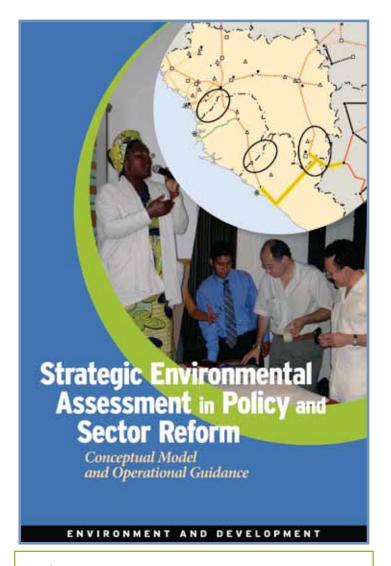
environment department ENVIRONMENT NOTES



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Strategic Environmental Assessment SECTOR POLICY

Greening Growth through Strategic Environmental Assessment of Sector Reforms

Fernando Loayza, Daniel Slunge, Rob Verheem, and Anna Axelsson

Overview

Policy makers are under increasing pressure to deliver policies that not only foster employment and growth but also are environmentally sustainable. Green growth seeks for even more ambitious results where employment and growth are stimulated by technological and institutional changes arising from better environmental stewardship and adaptation to and mitigation of climate change. As green growth may become the growth paradigm for the 21st century, policy makers require policy tools for addressing this challenge.

Strategic environmental assessment of policies (policy SEA) is one of these tools. Policy SEA is an analytical and participatory approach for incorporating environmental, social, and climate change considerations in sector reforms. Based mostly on results of the World Bank's SEA Pilot Program (World Bank and others 2011), this note briefly discusses what policy SEA is, why policy SEA is needed in greening growth, when policy SEA could be applied, and who should be involved in policy SEA. Acknowledging that sector reform is a unique opportunity for major policy and institutional changes,

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the note argues for policy SEA as a proactive, systemic, and strategic approach that promotes environmental and social sustainability of growth-oriented reforms (green growth).

A Strategic Approach for Managing Environmental and Social Risks and Opportunities

The need for greening economic growth is receiving increasing political attention.² This interest comes from a growing understanding of the economic costs associated with climate change and loss of ecosystem services. It also acknowledges the growth opportunities of an environmentally smart growth process such as green jobs creation and the fostering of technological change. (Stern 2006; World Bank 2010a; OECD 2010; UNEP 2011).

The high economic growth of countries such as Brazil, China, India, Indonesia, and South Africa is creating an unprecedented demand for energy, water, land, and raw materials. In the next decades, billions of people will aspire to achieve a middle-class standard of living. This will significantly increase the existing pressure on limited environmental resources. The sheer scale of expected global growth makes it impossible to ignore the systemic and macro environmental risks facing humankind, which come on top of existing environmental issues that traditional policies have been unable to tackle. Furthermore, the implementation of policies to tackle global environmental change is expected to induce large-scale innovation and technological change leading to new opportunities for economic growth. As a result, environmental sustainability is moving to the core of the growth agenda.

The issues at stake are challenging, as manifested in a range of global assessments of the state of the different ecosystem services (Millennium Ecosystems Assessments 2005). The cumulative impact from an increasing number of separate activities have resulted in, *inter alia*, soil erosion and deforestation, water degradation in river basins, and climate change. Several planetary boundaries, which define the safe operating space for human-

ity with respect to the Earth system, might have been surpassed (Rockström and others 2009). Migration and involuntary resettlement have worsened environmental degradation because newcomers have limited allegiance to local governance structures and culture. Furthermore, the capacity to address these challenges and manage natural capital in a sustainable way is constrained. For example, environmental management in poor and centralized states is often limited to reviewing environmental impact assessment studies and issuing permits, leaving compliance to the whim of those regulated. In several cases, communities affected by environmental degradation have borne the brunt of the costs of growth policies while others, living in distant places closer to centers of power, have received most of the benefits. As a result, environmental degradation has exacerbated economic and social inequalities fostering conflict and political instability.

The need for a more systemic and proactive approach to integrate environmental and social priorities in the policies and instruments for economic growth is evident. A strategic lens that accounts for cumulative impacts, institutional and governance weaknesses of existing environmental policies, asymmetries in power, and asymmetries in the distribution of environmental and social benefits and costs of growth is badly required. Policy SEA is such a lens (Box 1).

