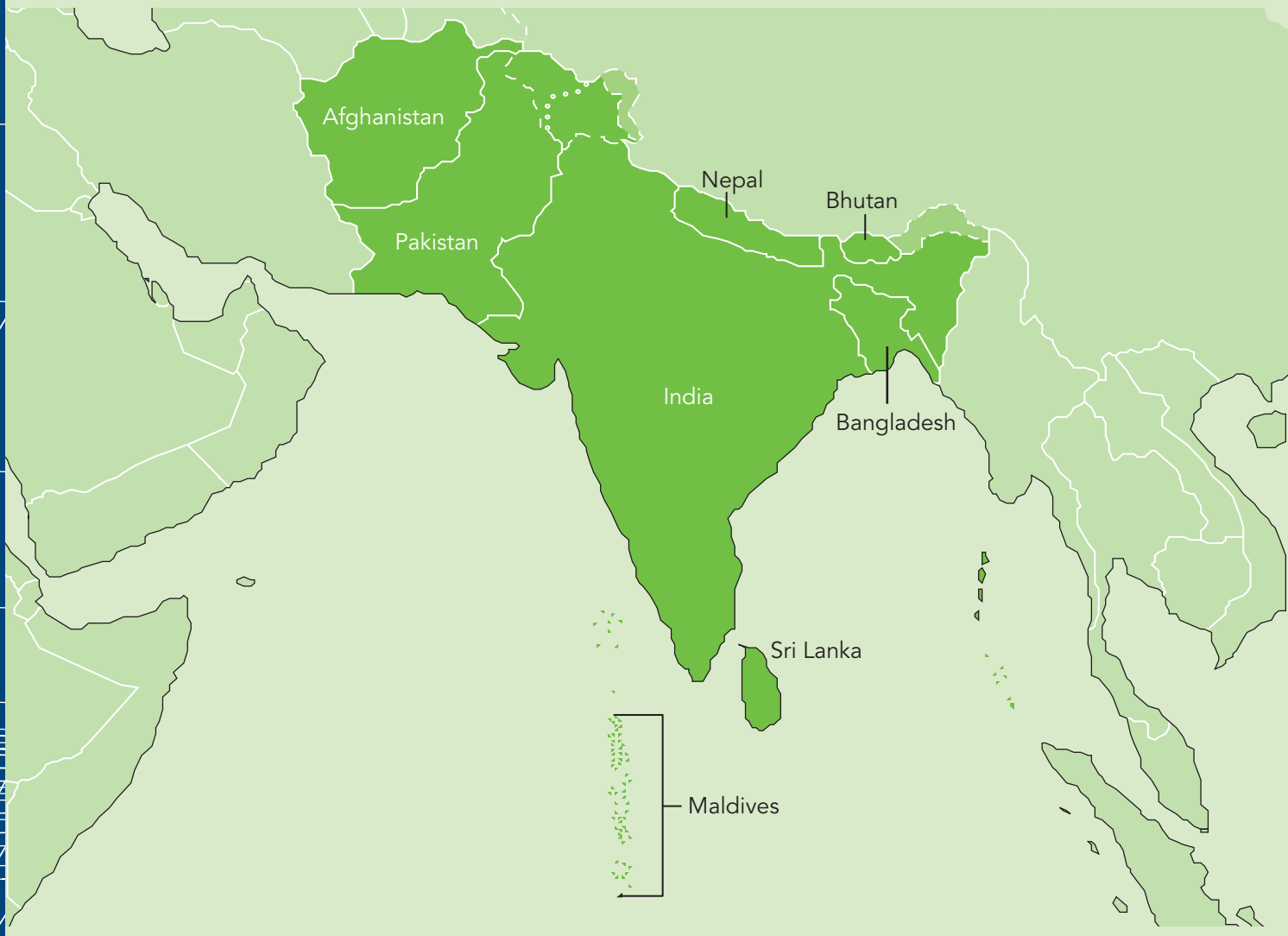
CHAPTER 5

WORLD BANK SEA EXPERIENCE IN

South Asia

FROM IMPACT-CENTERED TO POLICY APPROACHES

Paula Posas and Ernesto Sánchez-Triana[20]



20 Paula Posas is a consultant and Ernesto Sánchez-Triana is Lead Environmental Specialist. This paper benefited from inputs and comments from Fernando Loayza, Yves Prevost, Dan Biller, Ken Green, Javaid Afzal, Darshani de Silva, Shakil Ferdausi, Drona Ghimire, Nagaraja Rao Harshadeep, Priti Kumar, Tapas Paul, Sumith Pilapitiya, Easha Ramachandran, Arif Rasuli, Nadia Sharmin, Sanjay Srivastava, Jeff Lewis, and Mohammed Khaliquzzaman.

Introduction and Methodology

In order to help World Bank staff and country teams in the South Asia Region (SAR) use strategic environmental assessment (SEA) more effectively, this chapter takes stock of the evolution of SEA application there, focuses on results and lessons learned from nine SEA case studies, and identifies opportunities for moving the South Asia regional SEA agenda forward. SEA is understood here in a broad sense and includes a variety of instruments, from environmental impact assessment (EIA) of large projects to policy strategic environmental assessments.[21]

A high percentage of SEAs in SAR use impact-centered SEA to comply with national regulations and the "safeguard" requirements of international development organizations. In South Asia, impact-centered SEAs include instruments such as regional environmental assessment (regional EA), sectoral environmental assessment (sectoral EA), strategic basin assessment (SBA), cumulative environmental assessment (cumulative EA), cumulative impact assessment, and EIAs of large projects[22] that are considered strategic.

Representing a different approach, policy SEAs and institution-centered SEAs have increasingly been used in South Asia to mainstream environmental sustainability, social issues, and poverty alleviation into public policy design and implementation. Strategic environmental, poverty, and social assessment (SEPSA) and country environmental analysis (CEA)[23] are examples of these types of SEA.

21 The Development Assistance Committee of the Organisation for Economic Co-operation and Development defines SEA as a range of "analytical and participatory approaches that aim to integrate environmental considerations into policies, plans, and programs and evaluate their inter-linkages with economic and social considerations" (OECD-DAC 2006, p. 17).

22 According to Paul (2012, personal communication), environmental impact assessment of large projects includes the "India type SEAs," meaning social and environmental assessment.

23 Most CEAs in the World Bank are done with particular priorities identified, issues to be solved, and objectives in mind that are addressed strategically. It is these CEAs that are being included in this study as SEAs. Furthermore, Dalal-Clayton and Sadler (2005, p. 132) refer to CEA as a "para-SEA tool," and it has been previously argued that CEA can be viewed as a type of SEA (Posas 2011a, 2011b).

The research methodology underpinning this chapter involved structured and unstructured interviews with Bank staff, extensive online searches, and questionnaire surveys sent to field office colleagues with experience in EIA and SEA in Afghanistan, Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan, and Sri Lanka. Based on survey responses, and in some cases taking into consideration previously documented SEA experiences, case studies were selected to illustrate lessons and good practices. Document review and interviews were then used to grasp relevant contextual factors and identify the reasons for specific outcomes or challenges. These and other factors are further explored in the analysis of the case studies. Data collection from Bank staff and survey responses inform the final section on recommendations for the way forward.

Evolution of SEA South Asia

Even before 2001, when SEAs received a new impetus and validation through the World Bank's first *Environment Strategy*, there were important stirrings of impact-centered SEA activity in SAR. Impact-centered SEAs—particularly sectoral and regional EAs—as well as environmental reviews understood to be SEAs had already been undertaken and completed in various countries, including Bhutan, India, Nepal, and Pakistan (Rajvanshi 2001; Kjörven and Lindhjem 2002). In addition to the World Bank, other development banks and agencies were experimenting with this new tool in the Region (see, for example, Adhikari and Khadka 1998; IUCN 2000; Naim 2002). Though EIA legislation is common in the Region (Khadka and Shrestha 2011), only Bhutan has a legal requirement for impact-centered SEA. Bhutan's Regulation on Strategic Environment Assessment was adopted under the Environmental Assessment Act (2000) of Bhutan and came into effect on April 24, 2002, but has not yet been implemented (Annandale and Brown 2012).

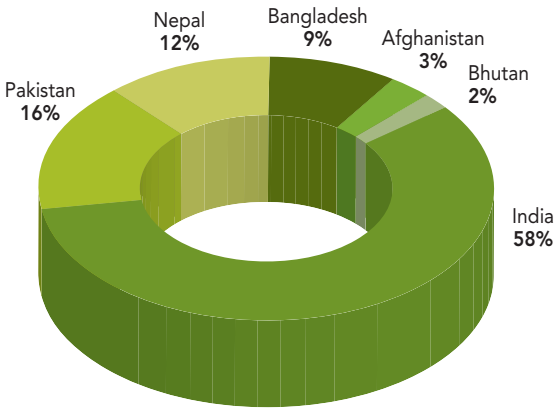
Figure 5.1 shows the proportion of SEAs by country for the 43 identified Bank-supported SEAs undertaken in SAR between 1993 and early 2012, and Figure 5.2 shows them by sector.

The majority of SEAs (58 percent) were conducted in India, followed by Pakistan (16 percent) and Nepal (12 percent). The largest proportion of SEAs have been carried out for the transport sector (28 percent), followed by the water resources sector (16 percent) and the energy sector (14 percent). Nearly all of the SEAs in the energy sector have been for hydropower projects.

A trend was seen in the use of different types of SEA instruments over time. There was a definite shift in the use of certain types of SEA instruments after 2004. Before then, only impact-centered SEAs, particularly sectoral and regional EAs, were done, along with a few EIAs considered to be SEAs. Interestingly, however, the words "sectoral EA" and "regional EA" were not used in titles after 2004. In 2005, policy SEAs with different titles emerged (most involving the words "strategic" and "social"), and SEAs began to be carried out more frequently again after a relative lull between 2002 and 2004. Strategic basin assessments, which appear to have originated in SAR, were the only instrument to span the 2004/2005 transition point, and they continue to be undertaken.

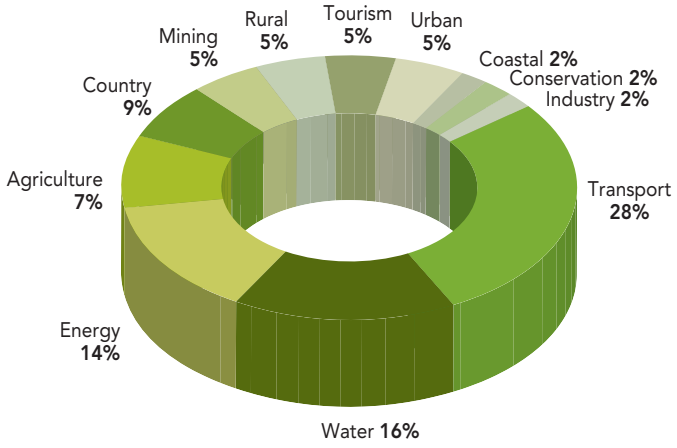
The post-2004 shift in SEA titling and greater use of policy SEA instruments may be explained by two developments. In August 2004, a new World Bank Operational Policy was approved (OP 8.60 Development Policy Lending) that acknowledged the need for "upstream analysis of social and environmental conditions and risks" and mentioned policy SEA and CEA as tools to carry out such analysis (Dalal-Clayton and Sadler 2005). Then in 2005 the World Bank established an SEA Pilot Program to test and promote institution-centered SEA approaches in policy and sector reform, providing grants and specialized assistance to up to eight pilot SEAs in the Regions. Two of these pilots were in SAR (the Dhaka Metropolitan Development Plan and the Pakistan SEPSA).

Figure 5.1
Proportion of SEAs in SAR by Country



Source: Based on Annex 5.1

Figure 5.2
Proportion of SEAs in SAR by Sector



Source: Based on Annex 5.1

Case Studies

SEAs fall along a continuum between impact-centered and institution-centered. Nine case studies are described in this section.

Impact-centered SEAs

The cases profiled below concerning roads and hydropower would be classified as impact-centered SEAs, and they involved rigorous screening and assessment of alternatives that helped avoid controversy and reduced the overall cost of investment.

Case 1.
Gujarat State Highway Project Sectoral EA[24]

The Gujarat State Highway Project (2000–07) had three main components: road improvement, including widening and strengthening; periodic maintenance, such as asphalt overlays; and institutional development. In 1995, some 3,000 kilometers of state highways were evaluated in a strategic options study carried out by Lea Associates South Asia, with 1,500 kilometers selected for detailed studies. The three objectives of the sectoral EA were:

- To perform an environmental screening of the road corridors based on data collected through detailed field surveys and updating of strip maps
- To provide a practical plan for mitigating and monitoring impacts that would stem from construction and future operation of the roads
- To design and start an Environment Management Unit (EMU) to implement the Environmental Management Action Plan (EMAP) and Resettlement Action Plan (RAP).

Due to the information collected and coordination with the engineering design team, implementation phasing integrated social and environmental risks (less challenging upgrades were done first), and early design changes could be made to avoid adverse social and environmental impacts. Examples of socially sensitive design changes included consideration of the resettlement of project-affected people and significant efforts to enhance and protect sites of archeological heritage and cultural significance (shrines and temples along the roadsides). Examples of design changes on the environment side included allowance for placement of large trees in medians, provision of bus stop platforms, and paving of shoulders to facilitate nonmotorized transport. After discussions between the government of Gujarat and the World Bank, the EMU was created.

This SEA has been commended for its simultaneous approach to social and environmental impacts, collection and analysis of data, and public consultations and integration of feedback into the design of mitigative actions (Kjörven and Lindhjem 2002). Also noteworthy is that the project intended to retain a nongovernmental organization (NGO) to evaluate implementation of the EMAP and RAP midway through and at the end of the project, demonstrating commitment to accountability and follow-up.

Case 2.
Sectoral EAs of Tamil Nadu, Karnataka, Kerala, Uttar Pradesh, Mizoram, and Manipur Highway Projects

In the late 1990s and early 2000s, several sectoral EAs were completed for Indian State Highway Projects in Tamil Nadu, Karnataka, Kerala, Uttar Pradesh, Mizoram, and Manipur. The objectives included an environmental screening of the road corridors, the design of impact mitigation plans for construction and operation of the roads, and the design and start-up of environmental management units to implement environmental management plans and resettlement action plans.

In 2003 the World Bank South Asia Environment and Social Development Unit issued a dissemination note highlighting the key findings of a

24 This case was adapted from Kjörven and Lindhjem 2002 and from Fang 2006.

comprehensive analysis of these sectoral EAs. Findings included issues with timing (assessments initiated too late in project preparation and/or not completed on time) and report quality (weak analysis of alternatives, insufficient highlighting of regional/sectoral issues, lack of structured recommendations). It was also observed that the sectoral EAs were done primarily to meet Bank clearance requirements and were not, as then undertaken, serving as a decision-making tool. The note made the following recommendations for increasing the applicability of sectoral EAs: make improvements in the timing of carrying out sectoral EAs; work to establish sectoral EAs as a decision-making tool, not just a clearance requirement; adopt a wider scope to include the road sector as a whole and not just focus on project roads; and develop further practical guidance beyond the existing *Environmental Assessment Sourcebook Updates* on sectoral and regional environmental assessment.

Case 3.
Nepal Medium Hydropower SEA[25]

In the mid-1990s, only about 10 percent of Nepal's population enjoyed the benefits of power supply, and there were strong efforts to address this by tapping Nepal's rich hydropower potential—stemming from steep rivers and high flows fed by snowmelt in the Himalayas and by winter and monsoon rains. In the wake of controversy following cancellation of the planned 402 megawatt (MW) Arun II Hydroelectric Project, the government of Nepal and the World Bank agreed in 1995 to pursue a medium-scale hydropower development strategy and establish a power development fund. Eligibility for its support would be based on screening and ranking (S&R) of identified potential medium-sized projects between 10 and 300 MW. The S&R as well as other efforts would take place within the context of a sectoral EA, whose purpose was to integrate environmental and social considerations into Nepal's power sector planning process in a transparent and consultative way and to develop a regulatory tool to support natural resource and economic risk management.

The full EA process consisted of an update of the nationwide inventory of sites suitable for medium-scale hydropower projects, a two-stage review of technoeconomic and social and environmental parameters of potential projects and sites, use of technoeconomic and social and environmental S&R criteria developed through a consensus process, and provision of open consultation and information sharing with government stakeholders, the professional community, NGOs, and the general public on each step of the S&R process. The main result was the progressive narrowing of potentially feasible projects from 138 in the inventory to 44 in a coarse screen, to 24, and finally to 7 "highest acceptability" projects to proceed to the feasibility stage. The S&R (functioning as an analysis of alternatives) constituted the backbone of the sectoral EA.

