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The World Bank Group

2010 Environment Strategy

Analytical Background Papers

Strengthening Environmental Institutions and Governance: *What Should be the Role of the World Bank Group?*

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November 3, 2010

¹ The authors are grateful to Kulsum Ahmed and Fernando Loayza from the Pollution Management and Environmental Governance Program, our peer reviewers, Herbert Acquay, Juan C. Belausteguigoitia, Ernesto Sanchez-Triana, Ambuj Sagar, and Jacob Werksman, for their extensive comments and suggestions. Irina I Klytchnikova and Ana Nunez Sanchez kindly provided the case studies from the Latin America Region. We would also like to thank participants at the Concept Note review meeting, Environment Sector Board members, participants at the side-event on SEA at the IAIA Annual meeting in Geneva (2010), and participants at the Final Decision meeting.

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1. Introduction

The 2001 Environment Strategy highlighted the importance of environmental institutions and governance in determining both the feasibility of World Bank Group (WBG) interventions and ultimately the environmental and developmental outcomes of these interventions. The Strategy noted that some client countries were not able to act to address the degradation of natural resources and deterioration of environmental quality due to weak institutions and governance. On the other hand, capable institutions and good governance structures, particularly by providing a platform for dispersed interests in society to have their views heard and incorporated in policy formulation, could help ensure that right policies were adopted and, more importantly, enforced. Hence, the Strategy suggested that strengthening environmental institutions and governance needed to be a critical component of WBG operations going forward. Similarly, in consultations on the Concept Note of the 2010 WBG Environment Strategy, a wide range of stakeholders across developing and developed countries have reiterated the importance of this issue and suggested that the new Strategy emphasize this as a key area of WBG operations.

In order to inform the 2010 Strategy, and suggest what role the WBG can realistically play in strengthening environmental institutions and governance, this paper takes stock of WBG operations in this area since the 2001 Strategy. Looking across the spectrum of lending and non-lending operations, the first task is to identify the approaches---points of entry and tools---which have been used to engage with clients. Thereafter, we evaluate whether these approaches have incorporated lessons from past WBG experience and reflect current understanding of how best to enable environmental institutions and governance reforms. We also assess the impact, to the extent possible, of a subset of these projects. Finally, we use this understanding to draw lessons for the 2010 Environment Strategy.

Our analysis indicates that the WBG has undertaken two main types of activities in the area of environmental institutions and governance: assessments (of environmental conditions, and institutional and governance structures) and lending operations geared towards technical capacity development. The chief point of entry for these operations has been government ministries, and secondarily civil society organizations. As a result of the focus on ministries, WBG operations have tended to emphasize strengthening environmental institutions' ability to pick-up signals regarding environmental problems, formulate balanced policy, and their ability to implement. Ensuring that the environmental institutions are being held accountable by strengthening civil society organizations and oversight institutions has received relatively less focus and may be an area of future engagement for the WBG.

The analysis also indicated that a new approach would be needed to ensure a long-term commitment on the part of the WBG, particularly when undertaking capacity development operations. The average length of environmental institutions and governance projects in the period under study was five years. While such a length is appropriate for reforms of formal rules, activities such as capacity development have been argued to require longer-term

engagements. We recommend the WBG consider utilizing instruments such as Adaptable Program Loans (APL) and Additional Financing which allow for sustained engagement. Forming strategic alliances with bilateral and multilateral partners will also be critical in this area.

Strong commitment from the WBG and its partners is particularly important given the apparent reluctance of clients to borrow to strengthen environmental institutions and governance. The vast majority of WBG operations in this area were found to be supported by grants – suggesting weak client demand for such projects. Overcoming weak client demand will be a challenge for the WBG moving forward as client commitment to reform has been highlighted as a critical determinant of project success.