Benefits of Policy SEA

Policy SEA can enhance the greening of growth by:

• providing data and analysis of the capacity of natural resources and environmental services to support sectorwide economic activities and sector growth. The SEAs for the tourism sector in Honduras and Mexico, for example, developed scenarios of tourism demand and supply to assess the sustainability of alternative strategies such as mass tourism and upscale nature and cultural tourism. These scenarios integrated considerations of sustainability, resilience, and economic growth in land use plans (Brakarz and Quintero 2005; World Bank 2005). Multi-country clusters of mining activities and ancillary power and

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Box 1. What is Strategic Environmental Assessment (SEA)?

SEA is an approach used by governments world-wide to safeguard sufficient quality of information, participation, transparency, and accountability of their strategic planning. Typically it is laid down in regulation. Originally designed as an extension of environmental impact assessment (EIA), the world-wide most used assessment approach at project level, SEA has developed into a more strategic direction, responding to the different needs politicians and governments have at the strategic level. The essence of SEA is to integrate into planning and policy making a continuous process of fact finding and dialogue with civil society and the private sector, aiming to influence decision making for environmental and social sustainability.

SEA has been used in industrialized and developing countries. The United States was the first country to introduce SEA regulation. In Europe, SEA is mandatory. Many developing countries have also adopted legislations or regulations in SEA (Ahmed and Fiadjoe 2006). Among others, these include Chile, China, Ghana, Guatemala, Indonesia, Lebanon, Mexico, Morocco, South Africa, and Vietnam, Most SEAs have been undertaken in support of programs and land use plans. Application of SEA in policies has been sparse but recently its use in developing countries has increased mainly to incorporate environmental considerations in environmentally sensitive sectors such as mining and forestry. Climate change may further encourage the use of SEA in policy and sector reform. For example, the Forestry Carbon Partnership Facility will use policy SEA approaches in the preparation of country strategies for the reduction of deforestation and forest degradation (see Slunge and others 2011).

transport infrastructure were identified in Guinea, Liberia, and Sierra Leone through a SEA focusing on mining reform and regional integration. The risk of deforestation and loss of biodiversity in the upper Guinean forest was factored in assessing the clusters (World Bank 2010b). In addition, the data

- and information provided by an SEA could be a first step of a larger effort to monitor the progress in achieving green growth transformations.
- bighlighting institutional and governance gaps or constraints affecting environmental and social sustainability. In Hubei, China, the SEA for the Road Network Plan suggested data sharing of baseline analyses and inter- and intra-institutional coordination. Although some recommendations created controversy, they also stimulated a more detailed monitoring of the overall development of the road framework. Likewise, the SEA of the Kenya Forests Act raised awareness of the need for inter-ministerial collaboration, and facilitated understanding of the new forest-users rights in enhanced forest management by rural communities (World Bank and others 2011).
- promoting capacity building and institutional, legal, and regulatory adjustments critical for environmental and social sustainability of sector reform. The SEA of Lao PDR's Hydropower Development Plan contributed to the adoption of a National Policy on Environmental and Social Sustainability for the Hydropower Sector in 2005, the improvement of resettlement and consultation practices, and the creation of a Watershed Management and Protection Authority (Morgan and others 2009). These actions have led to a less damaging growth upon which further progress can be made. Also, the West Africa Minerals Sector Strategic Assessment clarified the link of regional harmonization of national mining policies with enhanced governance of the minerals sector that lead to a proposal of a multistakeholder consultative framework at the local, national, and regional levels (World Bank 2010b). With assistance of the World Bank this proposal is being adapted to national mining reforms in Burkina Faso, Liberia, and Sierra Leone.
- strengthening accountability on the management of environmental and social risks through increasing transparency and empowering weaker stakeholders. Policy SEA interweaves analysis and public participation. Policy SEA involves all key stakeholders in the selection of environmental and social priorities, exposes them to the trade-offs and dilemmas of

policy making, and engages them in validating the SEA recommendations, and in monitoring and in following up implementation. SEA can also provide a useful framework for monitoring progress of the reform. For example, the report of the West Africa Minerals Sector Strategic Assessment, which advocates the need for regional mining sector reform, includes an action matrix that comprises priority reform areas; short, medium, and long term actions; and monitorable outcomes of these actions (World Bank 2010b, 123-127). It is through these processes that SEA promotes transparency and strengthens civil society influence on policy making. This reduces the risk of regulatory capture by powerful interests. This important benefit of policy SEA is further elaborated in Box 2.

Box 2 points to situations where addressing specific priorities may lie outside the purview of the sector, such as reforming land access rights and planning systems, which would require actions at a higher level than sector reform. The ability of policy SEA to call the attention of policy makers and stakeholders to cross-sector constraints and opportunities makes policy SEA a truly strategic process.