At least 2 of the 7 "highest acceptability" hydropower options were identified for development, 1 to be funded by the World Bank and the other by the government of Nepal. The S&R process also significantly contributed to capacity building of partners on the project team and in government ministries. The assessment overall was completed in time to contribute to the new Hydropower Policy, which promotes private sector investments in the energy sector. It has been noted that the sectoral EA overall provided a strong basis for future decision making.

Policy and Institution-Centered SEAs

In a recent World Bank note, policy SEA was defined as "an analytical and participatory approach for incorporating environmental, social, and climate change considerations in sector reforms" (Loayza et al. 2011). Institution-centered SEAs place particular emphasis on assessing the institutions and governance systems that underlie environmental and social management. The cases highlighted here are of SEAs done at the policy level or with an institution-centered focus.

25 Based on Kjörven and Lindhjem 2002 and on Hirji et al. 2007.

Case 4.
Pakistan Green Industrial Growth SEA

A recent policy SEA in Pakistan concerns Mainstreaming Sustainability into Pakistan's Industrial Competitiveness. The SEA was steered by a High Level Committee set up by the Ministry of Industries and representing the federal government, four provincial governments, academia, NGOs, the private sector, and the World Bank. The SEA promoted a consensus-building process that resulted in formulation of a coherent and sustainable industrialization strategy. The SEA stresses that industrial structural change, spatial transformation, and improvements in infrastructure in industrial clusters are needed if Pakistan is to realize gains in economic efficiency and competitiveness, especially in export markets. This in turn requires a cross-sectoral approach that has been endorsed by the Planning Commission and the Ministry of Industries, which has requested programmatic lending support for the implementation of Pakistan's green industrial growth strategy.

Case 5.
West Bengal Sundarbans Non-lending Technical Assistance (NLTA)

At the request of the government of West Bengal, the World Bank initiated a non-lending technical assistance on the Sundarbans with the objective of assessing priority issues and identifying policy options that the government might adopt to address issues of socioeconomic development and biodiversity conservation in a changing climate. The NLTA, entitled *Building Resilience for Sustainable Development of the Sundarbans through Estuary Management, Poverty Reduction, and Biodiversity Conservation*, involved 21 studies of unprecedented richness of analysis across disciplines over a two-year period.[26] As highlighted in the studies, current climate change predictions indicate that issues of poverty and vulnerability will be increasingly difficult to address within the context of natural changes already present in the Sundarbans. Ongoing deltaic subsidence over the past 150 years, compression and settling of soils behind embankments, and haphazard human-made changes that affect river dynamics and tidal flows have undermined the natural processes normally responsible for adaptive change to occur. The studies found that embankment erosion and collapse have become routine and that soils have become more saline. These types of occurrences are likely to be exacerbated by future climate change impacts.

The menu of options that emerged from the NLTA promotes building resilience and adaptive capacity in the Sundarbans through four interrelated pillars:

- *Reduction of vulnerability* of human settlements to historical and future natural changes and disasters via estuary management and disaster risk management
- *Poverty reduction* through capturing livelihood opportunities, building human capital through improving health and education, and improving the quality of life through provision of basic physical infrastructure
- *Biodiversity conservation* through incentive measures, property rights and co-management initiatives, partnerships, mangrove restoration, and marine protection
- *Institutional change* to clarify functions and roles of agencies, promote coordination functions, and build international partnerships with Bangladesh.

In line with these pillars, the SEA identified a series of priority interventions that distinguish between three geographic zones and can be classified as *spatially blind interventions* that address basic entitlements and needs wherever people reside, *spatially connective interventions* that facilitate access between geographic zones, and *spatially targeted interventions* that account for differing conservation and development

26 Study topics included climatology, geomorphology, economics, education, health, social anthropology, demography, ecology, tourism, water and sanitation, energy, agriculture, forestry, fisheries, and management.

needs. The SEA also supported bilateral dialogue between India and Bangladesh on the shared Sundarbans ecosystem. Both countries signed a Memorandum of Understanding in September 2011 to formalize their interest in cooperating in joint management and monitoring of resources. The SEA also built a platform for multistakeholder dialogue about biodiversity, livelihoods, and natural hazard risk management.

Case 6.
SEPSA of Pakistan Freight Transport Reforms

In order to ensure meaningful discussion among key stakeholders in the identification of specific sustainability criteria that would be incorporated into transport reforms, the government of Pakistan and the World Bank held a series of workshops during 2009 to scope out the studies that would be completed using methodologies developed for policy SEAs and poverty and social impact analysis (PSIA). This gave rise to the Pakistan Freight Transport SEPSA. The environmental management component of SEPSA focused on the environmental aspects of investments and reforms in the trade and transport sector, particularly freight. The potential environmental effects of three strategic alternatives were analyzed: the "no reforms" alternative, policy reform and investment in the road freight sector, and policy reform and investment in the rail freight sector. Each alternative was evaluated based on the set of priority issues identified jointly with stakeholders (climate change, air quality, transport of hazardous materials, road and railway safety, urban sprawl and accessibility, and environmental management systems) to assess their potential environmental and social implications.

The PSIA was prepared to identify potential social and distributional impacts of transport sector reforms on stakeholder groups, employing a computable general equilibrium model that uses actual economic data to simulate how an economy might react to changes in policy or other external factors. The PSIA identified the main effects of proposed policy reforms and developed a menu of options to mitigate negative impacts, to incorporate poverty alleviation measures into the design of transport reforms and projects, to enhance positive effects on poverty alleviation, and to address environmental and social priorities. Strong governance and institutional capacity in sectoral and environmental agencies were highlighted as indispensable for the adoption of the options identified.

Findings from the Pakistan SEPSA include that a modal shift from road freight to rail freight transport for long hauls would have significant environmental and social benefits; that environmental issues should not be considered in isolation from social ones, particularly in societies with significant social conflict; and that understanding social patterns and conflicts illuminates the feasibility and weaknesses of potential solutions and needed mitigation measures. To stimulate economic growth, employment, and poverty reduction, reforms to promote industrial competitiveness need to be made along with significant investments in increasing road density to improve the connectivity of industrial clusters to domestic and international markets. Strengthening the infrastructure of urban centers to receive migrants is also required.

Country Environmental Analyses

Country environmental analyses in SAR have been undertaken in Bangladesh, India, Pakistan, and most recently Nepal. The Bangladesh and India CEAs are profiled here for their main features, processes, results, and lessons.[27]

Case 7.
Bangladesh CEA

The objective of the Bangladesh CEA (2006) was to improve the environmental content of the final poverty reduction strategy paper (PRSP) and to strengthen the environmental foundation for

27 These CEA case studies have been adapted from Posas 2007.

the sequence of adjustment poverty reduction strategy credits expected over the next several years. The process centered on four principal tasks: identification of priority environmental concerns for sustainable, poverty-reducing development; analysis of the policies affecting the priority environmental concerns; assessment of environmental management capacity and performance in relation to the identified priorities; and development of a set of proposals to support improvements in the management of key environmental concerns. It involved undertaking both a cost of environmental degradation (COED) analysis and a public environmental expenditure review.

The Ministry of Environment and Forests and the World Bank jointly selected a set of priority issues based on their relevance to growth and poverty reduction and taking into account new analytical work and the scope for subsequent action. Priorities included protecting water quality in Dhaka, sustaining soil quality, managing capture fisheries, and strengthening institutions for environmental management. As a result of the COED's quantification of economic losses from environmental degradation, other priorities for additional action and Bank support emerged, such as reducing the threat of air pollution to human health and the need to better control urban and industrial effluent in Dhaka.

Several projects followed up, taking into account the CEA findings. These included the Second Urban Air Quality Project, the Indoor Air Pollution Technical Assistance Project, and the Dhaka Environment Management Project, which is tackling rapid urban growth. The CEA influenced the environmental content of the PRSP and was meant to serve the donor community more widely as well as to guide World Bank environmental support to Bangladesh.

Case 8.
India CEA

As stated in *India, Strengthening Institutions for Sustainable Growth: Country Environmental Analysis* (2007), the purpose of the CEA was to help strengthen the environmental policy implementation framework for meeting the challenges of India's rapidly growing and extraordinarily diverse economy. The CEA scope of work included a policy review and gap analysis, evaluation of implementation effectiveness using case studies, identification of priority issues and measures for institutional development and capacity building, and development of strategy/action plans to implement the agreed priority measures. The case studies of implementation experiences involved primary data collection and consultation with local stakeholders to gain a deeper understanding of obstacles and contributors to better environmental performance and compliance in real-life situations. The more detailed insights from the case studies complemented reviews of secondary data. The CEA focused on industry, highways, and power, which were among the key drivers of growth in India. Also, the sectors together represented a wide range of environmental impacts, sources, and regulatory issues of broad relevance.

The main recommendations of the CEA included passage of the Right of Information Act, strategic assessment of low-carbon growth options, and design of effective packages for clusters of small and medium-size enterprises. Overarching recommendations, such as improving access to information and empowering local governments, were also made. Finally, the need to develop a medium- to long-term program supported by necessary resources, targets, and clear accountability mechanisms was emphasized.

The CEA influenced national policy, had cascading impacts at the state and project levels, strengthened capacity of ministries and stakeholders, and elevated the priority of environmental issues in the country assistance strategy update and in India. With regard to the Pollution Control Boards, the additional leverage provided by the CEA facilitated some strategic realignment of their activities and the hiring of new professional staff. Information from the India CEA has strengthened several projects so far, including a capacity-building project to develop

more-specific action plans and development policy loans in several states. It identified several states with major projected investments in environmentally sensitive sectors, leading to two SEAs—one on mining in Orissa and another on water resources management in northeast India.

Blend of Impact and Institution-Centered SEA: Strategic Basin Assessment

The strategic basin assessment, which appears to have arisen in and be most commonly undertaken in SAR, exemplifies the blending of SEA approaches. The Palar Basin SBA, for example, is regional in the sense of the basin being the regional focus, it is sectoral (focused on water resources), and it addresses planning, policies, institutions, and impacts.

Case 9.
SEA for Water Resources Planning, Palar Basin, India[28]

The Palar River Basin in Tamil Nadu state in south India has a population of 5.4 million people and covers 18,000 square kilometers. Since the Palar River runs for only a few days during the northeast monsoon season, the population is highly dependent on adequate, good-quality water from tanks and groundwater. This SEA aimed at setting a common framework for handling critical water resource issues in the Palar Basin. The first phase consisted of scoping, capacity building, identification of issues, and formation of a vision and guiding principles. The SEA engaged a wide set of stakeholders, and the interrelationship between environmental, social, and economic issues was emphasized throughout the process. The second phase involved an Action Plan to address the key issues of water availability, water quality, and sand mining. Progress was made through additional funding approved for agriculture and water management in Tamil Nadu, industry upgrades and improved regulation of water quality, new sand mining regulations implemented throughout the state, and replication of this SEA pilot in all but one of the basins within Tamil Nadu in a follow-on project.

Some of the lessons learned from the Palar Basin SEA experience include the need for shared appreciation of the interrelationship of issues and options in a basin; the critical need for key stakeholders (especially counterpart government institutions) to have ownership, demand, and buy-in so that they play a catalytic and arbitrator role; the need to consider environmental, social, and economic issues in an integrated way; the value of a structured plan for stakeholder participation; and the need for tangible outcomes early in the process (low-hanging fruits) to retain stakeholder interest and participation. Last, it was learned that a subbasin-level approach, such as within a town or city, would enable stakeholders to interact around a more limited set of issues and make decisions at a more appropriate level. Collecting the views of stakeholders scattered hundreds of kilometers apart proved unwieldy.

Discussion of Case Studies

This section focuses on observations about and lessons drawn from the nine SEA case studies. An attempt is made to distill the overarching points to improve future SEA practice.

Results with impact-centered SEA overall have been mixed in SAR, with some SEAs having admittedly very little influence. As discussed, sectoral EAs of Indian State Highway Projects had limited influence in terms of guiding the project or the sector on specific decisions, either on policy or institutions. Early REAs in India showed mixed results.[29] On the other side, there have been not only some very successful and influential policy SEAs but also spontaneous, country-initiated SEAs and SEA training efforts within the Region (see SchEMS 2004).

28 Based on Hirji et al. 2007.

29 However, according to Kumar (personal communication, 2012) and Paul (personal communication, 2012), these environmental assessments initiated robust thinking around environment assessments and environmental management frameworks in the rural and agricultural sector in India at a time when the pipeline in this sector was growing.

Bank-supported SEAs have arisen in multiple ways with various purposes, as shown in the nine cases profiled, which span from 1996 to the present. Sometimes their impetus has been discussions between Bank staff and management or clients' governments (Pakistan SEPSA, Pakistan Green Industrial Growth SEA, and West Bengal Sundarbans SEA). In some cases an opportunity or need was seen initially by a single task team leader (Palar Basin SBA and India CEA). There are cases in which the Bank has recommended a CEA as a condition of going forward with potential development policy lending, and sometimes SEAs are initiated to help move forward and overcome controversy (Nepal Hydropower SEA). Several SEAs have been driven or incentivized through donor funding and pilot programs (SAR CEAs, Dhaka SEA). The majority of country office staff polled reported that most SEAs in the Region remain driven by international development bank or agency requirements.

It has been observed that benefits of policy SEA include (Ahmed and Sánchez-Triana 2008; Loayza et al. 2011):

- Identifying environmental priorities for poverty alleviation and analysis of the capacity of natural resources and environmental services to support sector-wide economic activities and sector growth
- Highlighting institutional and governance gaps or constraints affecting environmental and social sustainability
- Promoting capacity building and institutional, legal, and regulatory adjustments critical for environmental and social sustainability of sector reform
- Strengthening accountability on the management of environmental and social risks through increasing transparency and empowering weaker stakeholders
- Institutionalizing social learning processes around the design and implementation of public policies.

These types of benefits were seen in a number of the profiled cases. The CEAs and policy SEAs generally led to significant influence and results due to the benefits listed above: identifying environmental priorities associated with poverty alleviation (all cases), highlighting governance gaps or constraints (all CEAs, Sundarbans, and Pakistan SEPSA), promoting capacity building (India CEA and Pakistan Green Industrial Growth), strengthening accountability and transparency (Bangladesh and India CEAs), and empowering weaker stakeholders (India CEA, Pakistan SEPSA, and Palar Basin SBA).

Regarding empowering weaker stakeholders, particularly the poor, CEAs and policy SEAs were the most likely to explicitly address political economy issues. Through public consultations and outreach, they were able to ensure that some of the follow-up actions focused on poverty alleviation and addressed citizen and stakeholder concerns. SEAs attentive to poverty issues include the Bangladesh CEA, which focused on priority environmental concerns for sustainable, poverty-reducing development; the Pakistan SEPSA, which integrated an explicit poverty component and economic impact analyses and mitigation measures; and the Gujarat State Highway impact-centered SEA, which among other things paved road shoulders to facilitate nonmotorized transport.

There is often an artificial distinction made between social and environmental issues, which, while useful for some kinds or stages of analytical work, should not dominate an SEA. Addressing economic aspects and social and distributional/poverty impacts related to the issue(s) at hand are inherent to good SEA. However, few impact-centered SEAs address economic aspects and social and distributional/poverty impacts.

Factors conducive to the above benefits and overall SEA impact include SEA champions in the Bank and counterpart teams, solid coordination with the client and broad-based participation from stakeholders and civil society, SEA preparation in time to provide

environmental-social-economic input into specific instruments (such as policies and regional spatial transformation strategies), and commitment by the Bank to longer-term engagement and follow-up of the SEA process.

Robust methodologies, which are becoming more proven, also are a factor in an SEA's ultimate impact and level of influence. In this regard, CEAs and in general policy SEAs, which have increasingly better defined methodological components in the Bank context, have been shown to be highly effective in identifying priority issues and implementing measures to address them.

Impact-centered SEAs tend to be less strategic than policy SEAs and also less consistent in their results and influence. These are often done primarily to meet international financial institutions' clearance requirements and to minimize their "reputational risk." After more than 20 years of practice, impact-centered SEAs continue to face issues with timing (initiated too late in project or program preparation and/or not done in time) and report quality (weak analysis of alternatives, insufficient highlighting of regional/sectoral issues, lack of structured recommendations). Few impact-centered SEAs serve to enhance environmental planning or open up decision making to public scrutiny.

The importance of the participation element in SEA cannot be overemphasized. It has been acknowledged since SEA's early days that a good-quality SEA process is "participative" and "informs and involves interested and affected public and government bodies throughout the decision making process; explicitly addresses their inputs and concerns in documentation and decision making; and has clear, easily-understood information requirements and ensures sufficient access to all relevant information" (IAIA 2002). The importance of participation, which is not always culturally encouraged in the South Asian context, remains a common theme in the South Asian SEAs. In fact, participation is often spoken about as a major factor in an SEA's success and level of influence. In the India CEA, the participation component was heavily emphasized, government entities and NGOs were engaged, environmental constituencies were strengthened, and civil society partners took forward the CEA's recommendations even before the report had been finalized. The task team leader said that although it took a great deal of time and effort to coordinate that level of participation, the results clearly justify seeking as much participation in the future. In retrospect, it is wished that the Dhaka SEA pilot had addressed the participation element more effectively. The Nepal Medium Hydropower SEA, Palar Basin SBA, and Gujarat State Highways Project SEA all commendably integrated and prioritized public and community participation and response in the SEA process, to positive ends. Regional good practice regarding participation continues in newer processes, such as the West Bengal Sundarbans SEA.