Next we consider whether the WBG has heeded recommendations to both selectively intervene in countries and to differentiate its approach to clients based on client characteristics. The 2001 Environment Strategy argued that the WBG should focus on clients demonstrating adequate commitment to reform and possessing sufficient capacity, otherwise reform is likely to be ineffective. To evaluate the extent to which this advice has been heeded, we check whether the WBG has engaged different types of countries than the wider WBG portfolio when conducting environmental institutions and governance reforms. Projects in our portfolio sample were marginally more likely to take place in middle income countries with stronger democracies and higher quality governance relative to the wider WBG portfolio, perhaps reflecting a response to client demand and commitment.

In addition to selective intervention, the 2001 Strategy and others have argued that the project approach be differentiated according to particular country conditions relevant for project success. Our analysis suggests the WBG may need to take more care in ensuring that the project approach is tailored to country contexts. WBG approaches to countries of varied levels of democracy, governance, income level, and political stability were compared to determine whether interventions were being tailored to the type of country. These comparisons revealed a modest differentiation across types of countries in the activities undertaken, points-of-entry used, and institutional abilities targeted.

A review of the available assessments of projects in our portfolio echo several lessons already mentioned. Both non-lending and lending projects reiterated that country commitment, wider stakeholder involvement, and sustained engagement by the WBG were needed for project success. Non-lending evaluations noted the value of analytical work to define policy and regulatory frameworks prior to Technical Assistance (TA) activities. Evaluations of lending projects stressed the importance of matching reform efforts to initial country contexts, in particular the initial state of legal frameworks and institutional capacity.

Finally, we draw lessons from our analysis and provide recommendations for the 2010 Environment Strategy. We recommend the continued use of two types of assessments in particular, Country Environmental Assessments (CEA) and Strategic Environmental Assessments (SEA), to address many of the discussed shortcomings of past WBG operations. CEA is an

internal WBG analytic tool undertaken in consultation with clients to integrate environmental considerations into country assistance strategies and to guide institutional reform and capacity development efforts. Similarly, SEA refer to a range of approaches and tools for integrating environmental and social considerations at the policy, plan, or program level. These detailed assessments of local conditions can help ensure that the WBG differentiates its approach to clients by matching reform efforts to initial client institutional conditions. The call for analytical work to be done before conducting TA activities could be met by encouraging the use of CEA and SEA or even possibly making them mandatory. Also, the consultative nature of these tools can strengthen client commitment through wider stakeholder involvement.

The results of our content analysis indicated that the critical institutional ability of accountability requires more attention in WBG operations. We recommend that Development Policy Loans (DPLs) could be applied more directly to strengthen institutional accountability. DPLs have been used to reform formal rules that govern environmental institutions and to recognize achievements. These loans could also be made more effective by fully incorporating recommendations from CEA and SEA.

To address the need for sustained engagement and weak client demand for environmental institutions and governance reforms, we recommend the use of long-term oriented instruments such as APLs, strategic alliances with bilaterals and multilaterals, and the continued use of blended instruments (lending and grants such as through the Global Environment Facility) which can help create demand from clients hesitant to borrow for such reforms. Greater engagement with civil society organizations will also serve to strengthen accountability and promote greater client demand at the political level.

The remainder of the paper is organized as follows:

- Section 2 presents background on the importance of environmental institutions and governance and lessons from past experiences predating the 2001 Environment Strategy.
- Section 3 describes the portfolio and presents the results of the content analysis.
- Section 4 reports on the assessments of the effectiveness of the operations in the portfolio and gleans lessons to be applied to future WBG operations.
- Section 5 concludes and presents recommendations for the 2010 Environment strategy.

2. Background

2.1 Defining institutions and governance structures

Institutions are the “rules of the game” which consist of both formal legal rules, such as regulations, laws, and constitutions, and informal social norms, such as tradition and customs, that govern individual and organization behavior and structure social interactions (North 1990). Organizations can be defined as groups of individuals bound by a common purpose (North, 1990), examples of which are private industry and citizen groups, and local and national government ministries among others. Competent institutions and organizations are capable of picking up signals about problems and understanding their causes, balancing interests fairly and efficiently in formulating policies, and executing policies in an accountable manner (WDR 2003).