When to Consider Applying Policy SEA?

Because of its analytical and public participation components, policy SEA requires investment in time and money. In the World Bank's pilot program on SEA (World Bank and others 2011) a rapid SEA required

Box 2. Empowering Stakeholders through Policy SEA in the Mining Reform of Sierra Leone

Policy SEA helps policy makers to identify environmental, social, and climate change related issues linked with a sector. Even more importantly, it helps to identify which of these issues need to be given priority in the policy reform process. For example, the SEA of the minerals sector in Sierra Leone (World Bank 2008) showed that communities affected by mining activities had the following priority concerns: land and crop compensation and village relocation, sanitation and water pollution, deforestation and soil degradation, child labor, and postclosure reclamation. But the SEA also identified differences in priorities between provinces: for example, community development and participation were seen as priorities in the southern and western regions, while the negative impacts of blasting were considered a priority in the eastern region. These priorities gave policy makers, the private sector and civil society, a clear indication of the environmental and social issues that need attention across the country and in specific regions.

Empowering stakeholders by making them select the policy SEA priorities was reinforced by calling their attention to the following two sets of issues:

- 1. The capacity, institutional, and governance constraints that inhibited the government to address the priorities
- 2. The ability of the proposed sector reform to address these constraints

While an examination of constraints pointed to the usual suspects—for example, the lack of human and financial resources for ensuring compliance with existing regulations—it also threw light on more complex social and cultural issues. The analysis of postclosure reclamation showed that chiefs granted miners access to land on the condition established by law that miners pay a fee for reclamation to central authorities. However, in practice these resources were rarely paid and, if paid, they were insufficient to cover the reclamation costs of abandoned mines and open pits. Neither the state nor the miners could be effectively prosecuted and the villages had to bear this cost. Because in practice little could be done when mining activities ceased, chiefs tried to maximize compensation for granting access to lands, which led in some cases to rent-seeking behavior. The SEA discussions showed that addressing this problem requires more transparent and participatory mechanisms for granting access to land, and coordination between customary and government institutions. Thus, the SEA highlighted the need for mending the broken link in development planning across the village, provincial, and national levels in Sierra Leone (World Bank 2008).

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around three months and US\$30,000 to be completed. In the same program, full-fledged policy SEAs took from nine months to eighteen months and from US\$120,000 to US\$500,000 to be completed. Although there is room for cost and time optimization, the fact remains that policy SEA should be used wisely and mainly when significant policy changes such as sector reforms are envisaged.

Sector reforms are major shifts in policy processes usually undertaken to create an enabling environment for increasing investment, output, and productivity. Because of these overriding goals, reform priorities are traditionally defined in terms of economic and efficiency goals that are seldom interwoven with environmental and social priorities. Critical sustainability issues are often overlooked. As a result, the link between environmental and social priorities and the reform's economic and efficiency goals is weak and many times lost. The purpose of policy SEA is fostering green growth by reverting this disconnection early on when the reform is conceived. In addition to sector reform, Box 3 lists circumstances favorable for applying policy SEA.

Who Should Be Involved in Policy SEA?

This note has argued that policy SEA should be well integrated with policy formulation and implementation. When possible, the team undertaking the policy SEA should be members of the policy team preparing

the reform. This facilitates the interaction between sector specialists, who are knowledgeable on enabling and blocking factors for sector growth, with specialists familiar with the environmental, social, and climate change challenges facing the sector. For this reason the sector leading the reform should also be in charge of the policy SEA. The role of the environmental authority is that of an advisor who provides information and knowledge through inter-ministerial advisory or steering groups governing the SEA. Unlike environmental impact assessment of projects, policy SEA should not be seen as an environmental safeguard but as a strategic planning tool.

Critical for successful policy SEA is to establish a framework to enable a constructive policy dialogue and ownership of the SEA results. The following elements were found important for enabling multistakeholder frameworks (World Bank and others 2011):

• The lead agency should have both the capacity and incentive to take ownership of the SEA process. If these are not in place, SEA capacity building needs to be undertaken prior to the commencement of the SEA.³ For example, under the context of a wide-ranging SEA regulation Bhutan undertook a substantive capacity-building program across economic development ministries. As a result, the National Planning Agency of Bhutan that was originally reluctant to take on the environmental mainstreaming agenda now recognizes that it is the key agency for enforcing the requirement to inte-

Box 3. Windows of Opportunity for Policy SEA

- A change of government to one that is more open to deliberation, and to the incorporation of environmental issues in development policy;
- A government's development strategy prioritizes specific sectors for development. Usually this would lead to sector reform of these same sectors;
- Market or environmental conditions change radically, which underline the need for major policy revisions. Examples might include the food crisis and steeply rising oil prices that drive the introduction of renewable energy technologies, or economic stimulus packages that favor green jobs;
- · Civil conflicts are resolved and a new desire for development presents itself; and
- Civil society organizations are given more freedom to participate and advocate.