Ownership matters. Although CEAs and policy and plan SEAs have high potential influence due to their strategic reach and coverage, their influence is also determined by the amount of ownership and buy-in felt by the counterpart and other in-country partners. This is exemplified in the India CEA, whose findings and recommendations were embraced and taken forward by both the government counterparts and civil society partners. On the other hand, in the case of the Dhaka SEA, unlike some of the other pilots, the client did not feel a sense of ownership or buy-in and, as a result, its influence was limited (World Bank et al. 2011). As has been found by other authors as well (Annandale and Brown 2012), the term "SEA" can be flexible; including words like "social" or "poverty" can promote ownership and overcome perceptions of a sole emphasis on the natural environment. In some cases other challenges, in addition to lack of ownership, included greater time and cost investments than were initially budgeted for (India CEA and Nepal Medium Hydropower SEA) and high turnover of senior government officials, which caused fluctuating levels of commitment over time (Bangladesh CEA).

Carrying forward the lessons from past experiences is an important theme in SAR. Several policy SEA task team leaders advised considering at the beginning whether the ministries of finance or of planning might also be strategic counterpart agencies, taking into account their convening power and degree of influence, which is sometimes greater than that of traditional counterpart agencies. Implementing this advice, the counterparts for the 2007 Nepal CEA were the National Planning Commission and the Ministry of Environment, Science, and Technology, with collaboration from various concerned sector ministries and departments. Building on earlier strategic basin assessment experience, new lessons have been brought to bear in later basin assessments, such as the value of technology and spatial modeling or the importance of scale issues. The 2011 SBA of the National Ganga (or Ganges) River Basin Project was also able to build on earlier learning. It has already helped to inform future lending within the Bank in the hydropower and water resources sectors, including regional projects. Moreover, it helped improve awareness and technical understanding between the governments in Nepal and India (SAWI 2010).

As can be observed from the case studies and this discussion, SEA has been productively used in a variety of sectors in South Asia, including transport and tourism. CEAs have proved valuable in addressing country-level environment-development priorities. The case studies and discussions demonstrate that learning is occurring over time and confidence in different methodologies is growing as greater experience with SEA is gained. This is particularly true within certain sectors and typologies of SEA (CEAs, policy SEAs). This reality underscores the importance of periodic reflection and taking stock of SEA experience and lessons learned in the Region and Bank-wide.

The evident value of SEA findings and recommendations to client countries also underscores the need to assess and ensure the ongoing sustainability of carrying out SEAs, since they are so often undertaken with significant grant funding. What might happen in a situation of scarcer funding or changing priorities of decision makers within and outside the Bank?

Moving Forward

Some of the primary development objectives of the Region are to accelerate growth and improve living standards and income, particularly among the poor. Due to increasing understanding of the linkages between natural resource management, environmental quality, human health, and industrial growth, addressing lagging environmental performance and greening growth are also regional priorities for action. According to Bank estimates, environmental degradation costs are anywhere from 5 percent to more than 10 percent of gross domestic product in India, Bangladesh, Nepal, and Pakistan. The largest share of these costs is associated with environmental health impacts, which account for about 20 percent of the total burden of disease in the Region and are comparable to malnutrition. Another challenge is that the Region is expected to face increased vulnerability to extreme climatic events, such as more-intense cyclones, floods, and drought. Sea level rise is another critical threat, particularly for coastal India, the Maldives, Bangladesh, and Sri Lanka. In light of the need to address such issues to reach sustainable development goals, SAR priorities are promoting structural transformations in economic sectors, reducing the costs of environmental degradation on human health, reducing pollution from key sources, and increasing the resilience of ecosystems, infrastructure, and highly vulnerable areas.

As has been demonstrated through the case studies, SEA has a strong potential role in helping address pressing environmental, economic, and social issues so that South Asia's growth becomes increasingly green, more competitive in regional and international markets, and conducive to improvement of living standards for urban and rural populations along the income spectrum. Policy SEAs, particularly those that also unravel and illumine social issues and institutional bottlenecks, offer great potential for moving forward

and addressing the key priorities identified above. As analyzed in this chapter, recent policy SEAs in particular exhibit great sustainable development potential. Most notably, countries are becoming strong vested partners in the analytical work and are taking forward the findings and recommendations on their own initiative, often with new requests for Bank support or follow-up. This is occurring with respect to not only environment ministries but also ministries of industry and other productive sectors.

Recent developments may provide impetus to the SEA agenda in SAR and all Bank Regions. These include the SEA/SESA Community of Practice launched in November 2011, which is regularly meeting and sharing knowledge and good practices to strengthen the impact of SEA in client countries, and the 2012 World Bank *Environment Strategy*. The *Strategy* includes an action matrix commitment to strengthen capacity in strategic environmental assessment and country environmental analysis, which suggests continued high-level support and availability of material resources to promote capacity strengthening on SEA and CEA.

In closing, surveyed SAR field staff were asked to reflect on advancing the regional SEA agenda and the role of the Environment Department (Environment Anchor) and the Region's environment sector in enhancing SEA capacity. In terms of specific actions and directions to take, they suggested helping countries develop their own SEA systems, promoting pilot SEAs of government programs and policies, raising awareness among decision makers of the benefits of SEAs, hosting trainings, supporting learning from each other in the Region, and sharing information and best practices. It was hoped that the Environment Anchor could do more on developing SEA tools, offering training programs, and hosting learning visits of Bank environment specialists to update their skills on SEA. The Environment Department was also seen as needing to provide clarification on the proliferation of SEA-related instruments and SEA's core elements. Operational Policy 4.01 is silent on SEA's required elements (including requirements for regional and sectoral EAs),[30] yet assessment of cumulative effects and regional and global impacts, for example, are increasingly being interpreted as policy requirements for SEA.

The Regional Environment Sector was seen as having a role in providing technical assistance to improve SEA management capacity in key regulatory agencies, including sectors that may benefit by doing SEAs, in leading the dialogue with countries to promote SEA as a strategic planning tool, and in discussing with and orienting their government counterparts and task team leaders to the idea of integrating SEA as a policy preparation tool and ensuring internalization of recommendations.

Field staff opinions on how much to promote SEA in their respective countries were mixed. Several staff members said that until the quality of environmental impact assessments improves in SAR countries, perhaps it was not a good idea to "sell SEAs." However, others were keen to promote the SEA agenda in the Region. For example, in one of the countries with the fewest SEAs, a staff member said: "I have realized in our [country] context that SEA, if properly managed and prepared, is very helpful and will strengthen awareness and at the strategic and policy level; otherwise, other efforts like EIA will not be very efficient." A selection of comments from surveyed field staff is provided in Annex 5.2.

30 OP 4.01 footnote 11 refers the reader to *Environmental Sourcebook Updates* on sectoral and regional EA, which date from 1993 and 1996 respectively and are non-binding and advisory in nature.

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ANNEX 5.1: SEAs UNDERTAKEN IN THE SOUTH ASIA REGION

SEA title	Year*	Country	Sector	Type
Mining Sector — Sustainable Development of Natural Resources Project II (ongoing)	2012	Afghanistan	Mining	Policy SEA
Bangladesh Country Environmental Analysis	2006	Bangladesh	Country	CEA
Dhaka Metropolitan Development Plan	2007	Bangladesh	Urban	Policy SEA
Coastal Embankment Improvement Project (ongoing)	2012	Bangladesh	Coastal Zone	Cumulative EA
Bangladesh Sundarbans	2012	Bangladesh	Regional Dev	Policy SEA
Urban Development Project	1999	Bhutan	Urban	Sectoral EA
Haryana State Highway Upgrading Project (dropped)	1997	India	Transport	Sectoral EA
Ecodevelopment Project	1998	India	Conservation	Sectoral EA
Gujarat State Highway Project	1998	India	Transport	Sectoral EA
Rajasthan State Highways Project	1998	India	Transport	Sectoral EA
Integrated Watershed Development Project (Hills II)	1999	India	Rural Dev.	Regional EA
Tamil Nadu Road Sector Project	1999	India	Transport	Sectoral EA
Third National Highway Project	2000	India	Transport	EIA
Rajasthan Water Sector Restructuring Project	2000	India	Water	Sectoral EA
Mizoram State Road and Rural Development Project	2001	India	Transport	Sectoral EA
Kerala State Transport Project, Road Component	2001	India	Transport	Sectoral EA
Karnataka State Highways Improvement Project	2001	India	Transport	Sectoral EA
Uttar Pradesh State Roads Project	2001	India	Transport	Sectoral EA
Karnataka Watershed Development Project	2002	India	Rural Dev.	Regional EA
Tamil Nadu Water Resources Consolidation Project – Palar Basin	2004	India	Water	SBA
Rampur Hydropower Development	2006	India	Energy	Cumulative EA
India Country Environmental Analysis	2007	India	Country	CEA
Towards Sustainable Mineral-Intensive Growth in Orissa	2007	India	Mining	CEA
Tamil Nadu Water Resources Consolidation Project – Cooum Basin	2009	India	Water	SBA
Uttar Pradesh Water Sector Restructuring Project – Ghagra-Gomti Basin	2009	India	Water	SBA
Vishnugad Pipalkoti Hydro Electric Project	2009	India	Energy	Cumulative EA
National Ganga River Basin Project SBA	2011	India	Water	SBA
National Dairy Support Project	2011	India	Agriculture	Cumulative EA
West Bengal Sundarbans	2011	India	Regional Dev	Policy SEA
National Ganga River Basin Project Strategic Environmental, Economic, and Social Assessment	2012	India	Water	Programmatic EIA
Luhri Hydro Electric Project	2012	India	Energy	Cumulative EA
Road Maintenance and Development	1999	Nepal	Transport	EIA
Power Development Project	1999	Nepal	Energy	Sectoral EA
Nepal Country Environmental Analysis	2007	Nepal	Country	CEA
Nepal Hydropower Sector	2010	Nepal	Energy	Cumulative EA
Kabeli 'A' Hydro Electric Project	2011	Nepal	Energy	Cumulative EA
National Drainage Program Project	1993	Pakistan	Agriculture	Sectoral EA
Highway Rehabilitation Project Sectoral Social and Environmental Assessment	2003	Pakistan	Transport	Sectoral SEA
Balochistan Small Scale Irrigation Project	2005	Pakistan	Agriculture	Cumulative EA
Pakistan Strategic Country Environmental Assessment	2006	Pakistan	Country	CEA
Pakistan Strategic Environmental, Poverty and Social Assessment of Trade and Transport Sector Reforms	2011	Pakistan	Transport	Policy SEA
Green Industrial Growth	2012	Pakistan	Industry	Policy SEA
Water Sector Capacity Building and Advisory Services Project (in progress)	2012	Pakistan	Water	Cumulative EA

*Year of publication or disclosure. Acronyms: CEA-country environmental analysis; EA-environmental assessment; EIA-environmental impact assessment; SBA-strategic basin assessment; SEA-strategic EA.
Source: World Bank.

ANNEX 5.2: COMMENTS FROM FIELD OFFICE STAFF ON ADVANCING THE REGIONAL SEA AGENDA

One of the biggest impediments to moving the regional SEA agenda forward is the lack of awareness among key policy makers in the regional countries of the advantages of strategic planning. Raising awareness with specific country examples of the economic advantage of with- and without-SEA-based planning may trigger the interest of key decision makers in the countries.

Based on the limited experience of SEAs in South Asia, there is little commitment of the countries to conform to the recommendations of the SEAs, so incentives to do so would be beneficial.

I think the future SEA agenda should be addressing the policy, strategy levels, and institutional issues. I think since the third world and particularly the SAR countries suffer from lack of [effective] policy formulation and policy implementation, the Region should give priority to policy SEAs then to institutional SEAs and later to sector-level SEAs. In my view, institutional SEAs and sector SEAs will not be effective if the policy level is deficient.

In many cases the environmental impact of development activities can't be contained within the national boundaries. The issues such as natural resources management, water use, air pollution etc. can have transnational or regional dimensions. Regional SEA approach may help to integrate the principles of sustainable development in the policies and programs of the involved countries. Important issues for the regional SEA agenda include: (i) transboundary water management and hydropower potentials; (ii) transboundary air and water pollution management; (iii) management of shared natural resources, including ecological resources; (iv) regional impact of climate change; (v) regional impact due to coastal protection strategy; and (vi) flood risk management.

Since rural poor, especially in South Asia, are dependent on the natural resource base for livelihood and poverty alleviation, SEAs of regional development projects will be effective in terms of the Bank's mission of poverty alleviation. SEA on sectoral programs or policy-based lending may be good candidates for SEAs in this context. But without client ownership, particularly to act on the findings of the SEA, effectiveness is a question.

An integrated approach by streamlining both the institution-centered and impact-centered SEA with the project activities can be most effective for ensuring sustainable environment in the Bank's mission of poverty alleviation.

CHAPTER 6 WORLD BANK SEA EXPERIENCE IN

Sub-Saharan Africa

FROM ENVIRONMENTAL SAFEGUARDING TO INFORMING POLICY DIALOGUE

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Introduction

Strategic environmental assessments (SEAs) have been used in Bank-financed operations as an environmental assessment and development planning tool in core growth sectors in the Africa Region for over a decade. The use of SEA as a strategic planning tool reflects the shift in the Bank's development assistance from providing technical solutions to strengthening country capacity for formulating and implementing sustainable development policies and plans (World Bank 2007). Earlier, the focus of the Bank's support was on economic growth, with the environment being considered a constraint, an add-on, or a donor-driven agenda. The current focus supports country-owned sustainable development and considers environment as part of the development agenda with broad support for country systems, programs, and reforms. As a result, the scope of environmental tools has expanded from project assessment to upstream analyses of strategic development priorities.

Previous reviews of SEA experience in Bank-financed operations examined the impact and lessons from the use of different environmental assessment (EA) instruments (country environmental analyses (CEA), environmental impact assessments, and sectoral environmental assessments)[32] in Sub-Saharan Africa (AFR).[33] Several reviews called for a more concerted application of SEA in Bank-financed operations and, in particular, in the minerals sector. More recent analyses of the effectiveness of SEAs in Sub-Saharan Africa include the 2008 Bank-sponsored *Regional Workshop: Strategic Environmental Assessment in Africa: Challenges and Opportunities*, at which the Sierra Leone Minerals Sector SEA and the Kenya Forests Act SEA were presented. At the 29th International Association for Impact Assessment (IAIA) Annual Conference, held in Ghana in 2009, the Bank presented a session on *Promoting Human Well-Being through Mining in West Africa: The Role of SEA*. The session focused on how strategic environmental and social assessment contributes to achieving the triple bottom line from minerals sector development.

Building on these earlier reviews, this chapter takes stock of the Bank's experience in applying SEA in Bank-financed operations in Sub-Saharan Africa between 1999 and 2012. In essence, it examines whether the SEA work in AFR since 1999 has, in fact, reflected this shift in focus in the Bank's development assistance or whether a more concerted effort is needed to ensure full adoption of SEA as an effective assessment tool to support the Bank's sustainable development objectives.

This stocktaking exercise assessed the experience and lessons learned related to the growing body of SEA work in AFR along two dimensions: the evolution of SEA in the Africa Region (elements of an effective SEA, design and use of SEA, and the main drivers of SEA) and key lessons learned.

The chapter also presents an overview of emerging trends in the use of SEA as a catalytic tool in spatial planning and climate resilience operations in the Region. It closes with recommendations for the Environment Department and the Region to promote effective use of SEA across core growth sectors in AFR.

Evolution of SEA in Sub-Saharan Africa

Between 1999 and early 2012, the review identified 55 SEAs in 26 countries, including 7

32 For the purpose of this review, SEA is broadly defined to include the following instruments, among others: strategic environmental assessment, regional environmental assessment, sectoral environmental assessment, rapid strategic environmental assessment, transboundary diagnostic analysis, strategic environmental and social impact assessment, strategic environmental and social assessment, and country environmental analysis.

33 These reviews included, among others: World Bank 1998; Kjörven and Lindhjem 2002; the Bank-sponsored workshop on SEA on policy and planning process, Kilwa District, Tanzania, 2003; a Bank review of the Burundi, Rwanda, and Western Tanzania (Nile Basin) SSEA of Power Development Options Stage I and II, 2003 and 2004; WWF 2005; World Bank, *Safeguard Policies and Mining TA Review*, which examined the SEA experience in the Mauritania Mining Sector Capacity Building TA Project; and World Bank et al. 2011.

Regional SEAs (see Annex 5.1). Prior to 2007, however, just 9 SEAs were prepared in AFR.