Relatedly, governance is the exercise of authority in decisions, regulations, and enforcement, that determines how we will act and who will benefit. Good governance is epitomized by predictable, open, and evidence-based policymaking; a bureaucracy imbued with a professional ethos; an executive arm of government accountable for its actions; and a strong civil society participating in public affairs – all behaving under the rule of law (WBG, 1994).

2.2 Environmental institutions and governance structures are critical to the provision of environmental assets

Institutions such as property rights and the rule of law underpin well-functioning markets. Similarly, institutions are critical to ensure the supply of environmental assets that are not likely to be provided by markets spontaneously because of spillovers and lack of well-defined property rights. For example, rules of access that restrain the amount of firewood a household can collect from village common forests, or the amount of timber that concessioners can harvest from public forests, can help to ensure that natural assets are maintained sustainably. Similarly, emission standards and tradable permits that restrain the amount of pollutants that can be emitted can help to ensure that environmental assets such as clean water and clean air are not underprovided. Good governance structures help ensure that right policies are adopted and, possibly more importantly, enforced by providing a platform for dispersed interests in society to have their views heard and incorporated in policy formulation.

Providing good policy advice and helping with direct provision of outputs is therefore not enough; the WBG also needs to help create capacity for development by helping governments develop processes and incentives to design and implement good policies. In particular the WBG can assist in the establishment of property rights, capacity development, removing government induced distortions, piloting systems of payments for environmental services to deal with market failures; strengthening environmental policy, regulatory, and institutional frameworks; strengthening environmental assessment systems; and improving governance coordination across sectors and levels of government. Additionally, strengthening the capacity of civil society

organizations and the awareness of the general public can create demand for good policies and help hold governments accountable.

It is important to recognize at the outset that the attempt to strengthen institutions and governance structures is an ambitious agenda given the “long lead times involved in social evolution and transformation” (WDR 2003). Existing institutions and governance structures in countries have evolved over a long period of time and are resistant to change, even though it is often essential to change these structures to achieve environmental sustainability. These structures are likely to be persistent and change slowly. Consequently, and in order to further the goals of environmental sustainability, it is critical to pursue a two-pronged approach. In the near term, policy formulation must strive to achieve environmental goals within the constraints of existing institutions and governance structures. Sometimes optimality will have to be sacrificed in the interest of feasibility. Simultaneously, the WBG must apply a long-term strategy which consistently pushes to strengthen and improve institutions and governance structures to achieve environmental sustainability. This paper focuses on the WBG operations with the latter strategy.

2.3 WBG Experience in Building Environmental Institutions and Governance Structures

The 2003 World Development Report (WDR) provides a template for which institutional functions should be targeted for reform in strengthening environmental institutions and governance. The report cites four key abilities as critical. First, well-functioning institutions must be able to pick-up signals about environmental problems and understand their causes. In particular, institutions should be able to gather and disclose information about environmental trends; provide mechanisms of public participation and respond to feedback; and work with stakeholders and ministries to understand the causes of problems. Critical to this ability is the strengthening of knowledge institutions which provide a foundation for sound policy formulation and accountability. Second, capable institutions must be able to balance interests fairly and efficiently in formulating policies. This ability refers to creating forums for negotiation to take into account the perspectives and incentives of different stakeholders; and mechanisms for coordination across sectors and between levels of government. The third and fourth ability refer to the capacity to not only implement policy, but to implement in an accountable manner. Competent institutions in this regard will have administrative capacity at the national and sub-national level; adequate formal rules; and independent oversight institutions and judiciary. In our content analysis below, we will assess the extent to which the WBG has adequately targeted each of these critical institutional abilities.