Source: Adapted from World Bank and others 2011, 61.

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- grate environmental considerations into all sector development plans (Annandale and Brown 2010). Multisector ownership also could be an alternative, particularly when capacity and institutional measures are required in several sectors. This was the case in the SEA that supported the implementation of the Liberian National Forestry Law of 2006, where besides the forestry sector, mining, agriculture, and planning were also involved (World Bank and others 2011, 60).
- SEA steering committees can be mechanisms to facilitate intersectoral coordination. However, ensuring meaningful participation depends on steering committee members having the right incentives to participate. In the Hubei Road SEA, the incentive was access to data and analysis that provided a more comprehensive picture of environmental issues in transport planning (World Bank 2011). In the mining SEA in West Africa, sharing national experiences, mutually comparing challenges of

- mining sector reform, and convening international meetings of steering committee members kept the interest in the progress of the SEA high.
- Sector reform is typically a sensitive political process. Policy makers being subject to political pressures risk paying low attention to recommendations of environmental assessments unless there are constituencies that support them. Engaging in the policy SEA key private and civil society stakeholders is, therefore, critical. These stakeholders also need the right incentives for participation. A transparent multistakeholder dialogue where the voices and concerns of stakeholders can be heard and articulated into specific reform's priorities and actions has proved to be an effective mechanism for engaging stakeholders (World Bank and others 2011). This enhances the political support and legitimacy of the reform. Box 4 presents some hints and good practices on multistakeholder dialogue in policy SEA.

Box 4. Engaging Stakeholders in Multistakeholder Dialogue

The multistakeholder dialogue conducted as part of the policy SEA of the mining sector in West Africa created strong demands for a more permanent multistakeholder platform which could follow up on the integration of environmental and social concerns in the implementation of the West Africa Mineral Governance Program and other large-scale mining initiatives in the region. This dialogue was undertaken at the regional, national, and village level (World Bank 2010b, 187-213). A profile of common and differentiated priorities at these different levels of participation emerged, which gave policymakers a nuanced picture of the sustainability challenges facing the mining sector in West Africa. In the SEA of the forest sector reform in Kenya, an important outcome was a policy action matrix. This matrix was designed to be a key guide and monitoring device for the implementation of the new Kenya Forests Act. Endorsed by all the different groups of stakeholders (including the Ministry of Finance and the Ministry of Environment and Natural Resources, civil society and private sector organizations), the matrix is an important tool that permits stakeholders to monitor progress on implementation and suggest adjustments when needed (World Bank, 2007).

An important element of multistakeholder dialogue is to engage marginalized stakeholders such as women, local and indigenous communities, and the youth. Their dispersion creates constraints for their collective organization, and they are thus easily sidelined in policy dialogue by more powerful stakeholders. The challenge is, therefore, to bring the voices of these groups to the dialogue through processes that are culturally adequate. Surveys combined with focus groups have been reasonably helpful tools to this effect (World Bank and others 2011). Still, care needs to be taken to ensure that the outcomes of such activities are not diluted when the policy dialogue moves ahead to formulate policy recommendations.

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Conclusions

Policy reform is typically a sensitive political process that is hard to undertake. Policy makers may think that incorporating environmental, social, and climate change considerations into sector reforms would make reforms even harder to be implemented. Quite the contrary—experience shows that policy SEA may increase the support for and legitimacy of sector reform because it opens the policy process to the influence of all key stakeholders within well-defined boundaries. By giving voice to marginalized stakeholders, policy SEA brings the ultimate beneficiaries of sector reform into the policy dialogue and paves the way for their constructive participation during reform implementation. Greening sector reform through policy SEA enhances the sustainability of sector reform, hence the sustainability of growth.

Because sector reform in partner countries is usually assisted by the donor community, policy SEA could be an important approach for aid agencies and multilateral banks to ensure that their support to sector reforms contributes to greening growth. This would require that aid agencies and multilateral banks have a long-term commitment to greening sector reform through supporting capacity development and institutional strengthening on policy SEA. It is also likely that policy makers in partner countries would seek technical assistance on policy SEA as the recognition of the need for greening growth is increased. These trends may eventually lead in some countries to the use of policy SEA across all key sectors undergoing reform for fostering economic growth. Then, integration of environmental, social, and climate change considerations in sector reform would simply be a regular component of robust policy making.