With the onset and proliferation of the use of CEAs to inform Bank dialogue and the pipeline portfolio in 2007, use of SEAs in Bank-financed projects increased measurably, with the vast majority of SEA work (32 of the 55 identified SEAs) conducted in the last three years (12 in 2010, 11 in 2011, and 9 thus far in the pipeline for 2012). SEA was most frequently used in the minerals sector, with up to 13 SEAs used to inform projects that support sector reform.

Elements of an Effective SEA

Analyzing the Region's SEA experience to date against the three main elements that constitute a robust SEA—***information, dialogue, and influence*** (OECD-DAC 2006)—it was noted that all of the SEAs provided information and data on environmental and social issues related to the sector, project, or program. However, an effective SEA provides ***information*** that ensures the availability of the assessment results early enough to influence the decision-making process and guide future planning. It provides sufficient information on the potential environmental and social effects of implementing a strategic decision to judge whether this decision should be amended and to provide a basis for future decisions.

As most of the early SEAs, and some of the more recent ones, were not designed to influence decision making or guide future planning in the sector per se, the data they provided can be considered useful but largely limited to descriptive baseline information. An important exception are the SEAs for basin management projects and programs that have been acknowledged as a valuable decision-making tool and integrated into strategic basin planning efforts (Hirji et al. 2007).

Earlier reviews found that SEAs can catalyze shifts in decision making and planning. Several SEAs illustrate how strategic analyses can broaden the views of decision makers. This, in turn, lays the foundation for changes in the approach taken when considering and carrying out sector reforms. For example, the Lake Victoria Regional Transboundary Diagnostic Analysis and Strategic Action Program (TDA/SAP) was used to provide information for a program and strategy. The East African Community recognized at the time that there were shortcomings with the regional TDA and SAP. In spite of these limitations, they were considered valuable tools and deemed to have influenced the final design of the Lake Victoria Environmental Management Project Phase II. Another good example of how information coupled with consultations and policy dialogue in an SEA can catalyze subsequent development in a sector is the Rapid I-SESA for the Malawi Minerals Sector Review (World Bank 2009). The initial investment with the Minerals Sector Review led to development of a mining technical assistance (TA) project with a full-fledged SEA specifically designed to inform strategic planning in the sector over the long term.

An effective SEA also supports ***ongoing and participatory dialogue*** among interested stakeholders. The review found that SEAs that were designed as institutional or policy SEAs, and that included policy recommendations, were the most effective in generating dialogue with government and other stakeholders about gaps in the legal and regulatory framework and opportunities for policy reform and refinement.

Important examples of such SEAs include the Kenya Forests Act SEA that raised awareness of the need for interministerial collaboration and facilitated understanding of the new forest users rights in enhanced forest management by rural communities. Another example of an effective SEA with respect to supporting dialogue is the West Africa Minerals Sector Strategic Environmental Assessment that established a multistakeholder policy dialogue at the community, national, and regional levels (World Bank 2010). By emphasizing environmental considerations such as preserving the integrity of the Upper Guinea Forest and social considerations such as increasing the transparency in access to land for mining activities

through regional regulations, this SEA was able to create support for a regional approach to mining development in the Manu River Union (World Bank et al. 2011).

Another important example is the 2000 SEA for the Kihansi Area Conservation Plan that was deemed best practice in Tanzania as it helped to generate methodologies suitable for local-level conservation action. One important outcome of this SEA was its contribution in enhancing community participation in decision making and involvement in planning the conservation area. This SEA has also been used in decision making by the Tanzania Electric Supply Company Limited.

In addition, the 2011 Uganda CEA has also successfully supported continuous dialogue with the government on priority interventions to improve governance in environment and natural resources management and to enhance productivity of natural resources in priority sites to deliver socioeconomic and environmental benefits to local communities. The CEA has most recently informed the design of the proposed Bank-financed Sustainable Natural Resources Management for Growth Project proposed for FY14 (M. Fodor, personal communication).

Finally, an effective SEA will ***influence decision making and policy formulation*** by raising awareness and changing attitudes toward sustainable development (World Bank et al. 2011). Only a few of the SEAs reviewed exhibited this quality. The West Africa Minerals Sector Strategic Assessment is one example as it clarified the link of regional harmonization of national mining policies with enhanced governance of the sector. Another example is the Lake Victoria Regional TDA and SAP, which was successful in illustrating how to integrate environment into decision making with respect to natural resources management.

Design and Use of SEA in Africa

The review found that although use of SEA to inform Bank-financed operations and policy dialogue has matured since 1999, most notably in the minerals sector, the bulk of SEA work has been and remains supply-driven by the Bank in order to comply with its safeguard policies, in particular with OP 4.01 on Environmental Assessment.

The early SEAs were designed and used in a fashion quite similar to the way environmental and social management frameworks (ESMFs) are used today. That is, several SEAs were specifically designed to assess the potential environmental and social impacts of a project whose investment activities were not fully defined or identified by appraisal and yet the potential adverse impacts of proposed investments were deemed likely. In order to comply with the requirements of OP 4.01, the Borrower was advised to prepare an SEA to identify and assess significant potential project impacts and the associated mitigation measures that would be adopted for each subproject that might generate such impacts.

For example, the 1999 Ghana Micro, Small, and Medium Enterprise Project for the Tema export processing zone used SEA as the project's EA tool. SEA was selected as the EA tool based on the fact that the onsite investments were not known or fully defined at appraisal and involved a number of diverse investments such as on-site processing facilities, factory buildings, commercial centers, security, and off-site infrastructure such as access roads, electricity, water, and drainage that would have adverse environmental impacts. This SEA was designed and functioned as an ESMF and did not include a strategic assessment of the interlinkages between economic, environmental, and social concerns; of the cumulative impacts and the legal and policy framework; or of the potential benefits and alternatives of specific project interventions.

A second example is the 2003 Southern Africa Regional Gas Project (Mozambique and South Africa) that carried out a regional environmental assessment to meet financing requirements in accordance with the Bank's safeguard recommendations. The project involved the extraction, transfer, and use of natural gas and required a

range of activities, including exploration, development of gas extraction and processing facilities in the gas fields, and establishment of a pipeline. The environmental and social assessments prepared for the project were considered to be of high quality, with most of the documentation consistent with the Bank's safeguard policies and procedures. However, the Bank advised the client that in order to fully comply with safeguard requirements, a regional environmental and social assessment was needed.

In 2005, the Kenya Education Sector Support Program SEA provided an assessment of the environmental and social issues it raised. This SEA was prepared to comply with Bank safeguard requirements. And the "strategic" element referred to the fact that, as the investments had not yet been fully designed at appraisal, there was a need to assess the potential social and environmental impacts that the program's investments might have and provide guidance on how best to mitigate these impacts. Again, this illustrates how SEA was applied in practice in Bank-financed operations and how it functioned more as an ESMF than as a strategic development planning tool or platform for productive policy dialogue aimed at ensuring sustainable and equitable development.

A main lesson learned from the Eastern Nile Joint Multipurpose Program (JMP) I SEA (begun in 2009 and ongoing) was that the objective of the SEA should be strategic, not just technical, as was the case of several early SEAs, and that the SEA instrument must be tailored to the specific circumstances of each country. This review found that the early SEAs did not involve strategic or participatory planning as defined today and in use in current SEAs. Indeed, it was only with the 2005 Kenya Forest SEA and 2006 SESA for the Mauritania: Second Mining Sector Capacity Building Additional Financing Project that there was a clear shift in how SEAs were designed and applied in practice.

In 2005, the government of Kenya ratified a new Forests Act. The Kenya Forest Strategic Environmental Assessment focused on integrating the environmental, social, economic, and institutional considerations of the act into its implementation. The purpose of the SEA was to inform, influence, and strengthen the process of implementing the new Forests Act and policy discussions regarding sustainable use of forest resources for national development. Today, Kenya is one country that has formally incorporated use of SEA in its legislation and actively applies SEA to inform policy reform and development plans, projects, and programs independent of donor partner requests or financing requirements. Other countries where government is the driver of SEA include Mozambique (Lower Zambezi Coastal Project) and Namibia (Uranium Mining).

Although the SEA for the Mauritania Minerals Sector Project was required in order to comply with Bank safeguard policies, it was structured to provide information for the definition of an appropriate legal, regulatory, and institutional framework for sustainable development of the hydrocarbon sector. The SEA was developed in close consultation with all stakeholders including the oil industry, nongovernmental organizations working on environmental protection and social development, government agencies, and local government. International institutions and organizations such as the International Union for Conservation of Nature, the German and Norwegian development agencies, and the United Nations Development Programme also provided assistance in preparation of the SEA. This SEA illustrates well the shift in rationale and design of SEA from a basic safeguard policy compliance tool to a strategic planning instrument designed to inform sector growth and ensure sustainable and equitable results.

The World Bank SEA Pilot Program also influenced the evolution of SEA in AFR. The program was designed to develop and test policy SEA approaches (World Bank et al. 2011). Beginning in 2005, the pilot program included three mining SEAs (Malawi, Sierra Leone, and West Africa) and a forestry SEA (Kenya) in AFR. All of them illustrate the shift in focus in using SEA to support sustainable development rather

than as a compliance tool to attend to World Bank safeguard requirements.

It is clear that extractive industries play a critical role in economic growth and poverty alleviation in AFR and that they involve complex governance challenges. The social and environmental risks associated with extractive industries have to be identified and addressed in a participatory manner. The Bank's approach to working with governments on mineral sector development has evolved to emphasize a holistic approach to mineral policy formulation linked directly to positive development outcomes, an inclusive approach that depends on stakeholder engagement to obtain legitimacy, a long-term view that emphasizes building strong and accountable government institutions, and the right balance between creating a positive environment for mineral investment and making sure that tangible benefits reach people.

In this context, the mining pilot SEAs have been applied with varying degrees of success as a strategic sector planning tool to identify key environmental and social priorities and cross-sector linkages as well as existing institutional, policy, and governance capacity gaps to address such priorities. Even though the emphasis is on promoting open policy dialogue with multiple stakeholders, these pilots showed that addressing institutional and governance constraints is far from straightforward. A major challenge is the political economy of reform. In addition, support for multistakeholder dialogue needs to continue after the formal SEA report is complete, as environmental and social institutional and governance change takes time to materialize (Loayza and Albarracin-Jordan 2010).

Building on these pilots, a new generation of mining TA projects has been prepared for Cameroon, the Democratic Republic of Congo, Malawi, and Mozambique. All these projects follow the same methodology of preparing a full SEA as a discrete project activity, not just as a project safeguard instrument. Their primary objective is to identify priority actions that government can take to foster environmentally sustainable and socially equitable development of the sector. Today, all Bank-financed mining operations in AFR incorporate SEA as a strategic planning tool, as noted in Annex 5.1.

Finally, another good example of the post-2007 shift in the use of SEA to examine the context and sector policies applicable to specific investments and to move away from simply identifying potential adverse impacts and appropriate mitigation measures is the 2008 Sector EA for the Democratic Republic of Congo: Multimodal Transport Project. This Sector EA examined the environmental context applicable to the transport sector as a whole, environmental and social management plans (ESMPs) for specific activities of the project, and environmental policies to guide implementation of the subsector ESMPs.

Overall, the review found that few of the pre-2007 SEAs were effective in influencing tangible change over the long term due to weak ownership, capacity and resource constraints, and the challenge of sustaining dialogue and stakeholder engagement in implementing SEA recommendations once the SEA process was completed.

Main Drivers of SEA in Africa

As indicated previously, the review found that after more than a decade of applying SEA across core growth sectors, the main driver of Bank-financed SEAs in Sub-Saharan Africa remains the World Bank for the primary purpose of complying with OP 4.01. However, after 2007 it is also clear that the use of SEA to inform policy dialogue between the Bank and client countries and to influence strategic planning and policy formulation has increased. The minerals, forestry, and water sectors are leading this new trend in AFR.

In the minerals sector, the use of policy SEA reaches all technical assistance projects. In forestry, the use of SEA has been fostered by the REDD+ readiness process that integrates policy SEA and compliance with the World Bank's

environmental and social safeguards policies. Finally, the use of SEA as a strategic planning and policy formulation tool is embedded in Bank-financed basin management projects and programs such as the Eastern Nile JMP and Shire Basin Management Program.

Key Lessons Learned in the Use of SEA in the Africa Region

The review found that five main factors either enabled or hindered achievement of SEA objectives: country ownership, timing, stakeholder engagement, capacity constraints, and the legal basis for such assessments.

Country Ownership

The main factor affecting the outcome of an SEA was found to be government ownership of the SEA instrument and process. Country ownership of the SEA was deemed limited in most instances, as the SEA exercise was supply-driven by the Bank in order to comply with its safeguard policies. Often it involved international consultants who designed and carried out the work without building local capacity on SEA work. At present, SEA may still be considered a fairly new EA tool in AFR, given the general level of awareness and knowledge as to why, how, and when to use it.

Application of SEA in certain sectors (such as mining and forestry) is more advanced than in others in terms of informing strategic planning and decision-making processes. However, in sectors such as agriculture, education, and energy, SEA has not yet been shown to have generated significant influence in terms of guiding sector-specific decisions on either policy or institutional reform.

Trust is an important element of country ownership. Trust between government agencies or between the government and the development partner is a critical component when the government has limited experience with SEA. All policy SEA pilots in AFR had difficulty securing government buy-in, as the SEA was not funded directly by government. Trust was central to the initiation of the Eastern Nile JMP and Shire Basin SEAs. In both cases, the government was initially skeptical, with key institutions becoming strong supporters of the SEA process once trust was established. The Eastern Nile JMP SEA showed that sufficient time and effort must be allocated to foster greater understanding and ownership of the SEA and the SEA process by all stakeholders. The Rapid Integrated SEA for Malawi Minerals Sector Review was successful in bringing attention to environmental priorities and contributed to moving environmental and social issues up the reform agenda once trust had been established.

Timing

The review found that the timing of the SEA had an impact on the ability of the SEA to achieve its objectives. Timing in terms of status of sector policy dialogue, government development plans, national strategic planning cycle, pipeline investments, and parallel investments in a sector or in the same physical area should not be underestimated. The minerals sector SEAs of the Pilot Program found that factors that affected the efficacy and success of SEAs included timing, as often SEA was used too late in the process to make a tangible difference (World Bank et al. 2011). The Malawi Rapid Integrated SEA for the Minerals Sector Review, however, was timely and informed the process of developing new mining sector policy and legislation. The Lake Victoria TDA and SAP experienced significant delays that impaired their influence on the design of the second phase of the adjustable program loan. Approaching and designing the SEA with relative timing in mind is crucial to ensure successful outcomes.

Stakeholder Engagement

Dedicated public participation was integrated into the Lake Victoria, Eastern Nile JMP, Shire Basin, Sierra Leone mining, Malawi Minerals Sector Review, and West Africa Mineral Sector Strategic Assessment SEA processes through focus group discussions, community surveys, and regional,

national, and provincial workshops. A lesson learned from all of these is that SEA is not an event but a process and that decisions will not necessarily be taken on the basis of the SEA report but rather on the process. For example, the Malawi Shire Basin SEA established an ongoing process and policy dialogue with government throughout the life of the 12-year basin management program. Although the SEA was used to inform program and project design, including the project's safeguard documents, it was not in and of itself a requirement to comply with OP 4.01. It was found to be effective in engaging several key stakeholders central to fostering collaboration on a joint set of objectives with respect to planning and ensuring sustainable development of the Shire Basin.

The Malawi Minerals Sector Review SEA, in particular, was found to strengthen constituencies. The stakeholder workshop encouraged weaker stakeholders to claim stakes in the sector reform process. The SEA also improved social accountability. Efforts to collect and share information on key environmental and social concerns were limited but relevant to strengthen accountability against a backdrop of mistrust.

Capacity Constraints

A major limitation of effective SEA work across the Region was found to be a lack of local capacity to develop and prepare the assessments. In the majority of SEAs reviewed, international consultants or consultancy firms (such as Environmental Resources Management) were retained to conduct the SEA. One exception was the Lake Victoria Regional TDA and SAP, which demonstrated the benefits of working with national EA practitioners. The SAP was developed by international consultants. However, they drew on the five national TDAs, each of which was developed by national intersectoral tasks forces consisting of staff from different sector ministries.

Legal Basis for SEA

A number of countries in AFR (Kenya, South Africa, and Namibia) have incorporated formal legislation mandating use of SEA in development operations. By formalizing use of SEA at the national level, these countries have strengthened government ownership of SEA as an essential development planning tool. In countries where no such legislation exists, SEA tends to remain a donor-driven exercise with limited influence. Once the SEA is completed, it is difficult to sustain in terms of the medium- and long-term recommendations that underpin sustainable and equitable development in a particular sector or sectors.