While the 2003 WDR points to which institutional abilities the WBG ought to target for reform, reviews and analyses of past WBG operations in institutional development highlight factors that must be taken into account to ensure such reform efforts will be successful. A number of factors give the WBG a comparative advantage for institutional capacity development (Margulis and Vetleseter, 1996). A continuous relationship and mutual trust with beneficiary countries, sound technical capacity, and cross-sectoral involvement. However, despite the comparative

advantage, the WBG's track record in this area has been mixed. The 2001 Strategy pointed out that practical improvements in institutional development have been elusive with exceptions in, for example, the Poland Environment Management Project (see Box 1) and Chile Environmental Institutions Development Project (see Box 2). Failure in the past has been attributed to several factors by reviews in the 2001 Environment Strategy, IEG (2009), and others. The main factors include:

- *Narrow and Technocratic View:* The approach to capacity development in the past has largely focused on government interlocutors and funding consulting services, purchasing computers, and other inputs. Capacity development must involve more than simply procurement if it is to be effective and enduring.
- *Lack of Differentiated Approach:* The WBG has often been focused on best-practice models without sufficient attention to feasibility. There has been insufficient attention to research and analysis of local factors to devise practical solutions to institution building (Sagar and VanDeveer, 2005).
- *Short-Term Engagement:* Past approaches have used traditional WBG instruments – SALs, TA, and investment loans that do not allow for long-term donor commitment. Capacity development in particular has been most effective when WBG support has been strong and continuous over an extended period of time.
- *Lack of Client Commitment:* When client commitment has been lacking, institutional improvements were rapidly reversed after the completion of the project or the projects have not been implemented adequately. The experience from lending projects in particular indicates that lack of government commitment and ownership has been the greatest obstacle to improved environmental management and sustainable natural resource use.
- *Lack of Client Capacity:* Interventions have also failed due to low capacity of client countries. Insufficient attention has been paid to the complexities and practicalities of implementation in client countries.

In addition to responding to these limitations by calling for the WBG to take a more differentiated approach to clients and to undertake sustained engagements, two further recommendations were suggested in the 2001 Strategy:

- 1) *Selective Intervention:* WBG intervention in capacity development and policy advice should be compatible with client countries commitment; otherwise reform is likely to be ineffective. For example, analytical work can have significant impact on client countries' policies and investment decisions if local counterparts collaborate in the study, have high capacity to absorb, internalize, and disseminate its findings, and are willing and able to influence public awareness and policymaking. In countries with limited commitment or capacity,

strengthening environmental institutions and governance can perhaps be addressed as part of interventions in other sectors.

- 2) *Civil Society Engagement:* Commitment can be built at the political level by supporting institutions for collective action, increased transparency, access to environmental information, and public participation in decision-making. Additionally, the examples of Poland and Chile illustrate that public environmental concern can be channeled effectively into political action when part of a larger reform.

We will evaluate our portfolio against this understanding of the key institutional abilities the WBG should be targeting for reform, and the extent to which the lessons from past efforts have been heeded. In the next section, we define and describe the portfolio of the projects undertaken in the period 2002 to 2009 in environmental institutions and governance.

Box 1: Poland Environment Management Project and Institutional Development

The 2001 Environment Strategy names the Poland Management Project (09/1989 – 12/1996) as an unusual example of a highly satisfactory institutional development project. The objectives of the project were to provide a framework for analysis of high priority environmental issues in Poland as well as to support demonstration of a decentralized approach to environmental management. An aspect of this effort was to strengthen Poland’s capacity in analysis and design of policy, regulatory, institutional and investment actions to improve environmental quality. In particular, the project supported the introduction and training of specialists in environmental audit techniques, development of air quality monitoring stations, and establishment of water management boards.

The outcome of the project was judged to be highly satisfactory because it achieved its major objectives, exceeded its physical objectives, and is highly likely to achieve sustainable development results.