Endnotes

1. The publication Strategic Environmental Assessment in Policy and Sector Reform: Conceptual Model and Operational Guidance (World Bank and others 2011, chs. 3 and 4) provides guidance on how to undertake policy SEA, and discusses the role of stakeholders and government agencies in implementing SEA at the policy level.

- 2. Analytical work to clarify and operationalize the concepts of Green Economy and Green Growth is under way. The World Bank is currently preparing a Green Growth report. The OECD is developing a Green Growth Strategy. UNEP has prepared a Green Economy report (UNEP, 2011). Green Economy will be a key theme at the UN meeting in Rio de Janeiro 2012 and several countries have developed strategies for low-carbon growth.
- For example, the UNDP-UNEP Poverty-Environment Initiative (PEI) has been supporting countries in capacity building for environmental mainstreaming, which contributes to capacity building in policy SEA. Further information can be found in the following Web site: http://www.unpei.org.

References

Ahmed, Kulsum, and Ivonne Fiadjoe. 2006. A Selective Review of SEA Legislation. Results from a Nine-Country Review. *Strategy Series No. 13*. Environment Department. Washington, DC: World Bank.

Annandale, David, and A. L. Brown. 2010. "Integrating Environmental Concerns into Development Planning: A Case Study of Bhutan." Paper presented at IAIA '10, Geneva. April.

Brakarz, Barbara, and Juan Quintero. 2005. Strategic Environmental Assessment for the Honduran Tourism Sector: Integrated Report. Washington, DC: World Bank.

Millennium Ecosystem Assessment. 2005. *Ecosystems and Human Well-Being: Global Assessment Reports*. Washington, DC: Island Press.

Morgan, Glenn, Fernando Loayza, and Hayato Kobayashi. 2009. Lao PDR Nam Theun 2 (NT2) Hydroelectric Project SEA Case Study. *Environment Notes No. 2*. Washington, DC: World Bank.

OECD. 2010. Interim Report of the Green Growth Strategy: Implementing our commitment for a sustainable future. Paris: OECD.

Rockström and others. 2009. A safe operating space for humanity. *Nature* 461:472-475.

Slunge, Daniel, Anders Ekbom, Fernando Loayza, Paul Guthiga, and Wilfred Nyangena. 2011. "Can Strategic Environmental and Social Assessment of Sector Reform Improve Policy Making and Forest Gover-

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- nance?" Working paper, Department of Economics, University of Gothenburg.
- Stern, Nicholas. 2006. Stern Review: The economics of climate change. Cambridge, UK: Cambridge University Press.
- UNEP. 2011. Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication. Advance copy. Online Release. www.unep.org/greeneconomy.
- World Bank, University of Gothenburg, Swedish University of Agricultural Sciences, and Netherlands Commission for Environmental Assessment. 2011. Strategic Environmental Assessment in Policy and Sector Reform: Conceptual Model and Operational Guidance. World Bank Environment and Development series. Washington, DC: World Bank.
- World Bank. 2005. Evaluacion Ambiental del Sector Turismo en Mexico. Study undertaken for MX-Mexico Environmental Sustainability Development Policy Loan—P095510. http://imagebank.worldbank.org/servlet/WDS_IBank_Servlet?pcont=details &menuPK=64154159&searchMenuPK=64154240&

- theSitePK=501889&siteName=IMAGEBANK&ei d=000020953_20090813135112
- World Bank. 2007. Strategic Environmental Assessment of the Kenya Forests Act 2005. Report No. 40659-KE. Washington, DC: World Bank.
- World Bank. 2008. Sierra Leone Mining Sector Reform: A Strategic Environmental and Social Assessment. Report No. 44655-SL. Washington, DC: World Bank.
- World Bank. 2010a. World Development Report 2010— Development and Climate Change. Washington, DC: World Bank.
- World Bank. 2010b. West Africa Minerals Sector Strategic Assessment (WAMSSA): Environmental and Social Strategic Assessment for the Development of the Mineral Sector in the Mano River Union. Report 53738-AFR. Washington, DC: World Bank.
- World Bank. 2011. Strategic Environmental Assessment for Hubei Road Network Plan (2002-2020). Final Report commissioned by the World Bank. Sustainable Development Department. East Asia and the Pacific Region. Washington, DC: World Bank.