Future Trends: New Applications of SEA in Africa

In the last three years, it has become evident that SEA continues to be adopted as a regular EA tool to comply with OP 4.01 across the Region, but there is a shift toward using SEAs as a strategic development planning tool. Interestingly, this shift is not linear. In two emerging instances SEA is being used both to comply with Bank safeguard policies and to attend to a series of complex strategic development planning issues that are at the forefront of the Bank's development assistance in Africa. It is important to highlight these cases because they represent a well-balanced approach to applying SEA in a Region where using SEA to meet safeguard requirements remains an essential aspect of operational work.

The first case is the Spatial Development Technical Assistance Project that came online in Mozambique to help the government undertake a set of studies to support spatial development planning, including studies on "development corridors." With this approach, the government aims to strengthen sustainable institutional capacity on spatial development planning and elaborate robust proposals for spatial development initiatives (SDIs). The SDI methodology aims to unleash the economic potential of a given geographic zone (a "development corridor") in a sustainable manner. An integral part of this work is the preparation of upstream impact and policy SEAs to inform development priorities along each of the growth poles identified. The SEAs

will incorporate environmental and social considerations in the implementation of the project to promote environmentally sustainable and socially equitable development through the proposed SDI. The approach adopted is to develop a set of two-tiered SEAs: at the national level, with a focus on country systems and capacity for incorporating environmental and social considerations in spatial development planning, and at the SDI level, for applying SEA in the preparation of the six development corridors that the project will support. The SEA process will be conducted in a participatory manner.

The second case of applying SEA in innovative ways in the Region is the Pilot Program for Climate Resilience–PPCR (Mozambique, Niger, and Zambia). The program is designed to pilot and demonstrate ways to integrate climate risk and resilience into developing countries' core development planning. The pilot programs implemented under the PPCR are country-led, build on National Adaptation Programs of Action, and are strategically aligned with the Adaptation Fund and other donor-funded activities to provide pilot finance in the short term so that lessons will be learned in designing scaled-up adaptation financing. More specifically, as a complement to adaptation financing, the PPCR finances programmatic approaches to upstream climate resilience in development planning, core development policies, and strategies. The potential social and environmental issues and impacts involved in mainstreaming climate resilience into economic planning will be assessed through the SEA.

Moving Forward: Developing a Structured Approach to Mainstreaming SEA in Africa

From this stocktaking exercise, it is clear that the most critical gaps in ensuring effective design and appropriate application of SEA as a strategic development planning tool in the Africa Region remain greater awareness and deeper knowledge of why, when, and how to use SEA and how to establish a continuous dialogue and functional platform upon which strategic decision making can occur.

Two regional priorities for action and recommendations for addressing these gaps and moving the SEA agenda forward in Africa at this juncture are:

- Strengthening outreach efforts to increase awareness about SEA as an effective tool to foster sustainable and equitable development
- Facilitating knowledge transfer and technical skills development on the use of SEAs among local EA practitioners in the Region.

A third priority, internal to the Bank, is to maintain and strengthen efforts to facilitate and promote the paradigm shift away from using SEA as a safeguards compliance tool only. Although SEA may still be used as an instrument to comply with OP 4.01, which remains essential in many instances, efforts to promote the use of SEA as a development planning instrument are equally important. Only in this way will SEA be driven by government, which is needed for increasing SEA ownership, sustained investment in applying SEA recommendations, and maintaining stakeholder engagement in the SEA process.

To realize these priorities, a three-pronged approach is recommended:

- Development of a dedicated outreach and awareness raising program on the long-term economic, environmental, and social benefits of applying SEA to inform policy and strategic development planning and investment by the public and private sector.
- Development of a comprehensive capacity building program to strengthen local and regional capacity of environmental assessment and sector practitioners in the design and use of SEAs across core growth sectors. Current work led by the Region in partnership with the Netherlands Commission for Environmental

Assessment and the IAIA and its affiliates in Africa is the provision of targeted training workshops on effective use of EA tools, including SEA. Another effort led by the Africa Region is the recent launch of a set of Institutional Development Fund Grant Programs (Kenya, Senegal, and Uganda) designed to strengthen country systems on environmental and social assessment. These programs provide recipient-executed funds to national agencies tasked with supporting environmental and social assessment and management work at the national level. The two-year programs aim to strengthen the assessment, enforcement, and monitoring and evaluation capacities of national EA practitioners in the use of each country's environmental and social management systems, including the full range of EA tools such as SEA. This work will be scaled up to Ethiopia, Nigeria, and Tanzania in FY13, and additional sources of funding should be allocated to further expand this effort and similar efforts to build country capacity to prioritize use of SEA in planning processes.

- Strengthen and support the paradigm shift away from tieing SEA to safeguard compliance requirements only; carry out an in-depth review of the institutional framework for application of SEA at the national and regional levels. This review will ascertain what factors need to be put in place to permit the shift toward country-driven use of SEAs that ensure full ownership, continuous participatory engagement, appropriate timing, and possibly a formal legal and regulatory environment that calls for use of SEA when appropriate.

All three actions can and should be rolled out in close collaboration with the existing Environmental Assessment Nodes Network in Africa and with development partners active in supporting country-driven use of SEAs in AFR.

With respect to internal needs, the Environment Anchor and the Region could provide support through just-in-time direct operational support to task teams and clients preparing and conducting SEA work by World Bank SEA experts joining project teams and through targeted hands-on training on lessons learned, practical experience, and best practices in the design and use of SEA.

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ANNEX 6.1: SEAs COMPLETED, ONGOING, AND IN THE PIPELINE IN SUB-SAHARAN AFRICA, 1999–EARLY 2012

#	SEA title	Year	Country	Sector	Type
1	Micro, Small, and Medium Enterprise Project: strategic environmental assessment for the export processing zone, Tema	1999	Ghana	Private Sector	SEA
2	Kihansi Area Conservation Plan	2000	Tanzania	NRM	SEA
3	Tanzania Kihansi Area Conservation Plan	2000	Tanzania	NRM	SEA
4	Manantali Energy Project	2000	Regional	Energy	Mali, Senegal, and Mauritania Hydropower SEA
5	Sustainable Coastal Livelihoods Technical Assistance	2003	Tanzania	Fisheries	SEA
6	Southern Africa Regional Gas Project	2003	Regional	Minerals Sector	Regional EA
7	Kenya - Education Sector Support Program Project	2005	Kenya	Education	SESIA
8	Madagascar - Irrigation and Watershed Management Project	2006	Madagascar	Basin Management	Regional ESA
9	Second Mining Sector Capacity Building Additional Financing Project	2006	Mauritania	Minerals Sector	SESA
10	CEA	2007	Ethiopia	National	CEA
11	Rapid CEA	2007	Ghana	National	Rapid CEA
12	Rapid CEA	2007	Nigeria	National	Rapid CEA
13	Natural Resources and Environmental Governance First, Second and Third Development Policy Operations	2007	Ghana	Forest and Natural Resources Management	SEA
14	Kenya Forests Act 2005	2007	Kenya	Forestry	I-SEA
15	CEA	2008	Namibia	National	CEA
16	CEA	2008	Senegal	National	CEA
17	Lake Victoria Environmental Management Project Phase II	2008	Rwanda	Basin Management	Trans-boundary Diagnostic Analysis and Strategic Action Program
18	Kribi Gas Power Project	2008	Cameroon	Energy	Regional EA
19	Congo, Democratic Republic of - Multi-modal Transport Project	2008	DRC	Transport	Sector EA
20	Sierra Leone Mining Sector Reform	2008	Sierra Leone	Minerals Sector	SESA
21	Eastern Nile First Joint Multipurpose Program	2009	Regional	Basin management	Strategic Social and Environmental Assessment
22	Nile Basin Initiative Institutional Strengthening Project	2009	Regional	Basin management	Strategic Sector Social and Environmental Assessment
23	Minerals Sector Review (Chapter 4)	2009	Malawi	Minerals Sector	Rapid Integrated SESA
24	CEA	2010	Benin	National	CEA
25	CEA	2010	Cote d'Ivoire	National	CEA
26	ProIRRI	2010	Mozambique	Agriculture	SEA
27	Shire River Basin Mgmt Project	2010	Malawi	Basin management	SESA

#	SEA title	Year	Country	Sector	Type
28	Pilot Program for Climate Resilience	2010	Mozambique	Climate Change	SESIA
29	Pilot Program for Climate Resilience	2010	Niger	Climate Change	SESIA
30	Pilot Program for Climate Resilience	2010	Zambia	Climate Change	SESA
31	Nile Equatorial Lakes Region SEA Parts I and II	2010	Regional	Energy	Strategic Sector Social and Environmental Assessment
32	Growth with Governance in the Minerals Sector Project	2010	DRC	Minerals Sector	SESA
33	Mining Sector Capacity Building Project, 2nd	2010	Mauritania	Minerals Sector	SESA
34	West Africa Minerals Sector Strategic Assessment	2010	Regional	Minerals Sector	SESA (Guinea, Liberia and Sierra Leone)
35	7th PRSC Stocktaking of Needs across Sectors for EIAs and SEAs	2010	Mozambique	National	SEA Needs Assessment
36	CEA	2011	Central African Republic	National	CEA
37	CEA	2011	Uganda	National	CEA
38	Market-led Smallholder Development in the Zambezi Valley	2011	Mozambique	Agriculture	SESA
39	National Irrigation Master Plan and the National Irrigation Policy	2011	Tanzania	Agriculture	SESA
40	Forestry and Economic Diversification Project	2011	Republic of Congo	Forestry	SESA
41	Mineral Development Support Project	2011	Burkina Faso	Minerals Sector	SESA
42	Mining Governance and Growth Support TA Project	2011	Malawi	Minerals Sector	SESA
43	Nigeria Power Sector Guarantees Project	2011	Nigeria	Minerals Sector	Sector EA
44	Enhancing Institutional Capacities on Reducing Emissions from Deforestation and Forest Degradation (REDD) Issues for Sustainable Forest Management in the Congo Basin Project	2011	Regional	Forestry and Climate Change	SESA
45	Cameroon Mining Sector Technical Assistance Project	2011	Cameroon	Minerals Sector	SESA
46	Strategic Environmental Assessment of Coffee Sector Reform in Burundi	2011	Burundi	Agriculture	SEA
47	CEA	2012*	Madagascar	National	CEA
48	Tanzania Southern Agriculture Growth Corridor Project	2012	Tanzania	Agriculture	SESA
49	Liberia – FCPF REDD Readiness Preparation Support	2012	Liberia	Forestry	SESA
50	Tanzania Energy Sector Capacity Assistance Project	2012	Tanzania	Minerals Sector	Sector Impact SEA
51	Spatial Planning Technical Assistance Project 7 SESAs: 1 national, 6 sub-regional by economic corridor	2012	Mozambique	Infrastructure	7 SESAs
52	Mega-Infrastructure Regional Development Project – Mozambique CESUL	2012	Mozambique	Energy and Transport	Regional Strategic Environmental and Social Assessment
53	Mozambique Mining Technical Assistance	2012	Mozambique	Minerals Sector	SEA
54	Private Sector Rehabilitation and Agribusiness Development Project	2012	Guinea-Bissau	Private Sector	SESA
55	Ghana - PPP Project	2012	Ghana	Infrastructure	SEA

* draft under consultation
Source: World Bank.

CHAPTER 7

WORLD BANK SEA EXPERIENCE IN

Latin America AND THE Caribbean

FROM ENVIRONMENTAL SAFEGUARDING TO INFORMING POLICY DIALOGUE

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Introduction and Methodology

This chapter provides a brief assessment of the World Bank–supported Latin America and Caribbean Region (LAC) experience in strategic environmental assessment (SEA) over the last decade and a half. Several studies have documented the use of this instrument in the Region in different sectors and with different approaches (World Bank 2005; Hirji and Davis 2009; Kjörven and Lindjhem 2002). This discussion, however, seeks to consider the history of SEA more broadly, the drivers for utilizing it, and future and possible ways forward for the World Bank to continue supporting the mainstreaming of SEA in the Region. This assessment is based on a review of SEA practice supported by the World Bank and on interviews with key staff who have worked in the Region with this assessment method.

In regard to the methodology and practice of SEA, there is a spectrum of instruments, approaches, and nomenclature.[35] This characteristic is one of the most difficult aspects to grapple with when analyzing SEA practice. The flexibility of the instrument that can look at impacts from programs, policies, and plans is both its greatest strength and the greatest barrier to widespread adoption. The flexible methodology generates some difficulty in defining the boundaries (thematic, geographic, and temporal) of the analysis, while on the positive side it can provide a structured (and somewhat open) platform for dialogue and analysis of environmental and social impacts and the risks and benefits of development processes.

Evolution of SEA in Latin America and the Caribbean

SEA has a long history in LAC that goes back to the planning processes supported by the Organization of American States, starting in the 1970s, related to water basins such as the Pilcomayo River between Argentina, Bolivia, and Paraguay—some of the earliest strategic environmental assessment work in the Region. This may be why the water sector has naturally been a leader in the Region regarding SEA. At the broadest level of analysis, but within national boundaries, country environmental analyses (CEAs) can be very general or focus on specific issues linked to some development or governance issues of concern.

In the early 1990s, starting with the Operational Directive 4.01, regional environmental assessments (REAs) and sectoral environmental assessments (EAs) became part of the World Bank toolbox. Several projects undertook both REAs and sectoral EAs, including the power sector in Colombia, the water sector in Argentina, and the irrigation sector in Mexico. These instruments were applied to projects with broad geographic footprints and those with combinations of infrastructure and policy changes. Early experiences with these particular tools began in the water sector at a moment when possibly there was a strong emphasis on privatization and major changes in concession systems for increasing potable water and sanitation services. Options needed to be assessed and planned for investments, while the policy aspects were generally considered in relation to the social, environmental, and financial sustainability of the proposed investments.

At the beginning of the new millennium, following a review of EA in the World Bank (Green and Raphael 2001) and with a mandate from the 2001 *Environment Strategy* (World Bank 2001), the use of SEA began to increase throughout the Bank, including LAC. A review was also done in conjunction with the strategy that recommended a pilot program of SEA for the Bank (Kjörven and Lindhjem 2002). Starting in 2005, a pilot program began primarily focused on the Africa Region,

35 See Chapter 1 for a brief description of these instruments along with some of their benefits and limitations.

with only one pilot in Latin America.[36] During the second half of this decade, however, the Region did see a number of SEAs take place.

Impact-Centered Approaches

The important SEAs carried out in LAC over the last decade included large-scale projects such as the Bolivia-Brazil GASBOL pipeline, Lima Urban Transport, Santiago Urban Transport, and Dominican Republic Water and Sanitation. While these had some policy dimensions, they were primarily impact-oriented, with strategic alternative analysis that incorporated policy, economic, and social considerations into the decision-making process for the investment program. This is consistent with the 2002 Bank SEA review in which most cases considered were programmatic lending operations. These operations included large transboundary infrastructure projects in LAC involving the Inter-American Development Bank (IDB) and the World Bank that helped advance SEA practice in the Region. The approach in LAC has been an "ad-hoc" one, as described in the 2002 review, rather than the piloted approach that was suggested at that time. Important efforts were made, however, to advance the use of SEA in the Region, although this was not formally called a SEA "pilot" program (see Table 7.1).

Institution-Centered or Policy Approaches

This approach to SEA was also piloted in the Region, in particular with the water sector, building on the important groundwork in the area of integrated water resources management. The SEA process was a very natural extension of this process (Hirji and Davis 2009). The cases of Colombia and Argentina have been well documented (Sánchez-Triana and Enriquez 2006; Hirji and Davis 2009), in which the policy options of various scenarios for the sector were analyzed and led to recommendations that were incorporated into Bank operations. Moreover, they were also linked to advances in the sector more broadly. In these early cases, it is likely that the discussions around privatization that advanced in the Region and the Millennium Development Goals stimulated analysis of the potential structural changes needed in the water and sanitation sector to increase coverage levels. The sustained programmatic efforts in both Colombia and Argentina in the water sector provided the continuous platform for dialogue around key policy issues and strategic options needed for SEA to be successful.

Mexico has been a leader in advancing SEA in Latin America, covering many sectors through

Table 7.1 Select SEAs in LAC

Early phase (1997–2001)	
Guatemala	Private Participation in Infrastructure (1997)
Argentina	El Niño Emergency Flood Project (1998)
	Water Sector Reform (1999)
Venezuela	Power Sector Reform (2001)
Colombia	Energy Policy SEA (1993)
Recent SEAs (2002–12)	
Argentina	Calafate Tourism SEA (2006)
Mexico	Modernization of Irrigation SEA
	Rio Apatlaco Watershed SEA
	Michoacan Climate SEA (2010)
	Energy SEA
	Environment DPL (CEA) (2006)
	Tourism (2005)
Colombia	Water and Sanitation Sector SEA (2001)
Peru	Lima Urban Transport
	Mining (2005)
Honduras	Tourism (2004)
Dominican Republic	Water and Sanitation (2010)
Bolivia-Brazil	Gasbol pipeline
Brazil	Ceara – PROGERIRH Water (2002)
Chile	Santiago Transport SEA

Source: World Bank.