Factors Leading to Project Success:

- A shared vision between Poland and the WBG concerning the challenge of mainstreaming environmental issues into the economic transition process in Poland.
- A high level of commitment by Poland and the WBG.
- Representatives of stakeholder institutions were consulted in order to identify institutional and professional priorities
- Intensive technical assistance in the early phase of the project which allows for improved implementation in later stages.

Box 2: Chile Environmental Institutions Development Project

The Chile Environmental Development Project (06/90 – 06/98) is also highlighted as a successful institutional development project in the 2001 Environment Strategy. The ICR finds that the outcome of the project is highly satisfactory; the project is highly likely to be sustainable and had substantial development impact.

The project involved two components focused on institution strengthening: (1) Establishing an institutional framework to manage environmental protection and conservation of natural resources. (2) Strengthening environmental management in priority sectors such as forestry and mining. In particular, the project involved activities such as general technical capacity development, development of capacity to conduct environmental impact assessments, legal and regulatory reform, establishment of an environmental information system, and provision of training in environmental and natural resource management.

Factors Leading to Project Success:

- Broad public support
- Transition to democracy provided a unifying event. Environmental disasters may serve this function in other countries.
- High borrower capacity
- Close WBG supervision
- Alignment of sectoral and environmental objectives
- Establishment of non-project funding source

3. Portfolio Content Analysis

In this section, we identify which institutional abilities have been targeted for reform by the WBG and the approaches, points of entry, and tools which have been used in these efforts. We evaluate whether all four abilities highlighted in the 2003 WDR as being critical have been emphasized. The length of the operations in the portfolio is discussed to assess whether the WBG has followed through on previous calls to sustain its engagements when conducting capacity development activities. Finally, we assess whether the WBG has taken a differentiated approach to clients both by intervening selectively and by adopting different approaches across types of countries.

Across lending and non-lending operations, two types of activities, assessments and technical capacity development, were found to be the main focus of operations. Assessment consisted of evaluations of environmental conditions, as well as institutional and governance evaluations such as Country Environmental Assessments and Strategic Environmental Assessments. Table 1 displays the number and percentage of projects which had at least one component dedicated to a particular category.

Table 1: Distribution of 522 Projects Across Categories

Category	# of Projects	% of Projects
General Capacity development	58	11%
Technical Capacity development	207	40%
Governance Coordination	18	3%
Civil Society Outreach	24	5%
Civil Society Partnerships	15	3%
Reform Durability	12	2%
Assessments	239	46%
Policy Formulation	51	10%

Note: Percent of projects does not add to 100 because many projects were associated with more than one category

3.1 Institutional Abilities Targeted and Points of Entry

Mapping projects or project components to institutional ability targeted, be it the ability to pick-up signals, ability to formulate balanced policy, ability to implement, or ability to be held accountable, suggests that projects have not been targeting all four abilities. As shown in Table 2,

accountability is by far the least emphasized of the four abilities, with balancing interests the most prevalent targeted ability.

Table 2: Projects by Institutional Ability Targeted

Abilities	# of Operations	% of Portfolio
Picking-Up Signals	226	43%
Balance Interests	304	58%
Implementation	224	43%
Accountability	65	12%

Note: The percent of the portfolio does not add to 100 percent because most projects targeted multiple institutional abilities

Improving institutional accountability involves activities designed to increase the demand for good governance such as strengthening civil society organizations, formulating policy which requires judicial oversight, and support greater transparency (see Box 4 and Annex 4). The Ministério Público in Brazil is an example of an institution capable of promoting compliance and enforcing environmental laws and regulations (see Box 3 and Annex 3).