36 In 2010–11, the World Bank SEA Pilot Program supported the climate change plan for Campeche state (Mexico) and, partially, the climate change plan for Michoacán state (Mexico). These plans followed SEA approaches in their preparation as a way of fully integrating SEA in the preparation of climate change plans.

national and state-level processes, as can be noted in Table 7.1. One of these cases was documented by Loayza (2012) with regard to proposed reforms in the tourism sector around 2005. The SEA process provided for policy-level interventions through the development of scenarios of tourism development in the country and the potential impacts that these could generate. The process resulted in improved data collection in the sector, created institutional mechanisms for coordination of policies, established the importance of environmental quality for the provision of tourism services, and helped mainstream sustainability in the tourism sector and country outreach campaigns.

More recently the Mexico program has focused systematically on climate change in many different dimensions. SEA processes have incorporated the social dimension within the design of Mexico's national Reducing Emissions from Deforestation and Forest Degradation (REDD+) strategy through application of strategic environmental and social assessment (SESA). At the state level in Michoacan and Campeche, SEA approaches were applied in planning that included consideration of adaptation costs and climate change alternative scenarios. This process has also been helped recently by a specific memorandum with the country that sustains the knowledge agenda and engagement with the country, including SEA-type activities (J. C. Belausteguigoitia, personal communication).

The movement from impact-centered SEA toward policy SEAs is also consistent with the experience in other regional programs of the World Bank, such as the South Asia Region.[37] Although the practice has evolved, it is still difficult for practitioners to move from a project-oriented and impact and risk assessment focus to a national or sector-oriented and system assessment focus.

Country environmental analyses have also advanced with support from the World Bank in association with development policy loans (DPL), which in the Latin America and Caribbean Region saw a significant increase in use during the first decade of 2000 and continue to be an important lending instrument for the Bank (see Table 7.2).

Table 7.2 Country Environmental Analysis

Prepared	Ongoing
Honduras (2009)	Argentina
Peru (2007)	Ecuador
Colombia (2006)	
El Salvador (rapid) (2006)	
Guatemala (rapid) (2006)	
Dominican Republic (rapid) (2004)	
Nicaragua (2011)	
Panama (2008)	

Source: World Bank.

A number of these CEAs were developed between 2004 and 2007 with the support of a trust fund. The CEAs aimed at providing analytical support to governments in developing policies and programs to reduce environmental degradation, improve natural resources management, and seek links to human health and economic growth strategies (see Box 7.1). In Central America, trade aspects related to potential free trade agreements were considered as well. The analysis also provided the Bank with an important platform for dialogue regarding the development of country partnership strategies.

Current Status of SEA in LAC

The SEA approach is not being systematically adopted within a particular sector or country in the Region in the context of World Bank–financed projects. The incorporation is somewhat heterogeneous in regard to the themes and levels. Table 7.3 lists some of the projects currently under preparation or implementation that have incorporated strategic environmental (and social, in some cases) assessment. Recurrent themes include water and tourism followed by energy

37 See Chapter 5.

Box 7.1 Colombian Experience with Country Environmental Analysis

In 2004 the Bank approved Development Policy Operations as a new form of rapidly disbursing financing to countries for budget support. This lending instrument seeks to support policy and institutional actions for development, including achievement of environmental goals. From 2005 through 2009, Colombia received support from the World Bank for a series of development policy loans with the aim of supporting the government's sustainable development agenda, in particular advancing the achievement of the Millennium Development Goals.

The approach in the preparation of the series of DPLs was to focus on systemic-level policy interventions that would aim at strengthening the National Environmental System. Priority areas were based on a solid analysis provided by the preparation in 2006 of the Colombia CEA. Some important CEA findings included estimation of the cost of environmental pollution and degradation as 3.7 percent of gross domestic product and some 6,000 deaths from increased diseases linked to air and water pollution, especially affecting children. In addition, the CEA identified gaps or weaknesses in the institutional framework and priority-setting process in the environmental sector that were disconnected from the investments and execution at the regional and local levels.

Priority areas of reform were established and included in the 2006–10 National Development Plan. Mainstreaming of environmental aspects was a key objective of the government of Colombia rather than the development of a separate environmental plan. Areas of focus for the DPLs included the National Environmental System procedures and planning; water, solid waste, and air pollution legislation; key reforms in management of water resources; national policies on environmental health; climate change; and monitoring and evaluation systems on environment. Technical assistance and investment lending by the World Bank and by other partners such as the IDB and the Netherlands government were also linked to the reforms.

Currently the Colombia program of the World Bank continues to build on this solid grounding established through the DPL series. Support has continued from the Global Environment Facility (GEF). Additional financing has been available through the Sustainable Development Investment Project and other operations in urban and rural regions of Colombia that range thematically from urban transport and water basin management and regulation to carbon finance.

Source: Based from World Bank 2010.

and transport. Several projects in the Region, in particular in Brazil recently, have incorporated SEA as part of their activities. In Brazil, SEAs for the transport, mining, water, and energy sectors are currently being considered in the context of several operations. Notably, most of these efforts, with the exception of activities funded by the Global Environment Facility and the Forest Carbon Partnership Facility (FCPF), are supported by the loans themselves. Hence, while there are possibly fewer SEA efforts compared with other Regions, they are substantially demand-driven in nature.

Climate change as a policy issue in the international arena is inherently strategic in nature, given the importance of modeling and trends toward

Table 7.3 Current Planned or Ongoing SEAs with World Bank Support in the LAC Region

Argentina	- Biodiversity in Forestry Landscapes (GEF) - Sustainable Natural Resources Management - La Rioja SWAp – (water resources)
Bolivia	- Roads and Airport Transport
Brazil	- Federal Road Transport - Energy and Mining TAL - Ceara State SEA
Mexico, Colombia, Costa Rica, Nicaragua, El Salvador	- SESA for the REDD+ readiness supported by FCPF program grants
Mexico	- Tehuantepec Wind Power (GEF)

Source: World Bank.

future climate scenarios. Therefore, SEA has found an important role in the Region recently at national, subnational, and sector levels for climate change mainstreaming in decision making.

Strategic environmental and social assessment is an SEA in which assessment of social issues is emphasized. Applied in REDD+ readiness processes for climate change mitigation, SESA is a growing area of SEA practice in LAC. In particular, within the context of the FCPF supported by the World Bank and other delivery partners (IDB and United Nations Development Programme), REDD+ readiness programs set the basis for reducing emissions from deforestation and forest degradation. Countries become "ready" through forest and other sector policy revisions, financial mechanisms, and programmatic activities that would be developed and led by a national REDD+ strategy. Presently 15 countries in Latin America have been selected for the program, although 3 of them (Mexico, Costa Rica, and Colombia) are more actively advanced with the SESA process in the context of World Bank–supported programs.

The SESA process for REDD+ readiness is quite particular in that the program is environmentally focused, but there is concern regarding the potential social and ancillary environmental impacts of a REDD program and associated systems of payment for environmental services. The Mexico, Colombia, and Costa Rica programs are advancing in developing their REDD+ strategies and have already engaged in stakeholder identification and national-level consultation (subnational in Colombia) for scoping out the principal issues for strategic analysis. Some of the challenges noted based on the early experience include:

- Limited capacity to apply the SESA methodology in the context of REDD+ national strategies, especially considering that the safeguards management of these types of programs is still under discussion within the U.N. climate convention negotiations
- The need to consider the strategic options of REDD+ within broader national climate change priorities
- The interinstitutional coordination required to deal with the many potential drivers of deforestation (mining, forestry, agriculture, and energy, among others)
- Scaling the SESA process at the national level in very large countries
- Little advance in the Region in assessing and managing potential environmental impacts outside the project areas (so-called leakage) into non-forested ecosystems or other countries, as the process of SESA for REDD+ has focused strongly on the social dimensions of these potential programs.

Although the SESA process under REDD+ is still in its early stages, the existing challenges do not seem insurmountable. There is a need for a more thorough dialogue on the strengths and limitations of SESA for the design of REDD+ programs. The instrument is providing an important platform for public participation in the design of these programs as countries identify stakeholders, organize workshops, and plan the REDD+ preparation strategies. However, there is a danger that the SEA process is only seen as a platform for discussion and consensus, while other beneficial aspects of the methodology, such as assessment of risks and gaps for enhanced social and environmental management, might be weakened.

Main Drivers and Limitations of SEA

Legal Basis for SEA

There is no strong legal driver for SEA in the Region since few countries have considered SEA in their legislation as a requirement for policy changes or establishment of large-scale infrastructure. Countries with legislation on SEA in the LAC region include Chile, Dominican Republic, Panama, Guatemala, Colombia, and

more recently Peru. The development banks, including the IDB, have supported much of the work in addition to other bilateral and multilateral development partners. Clear evidence of the lack of mainstreaming is seen in most guidance documents on SEA developed for the Region, which primarily reference the European Union directive in regard to SEA methodological approaches (IIRSA 2009; Herrera 2009) rather than national approaches.

Without a legal grounding, SEA probably will not be used more broadly as an assessment tool. In particular, there will not be an incentive for the public sector to use public resources in analyses that, while potentially helpful, are not mandated by law and regulations. In the case of environmental impact assessment (EIA) in earlier decades, legislation provided a basis for broad adoption of the instrument and for more professionals and practitioners to become familiar with it. Given the solid and improving environmental governance situation in the Region, the potential for legal reform incorporating SEA leading to its greater adoption in decision making is significant. In Chile, for instance, there is a strong legal basis for SEA, and there seems to be a significant increase in its use throughout different sectors before adoption of plans, programs, and policies. It will be important to look at this case in the coming years to see the strengths and weaknesses of the approach taken and how SEA is used.

In any case, because of its inherent strategic nature, SEA will not be as widespread as the EIA instrument is today. An important question that can be asked is whether the legal requirement of SEA is necessary. What are the implications of this legal adoption? There is a strategic analysis that could and should be done to respond to these questions. A clear case for justifying the benefits of a mandatory SEA from the social, environmental, and economic standpoint would be needed if SEA were to be mainstreamed. Given the slow progress in ingraining SEA into the legislative framework, the Bank—although it cannot drive specific legislative efforts—can support analysis and consideration of what legal frameworks are working best in the Region and worldwide.

Economic Growth and Regional Integration

Policy-based SEA in the Region is carried out primarily in the context of infrastructure development initiatives, although there are some exceptions. Most recently, the drive for economic integration and free trade has brought the strategic environmental and social dimensions into play more strongly through efforts such as the North America Free Trade Agreement and the Central American Free Trade Agreement. Other integration initiatives are infrastructure-based, such as the Initiative for the Integration of Regional Infrastructure of South America (IIRSA), an effort supported by the IDB, the Plata Basin Development Fund, and the Andean Development Corporation (IIRSA 2009). Some subregional SEAs have already been supported under the broader umbrella initiative of IIRSA. Given their multicountry, long-term, and broader development impact objectives, these types of initiatives are more amenable to strategic planning that generally would include SEA.

Certain trends in the Region also tend to provide a more solid grounding for SEA initiatives, such as the need for structural changes (privatization, competitiveness, rapid expansion of services, and so on) or rapid transformation of the landscape (deforestation, agriculture, livestock, forestry expansion/production). In this latter area, as discussed before, the deforestation aspect has received the most attention in the Region through current REDD+ initiatives.

Trends that Influence Use of SEA in the World Bank

From the World Bank perspective there is a clear "spike" in the use of SEA based on initiatives at different points in time. An early trend was mentioned in the water sector policy reforms (and to some degree the energy sector), followed by the trend in CEAs as an input to regional policy-based lending in application of OP 8.60. Current DPLs,

however, especially those environmentally oriented, rely on other less specifically prepared technical and policy analyses rather than SEA as inputs to the preparation process. CEAs in the past provided estimated costs of impacts, which is a good way to establish dialogue with decision makers, particularly in ministries of finance, about the national costs of environmental degradation on human development (R. Tolmos, personal communication). CEA, however, has largely disappeared from the Region partly due to lack of funding as the CEA trust fund was finalized and also because of the level of effort required to undertake CEAs.

It is important that practitioners adapt the use of SEA to consider these new regional scenarios and related institutional constraints. The use of "rapid" SEAs may be a good approach under these conditions in spite of the negative impact on the depth of the analysis and stakeholder engagement. The Region might be well positioned to deal with this situation, given its improved governance, strong voices for civil society, representation of stakeholders in national fora, and relatively good Internet and telecommunications coverage.

Discussion and Trends

From the World Bank side, support for the use of SEA in LAC has varied over time. There was a strong push from the early to mid-2000s, possibly linked to the expansion in the use of policy-based lending instruments (DPLs) that sustained an important CEA preparation process that has since subsided. Country partnership strategies now variably incorporate the environmental dimension in their analyses (with some exceptions regarding climate change). The experience seems more linked to the availability of funding to support these efforts rather than a sustained effort. The limited experience may be insufficient to create momentum in the use of SEA by World Bank clients in the Region. A critical mass of practitioners within the Bank and the Region to facilitate the preparation of SEAs seems also to be lacking.

Financial limitations are another important aspect that appears to underlie the slow trend of a more extensive use of policy SEA in the Region. Infrastructure-based initiatives generally have a more clearly defined financial investment, more easily quantifiable return on investment, and generally more clearly defined environmental costs and benefits. The costs of a regional or even national exercise can be somewhat more tangible and easily justified by virtue of the potential direct impacts and large size of future investment programs (or income from sectors such as mining or petroleum, for example).

The same cannot be said of the policy SEA. These exercises are more intangible by nature, with many imponderables not as readily visualized. These challenges would likely test the effectiveness of SEA in LAC through the SESA for the REDD+ readiness. The national scope of the REDD+ programs may require extensive consultative processes that can be costly, given the potential need to support participation by stakeholders. The potential implications from a financial standpoint of a future REDD+ strategy and payment for environmental services system are not clear at this point, which makes a nationally driven process, in the absence of legal requirements, more difficult to justify. However, the potential impacts from a social standpoint are generally recognized and provide for strong support from civil society for the advance of these initiatives.

Sectors Not Always in the "Driver's Seat"

Important sectors driving not only the investments in infrastructure but also the policies for promoting private sector initiatives are not always leading the SEA processes. In cases where they are, there is more likelihood of adoption of the policy and programmatic approaches emerging from the analysis. Challenges to achieving this result include the lack of specialized personnel with environmental and social training to steer the process. This is worsened by the absence of legal requirements and competing institutional mandates to fulfill other operational activities such as supervising projects.

Environment agencies have been the lead institutions generating many SEAs, given their interest in reducing environmental degradation. But the convening power of the environmental agency may not be great or exist at all in the absence of some legal mandate to do so.

Certain Sectors More Amenable to SEA

Some exceptions have been found in the water sector, where the multisectoral nature in terms of management requires better institutional coordination that occurs more naturally based on long-term integrated water resources management efforts and competing needs and uses of water resources. Given the nature of the resource, it also may be seen as more "strategic," as its value may be more easily quantifiable in monetary terms and its use more clearly recognized in regard to human sustenance and well-being. However, this may not necessarily be the case for biodiversity and forests.

Making SEAs more broadly understood by decision makers with tangible demonstrations of their utility for improving development outcomes is key to increasing their use in the Region. Considering the importance that the World Bank, along with other development banks and agencies, is giving to the knowledge agenda, this is an area that could benefit from a more sustained, planned, and coordinated effort.

Bank Regional Experience in SEA Limited in Key Sectors

Transport, mining, energy, and agriculture are all key areas of interest to the World Bank's development agenda, but there has been limited SEA experience in these sectors. Nevertheless, the sectors have been approached in some select cases. Because of the important portfolio in transport, energy, and rural development, greater use of SEA might be expected.

Impact on Stakeholder Engagement

This analysis has not looked at specific outcomes regarding ongoing platforms created by SEA programs in the Region supported by the Bank. The current trend in SEA/SESA from the most recent experience of the FCPF has been to optimally utilize existing stakeholder platforms that are well developed as opposed to establishing new platforms for ongoing sector or thematic dialogue. This does not mean that in specific cases the SEA process cannot be a catalyst for establishing platforms for dialogue, especially at regional levels; however, national-level SEA processes in particular can generally use existing platforms. In the case of Mexico, the SESA process has been mainstreamed into the national strategy preparation dialogue process and utilizes several platforms, including the National Commission for Development of Indigenous Peoples and the Mexican Civil Council for Sustainable Forestry. Other SEA efforts in Mexico such as the Michoacan case (Damania et al. 2010) also used existing and recognized platforms to develop and mainstream subnational adaptation strategies. These design features ensure that stakeholder dialogues are not de-linked from the primary sectors they are focused on and can be sustained in the future.