Box 3: Accountability and the Case of Public Prosecutors in Brazil

Over the past 50 years, countries in the Latin American and the Caribbean region (LCR) have developed a wide range of environmental law and institutional frameworks aimed at protecting the environment and promoting sustainable development. However, overall compliance and enforcement of these laws and regulations remains a challenge in the region. Brazil’s accountability mechanism is a notable exception. The *Ministério Público* (MP) has played a central role in helping to promote compliance and enforcement of Brazil’s environmental law and regulations. In addition to enjoying administrative and financial independence, the MP is able to employ a wide range of policy tools involving both legal action and cooperation-based enforcement programs. The Public Civil Action Law of 1985 granted the MP with power to promote civil investigation. The MP can request free expert advice from police and other governmental organizations such as environmental agencies in order to build a case for environmental protection (Mueller, 2009). The law also grants the MP and other governmental or non-governmental organizations the power to bring Public Civil Actions before the court. In practice, environmental organizations often bring complaints to the MP rather than filing legal actions themselves relying on the MP’s expertise and capacity to investigate and manage complaints before court. The majority of the MP’s environmental investigations are actually negotiated settlements with potential perpetrators designed to achieve compliance before costly legal action becomes necessary. The Brazilian MP may serve as a model for achieving accountability in certain contexts. Such an institution would be most appropriate in countries with developed legal frameworks, independent enforcement institutions, a receptive judiciary, and an active and engaged civil society.

Box 4: Promoting Social Accountability

As part of an effort to enhance accountability, the World Bank has supported efforts to strengthen civil society organizations (CSOs). These efforts have included building their capacity, increasing their access to government or corporate environmental information, as well as including CSOs as key stakeholders in policy discussions. The Bank has supported the Access Initiative (TAI) which is a network of over 150 NGOs in over 45 countries that seeks to strengthen the capacity of CSOs in developing countries to obtain access to environmental information, as well as participate in decision making and access to justice in matters relating to the environment.

In the area of extractive industries, the Bank has endorsed and supported the Extractive Industries Transparency Initiative (EITI). Established in 2002, EITI was designed to promote and support improved governance in resource-rich countries through the full publication and verification of company payments and government revenues from oil, gas, and mining. Among the benefits to participating countries, EITI can (a) provide a systematic framework for collaboration among governments, companies, and CSOs; (b) demonstrate a national commitment to transparency; and (c) help citizens organize themselves to hold agencies accountable for how revenues are used in public expenditure programs.

Promoting demand-side accountability is challenging for the Bank given that its main counterparts are governments. The Ethiopia Productive Safety Net Program (PSNP), which provides resources to food-insecure households, serves as an example of how the Bank can facilitate demand-side accountability. In order to ensure accountability in the project, the Bank assisted in organizing a consortium of CSOs by mobilizing funds to finance the consortium from bilaterals and the European Community. While the Bank could not directly use loan or grant funding to finance the consortium, this example serves to illustrate that the Bank has the ability to organize demand-side accountability by partnering with other donor organizations.

The Bank is also part of multi-donor partnership programs which engage civil society among other stakeholders in promoting accountability and improved governance in the forest sector through the Program on Forests (PROFOR) and the fisheries sector through the Global Program on Fisheries (PROFISH).