Capacity Building for SEA

Efforts have been made by the World Bank over the last decade at both the thematic level and the project level to create national capacity for SEA. Currently SEA capacity building driven by the World Bank in the Region is limited to ad hoc efforts linked to specific operations or to occasional regional training efforts. While the demand and opportunities for national-level SEA may be declining, given improved governance and capacities in the Region (of largely middle-income countries), subnational lending is increasing and may present an opportunity for increasing the use of CEAs. In this context, SEAs could be undertaken at more-manageable scales and may have a greater chance to influence decision making on development strategies and programs.

Conclusions

The last 15 years of Bank-supported SEA in LAC have covered a variety of sectors and included a number of approaches that ranged from country environmental assessments to inform DPLs to sector strategies in tourism, water and sanitation, and others, including multisectoral national strategies for REDD+ readiness currently being carried out throughout the Region. The experiences during the period, however, were not built upon a longer-term systematic view to increase SEA use in the Region, as had been done to a certain extent with EIA policy. Client countries have not seen the advance to SEA as incremental or as transformational as the use of EIA. The approach from the Bank in the dialogue on country partnership strategies and development planning has not been systematic either.

The year 2011, however, was an important inflection point in that the World Bank's Operational Policy 4.01 on environmental assessment formally added SESA to the list of instruments that can be used in World Bank operations. This, in addition to the establishment of the SEA Community of Practice as a natural follow-on to the pilot initiatives on SEA, should sustain a more important and focused effort in the near future to mainstream SEA in Bank-supported LAC activities. To this end, some suggestions are made here. They consider the potential for World Bank engagement, given the current emphasis on certain issues and approaches in the Region.

Coordination with IDB and International Finance Corporation (IFC)

Some development partners, such as the IDB, have advanced more strongly in areas such as transport in the Region from the SEA perspective, while the World Bank has substantive regional experience in water and climate change and worldwide experience in areas such as hydropower and mining, where there is renewed regional interest. There also are potential entry points for greater World Bank partnering with IFC colleagues. Recently the Region has discussed the issues of wind power strategic assessments, given the overlap of public and private investments in southwestern Mexico. But greater coordination efforts are required, which must be supported with human and financial resources. This partnership could be strategic, since the Bank has a solid engagement with the public sector while the IFC is a good partner for convening the private sector and for driving international standards at a broader scale for corporate adoption.

Private Sector Involvement

Private sector considerations and buy-in would be critical to foster environmental integration in policy and planning in LAC. Given the importance of the Region now and in the future in regard to commodity production from mining, agriculture, livestock, and forestry, the potential benefits could be great if these were based on more solid and widespread SEA efforts.

Regional Priorities for Action

Deforestation is a regional priority, given the continuing expansion of the commodities sectors. Mining and energy are more critical in the shorter term (in the Andean region) while agriculture and livestock are more important in other subregions, such as Central America and the Southern Cone of South America. Some large countries, such as Brazil, Argentina, and Mexico, deal with all of these dimensions concurrently. Coincidentally, their federal systems add a layer of complexity to developing strategies and SEAs. The World Bank is working more with state and municipal-level projects in these countries that have relatively high capacity and can pave the way for greater use of strategic analytical tools such as SEA/SESA in other contexts and for other Regions.

The World Bank Environment Department has convened an SEA Community of Practice that can assist in these efforts to mainstream SEA in Latin America and the Caribbean. Middle-income countries make up the majority of the Region,

with relatively high capacities and advanced environmental governance institutions and legislation. They look to the Bank increasingly for this added value as a worldwide knowledge Bank as well as being a provider of financial support. In addition, the important experience of high-capacity countries such as Brazil, Mexico, and Colombia can be leveraged to establish South-South knowledge sharing within LAC as well as across the ocean to Africa, where there are a significant number of Portuguese-speaking countries engaging in other South-South exchanges, for example with Brazil. The Region's strong governance platform and active civil society provide the ideal environment to expand the use of SEA that facilitates citizen engagement and voices in development planning. Promoting SEA and leveraging global knowledge through the SEA Community of Practice in LAC is highly compatible with the World Bank emphasis on knowledge sharing.

The Bank has already developed memoranda for advancing these approaches and activities with countries such as Mexico. More resources are needed, combined with a closer analysis of the outcomes to provide solid evidence of the utility of SEA. The regional environmental and social safeguards team in LAC also has resources and experience in SEA to continue developing platforms for dialogue with countries on SEA through their support of projects and safeguards training agenda. Finally, the integration of environmental and social strategic analyses into the dialogue leading to country partnership strategies has been important in the past and will continue to be important in the future.

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CHAPTER 8

WORLD BANK SEA EXPERIENCE IN Europe AND Central Asia

THE MIXED EFFECTS OF REGULATION

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Introduction

As a strategic tool for comprehensive analysis of environmental impacts, strategic environmental assessment (SEA) has the potential to drive the integration of environmental considerations in the development of plans, programs, or sector development strategies. As such, SEA provides support for achieving the United Nations Millennium Development Goal No.7 on environmental sustainability. All countries and the world's leading development institutions at the U.N. General Assembly in 2000 agreed that environmental sustainability requires integration of the principles of sustainable development into country policies and programs to help reverse loss of environmental resources. This chapter includes a review of SEA processes and implementation in the Europe and Central Asia (ECA) Region, focusing on cases supervised by the World Bank.

Evolution of SEA in Europe and Central Asia

The evolution and current status of SEA in ECA was reviewed in terms of the relevant legislation and methodologies, scope of application and practice, key actors, and main implementation issues (benefits, problems, what worked well, etc.). Most countries within the Region have already developed SEA national systems, and in some cases they have also gained practical experience with the application of SEA. At the same time there is need for further support for capacity building, particularly with regards to administrative capacity of responsible authorities and relevant stakeholder groups (economic planners, nongovernmental organizations (NGOs), and the public at large). The utility of carrying out SEA pilot assessments and providing guidance on implementation proved of significant value to national SEA capacity in ECA.

The main driver for SEA in the region has been the European Union (EU) SEA Directive 2001/42/EC,[39] which has been applied differently in various countries, resulting in a variety of client-country demands for the Bank's support on SEA or SEA-related activities. Internationally, SEA is also regulated by the SEA Protocol to the UNECE Convention on Environmental Impact Assessment (EIA) in a Transboundary Context (2003).[40] The EU SEA Directive requires an environmental assessment for plans and programs that are likely to have significant impacts on environment, while the SEA Protocol also encourages the use of SEA in the context of policies and legislation. Many ECA Region countries include the transposition of the EU SEA Directive, the backbone of the SEA legislative framework, as part of the legislative harmonization and approximation with the EU Environmental Acquis.[41] Although the SEA regulatory basis in the Region is largely in place, the process of initiation, scoping, and implementation, and mainly the decision on whether SEA is required, remains the responsibility of client countries.

The Europe and Central Asia Region includes 30 countries that are members of the World Bank and covers economies in Eastern and Central Europe, the former Soviet Union (or newly independent states (NIS)),[42] and Turkey. Ten of these 30 countries are EU members and 5 others are considered EU candidate members; only Kosovo, Tajikistan, Uzbekistan, and Turkmenistan are not covered by the aforementioned two SEA legislations. Countries that became EU members or are EU candidate countries have to transpose the EU SEA Directive into their own national or legislative frameworks by specific deadlines. Likewise, countries that ratified the Espoo Convention[43] have to implement its provisions.

39 The European SEA Directive on the Assessment of the Effects of Certain Plans and Programmes on the Environment (effective in 2004).

40 The SEA Protocol to the Espoo Convention was adopted in 2003 and entered into force in July 2010.

41 European Union Body of Environmental Legislation.

42 The newly independent states of the former Soviet Union are Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kirghizstan, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan.

43 The Espoo Convention sets out the obligations of parties to assess the environmental impact of certain activities at an early stage of planning. It also lays down the general obligation of states to notify and consult each other on all major projects under consideration that are likely to have a significant adverse environmental impact across boundaries.

In most newly independent states, the legal and regulatory framework for SEA and EIA is largely established. However, implementation of EIA and SEA regulations requires significant attention to fill in procedural gaps in order to improve the effectiveness of this tool for planning and decision making. In many NIS countries implementation falls short, as the legal provisions are not always followed. The opportunities provided by the law to use the impact assessment tool for decision making is skirted by local politics and disincentives for its application to strategic proposals. Also, some NIS countries make no distinction between EIA and SEA, and their legislation requires that laws, programs, plans, and projects are all subject to environmental assessment. Many NIS countries (for instance, Belarus, Georgia, Kazakhstan, and Ukraine) still use the former Soviet system of the State Environmental Expertise,[44] albeit in conjunction with new legislation. As a result, in practice there appears to be little or no development of SEA (Dalal-Clayton and Sadler 2005).

The status of SEA application is different in Central and Eastern Europe (for example, in the Balkans and Baltic countries). It largely adheres to the internationally accepted practice in countries that moved toward full transposition and implementation of the EU SEA Directive. These countries are required to assess their proposed plans and programs for future use of EU structural funds. Several countries (Poland, Czech Republic, Estonia, Hungary, Latvia, Bulgaria, and Romania) carried out comprehensive SEAs mainly linked to specific sector plans such as regional waste/water management, tourism, agriculture, or transport, which later provided input into national planning documents (Dalal-Clayton and Sadler 2005).

Varied and diverse methodologies are used in ECA in developing SEAs, with all of them emphasizing integration of environmental effects into national plans, sectors, and programs. The way in which the EU SEA Directive has been defined and implemented by the EU countries has varied from nation to nation due to application of different legal, procedural, and political factors. It has been introduced as a separate process and an extension of the EIA, established as a two-tier system for specific plans and programs (in the Netherlands), or incorporated into regional and land use planning (in Sweden).

The various models and approaches in the region can be analyzed as corresponding to two types of SEA that distinguish between institution-centered SEA (I-SEA, or the "policy SEA") and the impact-centered SEA (the "EIA-SEA") (OECD-DAC 2006; World Bank 2008). A great percentage of SEAs undertaken in ECA use the impact-centered approach to help ensure that environmental considerations are not overlooked while outlining the sustainability of the proposed actions; this includes cumulative impact assessments (CIAs), SEAs for land use plans, and EIAs of large projects.

In addition to the SEA Directive requirements in ECA, the Bank's policies require clients to comply with its own environmental safeguards policies for investment and development policy lending. Yet financial constraints, client countries' interests, and priorities at the national level as well as the lack of adequate capacity especially in the former Soviet countries are some (but not all) of the reasons why only a few SEAs have been prepared with the assistance of the Bank in ECA (as described in this chapter).

Furthermore, other donors in the region—such as the U.N. Environment Programme, the U.N. Development Programme (UNDP), the Organization for Security and Co-operation In Europe, and the Regional Environmental Center (REC)—actively support SEA capacity in various countries[45] or finance public-private infrastructure facilities, programs, or other sector-specific policies (such as a transportation program) that

44 The Federal Law on Environmental Expertise (1995) set procedures of the State Environmental Expertise that was carried out by a Commission of Experts formed by a specialized, fully empowered state agency on environment in the Soviet Union to examine a definite project.

45 UNDP and REC implemented the regional project SEA – Promotion and Capacity-building in Five Countries in Eastern Europe, Caucasus, and Central Asia Region (2004–2006).

call for preparation of an SEA. The International Association for Impact Assessment hosts an international meeting with training events on SEA each year, in which agencies share their experiences (see www.iaia.org).

Application of SEA in the ECA Region

Policy SEA

It is important to note that SEA's ability to reinforce other policy assessment approaches through instruments such as the country environmental analysis (CEA), poverty and social impact analysis (PSIA), or energy-environment reviews/strategies (EER/S), is widely recognized. All these approaches take a broader view on country environmental priorities, policy options, and implementation capacity, and they could influence the government approach to broader development and lead to further demand for application of specific SEAs. However, as described below, in ECA there is no clear evidence that development of such broader policy reviews has influenced the client countries to use SEA as a step toward more sustainability-oriented environmental management.

The country environmental analysis is a diagnostic tool aimed at providing the analytical underpinning for integrating the environment into the development process and sustainable development assistance. It does provide a framework to systematically link country-level analytical work with strategic planning processes. This tool includes an institutional analysis with the objective of assessing institutional capacity to address environmental implications of policy reforms supported through development policy lending operations, assessing capacity to manage country's environmental concerns, providing a strategic focus to safeguards issues, and providing strategic guidance and identifying areas of technical assistance and investments (World Bank 2003). While several CEAs have been prepared in countries[46] in the Region, it seems that only in Azerbaijan did the CEA analysis serve as an entry point for the application of SEA linked with the regional development plan of the Greater Baku area.

The Bank has made a specific commitment as part of OP 8.60 to undertake poverty and social impact analysis in order to examine the poverty reduction impacts on different stakeholder groups as part of proposed lending programs and policy reforms. While PSIAs focus almost exclusively on economic, social, political, and institutional analysis, in some cases in the Balkan countries the Bank is addressing the linkages between environmental management and poverty as part of the PSIA. The authors suggest addressing environmental concerns more strongly to ensure the longer-term sustainability of proposed interventions through integration of the SEA concept into PSIA and into related national planning strategy and policy development operations supported by the Bank.

The preparation of energy-environment reviews was useful in ECA for influencing energy and environment policy and interventions in the Balkans (Bulgaria and Russia) and Central Asian countries (Tajikistan) (see www.esmap.org). In the case of environmental strategies, for example, these analyses would further assist the respective governments to narrow down priorities and to highlight actions that could achieve major environmental improvements in the short to medium term (such as Poland, Bulgaria, and Romania Environmental Strategies developed in 1992). Applying SEA would further strengthen the sustainability of sector strategies (for example, urban environment infrastructure, water, health, and transport).

Impact-Centered SEA: Case Studies and Lessons Learned

The case studies analyzed in this chapter mostly follow the requirements of the EU SEA Directive in terms of approach and methodology, with certain factors being given different weight (such as approach on public consultation, alternatives, and cumulative and interrelated effects). An

46 CEAs have been prepared in Belarus, Serbia, and Montenegro (2003); in Tajikistan and Ukraine (2008); in Armenia (2009); in Azerbaijan (2011); and in Kosovo (ongoing).

overall concern in ECA was whether SEA should be integrated into the urban planning process or conducted as a parallel, independent process in line with the opportunities and constraints of each country. The SEAs developed with Bank assistance were mainly for regional and local plans (Georgia and Albania) and to a lesser extent for sector programs (Kosovo), and some were used as a planning tool in the stages of project preparation. The Bank policy OP 4.01 allows the SEA to be used as a main environment and social assessment tool when appraising projects financed by the Bank, so there is a possibility of increasing the number of SEAs developed in this Region in the future.

SEAs Developed with World Bank Assistance

A sectoral environmental assessment was prepared to evaluate the potential short-, medium-, and long-term environmental impacts, environmental management, and monitoring issues associated with the harvesting of peat and wood raw material and their processing and use as fuels in heating systems in ***Estonia***. The assessment—financed by the Swedish Board for Investment and Technical Support at the request of the government of Estonia in 1994 and supervised by the World Bank—provided an evaluation of the issues related to adopting and implementing a national program for energy conservation and providing environmental guidelines for use in activities proposed for funding by the World Bank and other institutions. The assessment included an analysis of possible environmental impacts resulting from the proposed program and an analysis of possible alternative programs. A mitigation plan and a monitoring plan were also included, as well as identification of institutional development measures required to increase use of local fuel resources in an environmentally sound manner.

Results and lessons learned: The baseline information did not include current data on all parameters necessary to develop a feasible environmental monitoring program (such as water, soil, or air quality), although the basic environmental monitoring programs in Estonia are usually built on effective and sufficient data. The overall sectoral environmental assessment results helped finalize the country's new energy policy and launch specific priority investments in the district heating sector (for example, the World Bank–financed District Heating Rehabilitation Project). The public consultations were limited to discussions held only with related government representatives (the Ministry of Environment and State Energy Department), the Academy Society of Forestry, and several relevant NGOs (SERI et al.1994).

A strategic environmental and social assessment (SESA) was prepared to identify environmental and social issues of projected developments in the power generation and related lignite mining sectors in ***Kosovo*** as part of the Bank-financed Kosovo Lignite Power Technical Assistance Project. The SESA developed a framework for the assessment, consultation, and regulation of follow-up investments to mitigate any potentially negative consequences of interventions proposed under the Sibovc Development Plan (SDP).[47] The SESA was prepared in parallel with this plan and was initiated by the Ministry of Energy and Mining of Kosovo. The analysis included the current environmental and social situation in the area of interest, analyses of the alternative development scenarios and their impacts, and a proposed mitigation and monitoring plan.

Results and lessons learned: The SESA evaluated the benefits of the SDP, including reclamation of mining areas and polluted surroundings, improvement of existing specific infrastructure, and related employment opportunities and economical development. The public involvement played a critical role in quality control and assurance in the SEA process (ERM 2008).

The SEA for the Southern Coastal Development (SCD) Plan in ***Albania*** was developed in December 2007 in line with the government's

47 This regional sector development plan was prepared on the basis of the Energy Sector Development Policies, which include all existing and planned lignite mining and power generation activities in the Sibovic-Obiliq area.

commitment to ensure sustainable development of the Southern Coast while optimizing economic developments and job creation. The challenge was to elaborate and implement the SCD Plan and a tourism development strategy that exploits the key assets of the natural and cultural environments while minimizing negative environmental impacts. The SEA report was developed based on a compilation of available materials, interpretation of existing baseline data, and a thorough compilation of existing infrastructural elements in the Southern Coastal area.

Results and lessons learned: The SEA process relied on the existing outdated and incomplete baseline data (for instance, a survey on biodiversity, data on effects of sewage discharge, and so on at specific sites were not available), as no field work or other means of collecting new data and information were carried out. Thus, projections of future infrastructural needs for supporting a sustainable tourism development and analysis of their relevant impacts were given only on the basis of existing information, consultations, and limited site visits. The SEA report was prepared in parallel with the SCD plan and included among other aspects the transboundary effects on landscape, marine areas, and cultural heritage and community habitat related to this plan. The SEA process concluded that the implementation of the plan will require establishing a thorough EIA process for all major activities and projects and formulating and observing relevant environmental management plans. Also, capacity building and institution strengthening, sectoral coordination and cooperation, and development of relevant monitoring indicators were considered crucial for effective implementation of the SCD Plan (COWI 2007).

The government of ***Georgia*** asked the World Bank to support regional development in Kakheti. The Regional Development Strategy for Kakheti (2010–2014) concluded that tourism and agriculture in Kakheti offer significant development potential and proposed a priority Action Plan. The implementation of the Kakheti Regional Development Program required the preparation of a strategic environment, cultural heritage, and social assessment (SECHSA) (February 2012).

Results and lessons learned: The SECHSA process encountered two challenges: the tight timeline for completion, as the SECHSA approach was not part of the project concept, and the lack of baseline information from national databases to assess the impact of the proposed program. Baseline data collection included extensive overview of available literature and studies as well as consultations with experts and representatives of several entities. Notwithstanding these constraints, two points are worth highlighting. First, the SECHSA created strong ownership from several line ministries and the regional government as well as full involvement of the cultural heritage agencies, the Church, residents of buildings that will undergo rehabilitations as part of urban regeneration efforts, the population of remote mountainous areas, and NGOs. Second, the local communities were not particularly interested in the environmental aspects of development, as they were mainly concerned about potential resettlement, but there was excitement about job creation. Also, the SECHSA directly contributed to the screening of all potential investments under the World Bank project and the development of the environmental management framework. Finally, the SECHSA report was used to meet the project appraisal conditions in line with OP 4.01, and it is expected that it will feed into the decision-making process as it continues during project implementation (SECHSA 2012).

The World Bank supported the government of ***Montenegro's*** capacity building in SEA linked to the National Spatial Plan (NSP) through the Bank–Netherlands Partnership Program. This SEA training and capacity building program was developed based on a specific SEA pilot to familiarize government and other stakeholders with the SEA planning tool. It was also considered a great example of donor harmonization and division of labor, as the World Bank and the Netherlands Environmental Assessment Commission focused on technical support for

SEA while GTZ supported the analytical studies linked to the NSP and UNDP supported the public participation process. However, the timing of the SEA in relation to the draft plan closing stages made it difficult to fully integrate its findings into the planning process.

Results and lessons learned: The SEA made a valuable contribution to the public discussions that were part of the plan development. It also affected positively the attitude and capacity of some of the stakeholders, yet it did not have a substantial impact on the development of institutional capacities. The transfer to the Montenegrin authorities of skills and experience needed to undertake SEAs and their real ownership of the process are important. It was also learned that for the purpose of spatial planning, SEA needs to give equal weight to economic and social dimensions as well (OECD-DAC 2012).

SEAs Developed by Client Countries with Other Donors' Assistance

The EU and other multilateral and bilateral international donors are enhancing the practice and application of SEAs in ECA through direct exchange of experience via national workshops, capacity development trainings, and financing of specific SEA pilot projects. Several SEA examples are provided below to underline that the international experience efforts in promoting the SEA tool in the Region should be also considered an SEA driving force in addition to the relevant EU SEA Directive regulation provisions.

The SEA for Varna Municipality Development Plan, ***Bulgaria***, was part of a World Bank-financed program for development of the Bulgarian Black Sea Coast, which included the preparation of development plans for the 14 municipalities of this region. Each plan was subject to a pilot SEA, which represented the first application of this tool for sectors and programs in the country. The main purpose of this SEA was to integrate environmental conditions into territorial and urban development. Issues encountered during the SEA process included determining the scope of the SEA and the type of information to be considered, describing and analyzing the environmental baseline information, organizing meaningful meetings for public discussions of the report, and fulfilling the conditions stipulated in the decisions.

Results and lessons learned: There was little or no public interest during the SEA review. However, NGOs supported the SEA process as being useful input to plans and contributing to transparency and public access to information. The time constraints and limited resources available triggered use of available data, which were scarce, and not tackling all technically complex aspects of waste management, water supply, and energy. EIA specialists involved in the process emphasized the need to apply the SEA procedure from the earliest phase of the plan preparation. The Ministry of Environment and Water amended the EIA regulations as a result for the SEA process findings to clarify the procedures to the planning process in the country (Grigorova and Metodieva 2001).

An SEA of the the Bratislava Land Use Plan, ***Slovakia***, was undertaken in line with the EU SEA Directive. The analysis covered a comparison of the objectives of the comprehensive development strategy of Bratislava city and the three alternative land use plans, assessment of the environmental quality to identify positive and adverse environmental impacts of individual land use plan policies, and identification of mitigation measures to address adverse effects. The SEA procedure followed a two-tier approach: a strategic evaluation was undertaken of the goals, aims, and aspects of the plan against sustainability principles, and a detailed evaluation was made of the plan against sustainability indicators, both qualitatively and quantitatively, while including cumulative impacts.

Results and lessons learned: The process provided an opportunity to generate more environmental information, especially on impacts. There is need for SEA to be initiated earlier in the land use plan preparation process. The sustainability goals set out in the Bratislava Development Strategy were too general. SEA

should be linked procedurally and methodologically to a tired approach at different levels of land use planning (Dalal-Clayton and Sadler 2005).

The SEA of the Waste Management Plan (WMP) in the ***Czech Republic*** (a framework document developed for 2003–2012 for access to EU structural funds) was carried out as a separate, parallel process from the plan and included four main steps: scoping, review of detailed terms of reference for the SEA, preparation of the SEA report itself, and public review.

Results and lessons learned: Based on the SEA assessment (including consideration, discussion, and selection of alternatives and related issues), the SEA team identified various inconsistencies among the plan's objectives and measures, issues, and indicators. The SEA provided input into all key stages of the process; also, it facilitated stakeholder input into the review of arrangements for the plan implementation and monitoring. However, it was difficult to establish in the end the contribution that SEA made to the WMP process, as from the planning perspective the SEA process concentrated too much on the methodology and report preparation rather than influencing decision making at various stages of the WMP (Dusik 2003).

Summary of Results and Lessons Learned

The main findings from the cases reviewed in the implementation of SEA in the ECA Region include:

- The SEA's convening power facilitated better coordination among all stakeholders and can create an enabling environment for conducting a substantial dialogue on strategic environmental issues.
- Evaluation of impacts was mainly based on various stakeholders' input and concerns; however, there were slightly different approaches concerning assessment of impacts (for example, direct impacts of projects versus indirect effects of general activities).
- SEAs were used effectively for further programming documents (such as environmental management frameworks, energy policy drafts, and action plans).
- The preparation of SEAs enhanced the opportunity for public involvement in all phases of SEA and planning.
- Several aspects of SEA practice were addressed superficially, such as cumulative or health effects or transboundary linkages.
- SEA follow-up activities and monitoring framework were weak, but they are key tools for ensuring that the SEA outcomes will actually be taken into account.

At the same time, some barriers or challenges to the SEA process emerged out of the review concerning the scale and timing of an SEA, the rigid approach to the scoping, the timing of stakeholder engagement, limited awareness of SEA process, and the capacity and resources for implementation.

The lessons learned include the following:

- From the outset, ensure that the SEA's role is understood and supported by the decision makers; also, clarify the SEA benefits and when and how it is important to apply SEA so that political commitment is secured.
- Identify main stakeholders who would champion, support, and own the SEA through the entire process.
- An effective SEA can be undertaken in parallel with the planning and preparation of a project, program, strategy, or plan rather than after it (as, for example, in Kosovo and Azerbaijan).
- The quality and availability of baseline data is crucial to allow development of scenarios and/or gap analysis.

- Sufficient time and resources have to be provided throughout the SEA and the relevant planning steps (a public consultation process may take a minimum of four months, for instance).

- The methods used and the form of presenting outcomes must be understandable for the decision makers. The SEA team should intensively communicate with the planners so that the SEA proposed modifications could be considered at an early stage of the plan drafting.

Ongoing and Potential SEA Development in the ECA Region

For fiscal year 2013, there are a couple of SEAs under implementation in ECA under the guidance of the Bank. These include the SEA of the Greater Baku Regional Development Plan (RDP) in Azerbaijan and the SEA linked to Rogun Hydroelectric Power Plant Construction Project in Tajikistan within the context of the entire Vaksh River Development Master Plan.

The government of ***Azerbaijan*** is preparing a sustainable vision for the metropolitan region and the surrounding Absheron Peninsula area by launching the preparation of the Greater Baku RDP with support from several World Bank–funded projects. The SEA to be developed in parallel with the Greater Baku RDP will examine environmental consequences and risks and will investigate alternatives to specific aspects of the plan, ensuring that possible impacts of the programs are identified before their adoption. The focus will be on constraints (sensitive environments and potential costs) and opportunities (resources and potential benefits) for protecting environment media (water, soil, air, biodiversity), land resources, and social aspects. This involves documenting any existing environmental issues, assessing direct and indirect (secondary and cumulative) impacts, and evaluating strategic benefits to be considered by the relevant authorities.

The SEA proposed in ***Tajikistan*** will build upon the results from the World Bank's country environmental analysis. It will contribute to shaping the country's overall energy development outcomes by integrating environmental and social considerations into the national energy policy and sector growth. It will also analyze relevant components within the Tajik energy sector in their relationship with transnational energy trading and development schemes. Specifically, the SEA will analyze, from environmental and social points of view, Tajikistan's energy policy, the plans for the energy sector, the role of the Vaksh River Development Masterplan and existing transmission projects included in the energy policy and long-term planning, and the government's schemes on energy sources other than hydropower (such as a coal-fired thermal power plant and renewable energy) and energy conservation.

In ***Armenia***, the Bank is continuing a policy dialogue established through the development policy operations (DPO) series to protect the poor and vulnerable while fostering competitiveness. The new DPO series aims to emphasize the sustainability of policy reforms supported by this operation. This would include support to policy and regulatory actions for wider inclusion of stakeholders and NGOs in implementation of the mining code, preparation of guidelines pertaining to environmental and social provisions in the mining sector, and implementation of the provisions of the new EIA law. The DPO series would support actions related to Armenia's obligations to international conventions concerning access to environmental information and transportation of dangerous substances. As the government is preparing a national strategy on minerals, there would be an opportunity to launch discussions on integration of SEA elements into the national EA system in relation to the mining sector.

Also, in ***Turkey*** the proposed Third Environmental Sustainability and Energy Sector DPO is helping the country to improve the effectiveness and efficiency of environmental management processes, in the context of harmonization with

the EU Environmental Acquis, including, among others, the transposition of SEA EU Directive into national legislation. It is expected that the SEA regulation will be finalized and approved during 2012. Ahead of formal approval of the regulation, the government has already launched capacity building projects for SEA implementation and considers that implementation of SEA should start with a specific sector SEA (such as transport) rather than regional or urban development plans, given the need for clarification of coordination/ responsibilities between central and local levels for urban plans.

In linking energy sector investments to the overall national strategy, the Bank has recently advised the government of Turkey to prepare a cumulative impact assessment related to hydropower dam construction. Cumulative impact assessment is a technique designed to assess the combined environmental effects of multiple activities. The CIA findings would help in the overall environmental management aspects of hydropower dam construction and would regulate private sector investments in renewable energy and energy efficiency activities. The CIA may also help the government of Turkey in advancing the SEA agenda from an institutional and capacity building perspective as part of harmonizing the country's legislation with the EU Directives.

There is a possibility of launching a SEA linked to drought management and mitigation assessment for *Central Asia and South Caucasus* to raise awareness and understanding of climate vulnerability to drought in this area, with the ultimate purpose of introducing a strategic, pro-active framework for adaptation. Overall, the SEA intends to help the Ministries of Agriculture, Irrigation and Water Resource Management, and Environment as well as meteorological services, emergency services, and regional and local government (including municipalities) to improve their preparedness for future droughts. The SEA would provide recommendations on how international agencies, including the World Bank, could coordinate and synergistically assist the countries of Central Asia and the South Caucasus in successfully creating and implementing a drought management and adaptation strategy.

Conclusions and Recommendations

There are "teething problems" in SEA practice supported by the World Bank in ECA despite the legal provisions required by the EU SEA Directive. The review of the SEA case studies in this chapter shows that there is an ongoing debate on the suitability of the SEA tool in the developing countries of the ECA Region. This indicates the need for an effort to increase capacity and raise awareness of the SEA utility in the Region. We believe that the reasons for limited SEAs are not so much technical as they are lack of political and institutional will, limited skills and knowledge, sectoral organizational fragmentation, and a lack of clear environmental priorities on some governments' development agendas. Consequently, because of the lack of understanding of the SEA tool and of adequate resources and capacity within government departments and agencies, most clients in ECA view SEA as an unnecessary and bureaucratic step rather than a tool for informing the decision-making process and providing strategic inputs for planning.

Furthermore, it was noted that most SEAs were undertaken under considerable financial and time constraints. There were observed differences in terms of describing mitigation actions, consideration of alternatives, monitoring, and assessing interrelationships among impacts. Thus, the quality and effectiveness of the SEA process varied, reflecting the resource constraints, lack of methodological guidance, unclear internal responsibilities, and ultimately the limited capacity of participating stakeholders.

Public engagement is critical. Undertaking the SEA report in a participatory and transparent manner is important in order to avoid criticism from NGOs or other interested stakeholders. Also, proper identification of stakeholders, highly interactive modes of public involvement, and

analysis of public participation effectiveness are keys to a good-quality SEA.

Finally, it is important to seek or improve political commitment for SEA at the highest as well as at local levels.

In ECA, it is vital to use SEA despite institutional weaknesses and insufficient capacity for implementation to support long-term sustainability objectives and effective environmental intersectoral dialogue. Consequently, technical assistance (for instance, training activities for staff, development of SEA guidelines for a sector or specific issues such as cumulative impacts, and donor coordination and exchange of experience on SEA) should be provided to support innovative ways to promote leadership in capacity development for SEA in the Region.

Also, it should be recognized that not all entry points for SEA have been fully explored in ECA. For example, various countries have finalized poverty reduction strategies but few or none have triggered the development of an SEA. Furthermore, several Country Water Notes (in 2003) have been prepared to review issues and directions of water resource management in Southeastern Europe. While these Notes also provided a brief description of the socioeconomic and geographical context of the water sector in these countries, none have addressed any related environmental impacts and alternatives.

It will be worthwhile to continue reviewing the effectiveness of the integration of SEA into strategic documents (for the ongoing assignments) and to compare the SEA implementation in EU member states with countries from other regions where this tool has been applied. Therefore, it is recommended to provide a more detailed update of the progress with SEA in developing countries in the ECA Region to better identify the needs and opportunities for SEA capacity building and to enhance the understanding of SEA systems and implementation modalities in this Region.

Also, given that almost all client countries in ECA are subject to SEA regulations such as the EU Directive or the Espoo Convention, it will worth elaborating further on the benefits and costs of these regulations, particularly in terms of improving public decision making, environmental planning, or social learning in the design and implementation of public policies.

The establishment of the World Bank Community of Practice for SEA is important, as it will allow monitoring of the development of national and transboundary SEA activities while providing knowledge sharing on relevant resources, information, and experience from all Regions. With the increasing policy development and innovative instruments such as programs for reform lending in ECA and other regions, the SEA could be the strategic tool to draw attention to long-term policy and development constraints concerning countries' environmental assets and as an economic resource. There is a need for SEA terms of reference related to specific sectors and the development of concrete guidance for SEA issues such as cumulative impacts, SEA prioritization, or the assessment procedure.

Finally, it will be important to facilitate public access of SEA reports in national and international key information sources/tools and to provide information on the overall SEA process design and outputs (including public participation) to international and national stakeholders in order to strengthen SEA good practices.

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