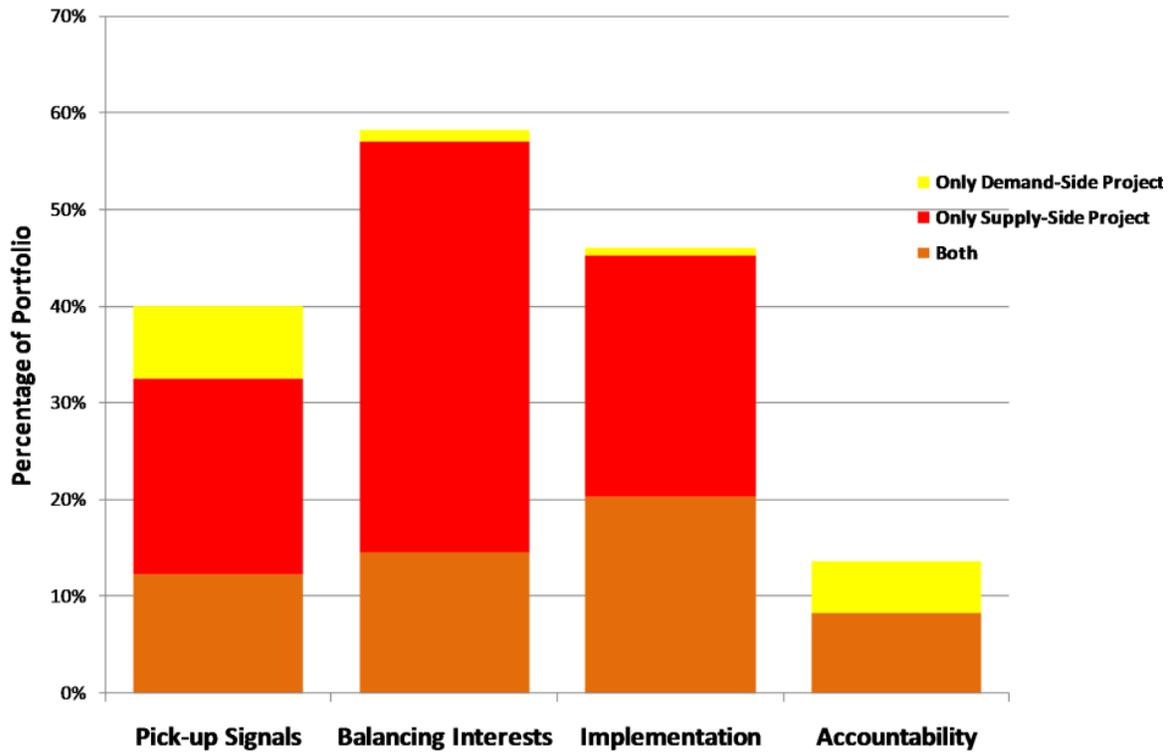
The limited attention paid to accountability in the portfolio reflects the greater emphasis on strictly supply-side than demand-side operations in the portfolio. As Fig. 1 depicts, operations which involved solely supply-side interventions represent the majority of the portfolio and serve to target the key institutional abilities other than accountability. Most often strictly supply-side interventions involved training and technical capacity development within key government ministries. Supply-side operations also consisted of the creation of new technical monitoring divisions within environment ministries such as the Center for Biodiversity Monitoring and Forecasting in the Brazilian Ministry of Environment. Formulation of new regulatory frameworks and the integration of environmental concerns into other sectors are other examples of supply-side activities.

Similar conclusions were reached in a recent review of CEAs (Pillai 2008), which found that while CEAs (see Box 5) had helped to improve the quality of institutional analysis, they had focused on public sector institutions rather than private sector or civil society, and within public sector, focused on mandates, staffing, and resources, rather than decision-making processes or assessment of vertical and horizontal accountability structures.

This analysis suggests that future operations to strengthen environmental institutions and governance be cognizant of these constraints and work to ensure greater civil society

involvement and target all four abilities including accountability. Stakeholders in environment strategy consultations have also emphasized the need to engage with civil society.

Figure 1: Projects by Institutional Abilities and Supply/Demand Point of Entry



Box 5: Country Environmental Assessments (CEA)

CEA is an “upstream analytic tool that aims to integrate environmental considerations into country level development assistance strategies and programs and to guide institutional reform and capacity-building efforts” (Pillai and Lunde, 2006). The primary objective of a CEA is not capacity development but rather to undertake an assessment. Yet to the extent that a CEA is undertaken in a consultative manner it can indirectly lead to capacity development. CEAs also enable donor coordination. The need for such a systematic tool was identified by the Environment Strategy 2001, in particular a tool that would link capacity to specific environmental problems that have been identified as priorities. Initially funding for CEAs was provided through BNPP and TFESSD and about four years ago a special trust fund for CEAs was set up which will close in FY11.

“CEAs have contributed to a range of outputs and processes. Types of results included input to policy and institutional changes, identification of lending operations, integration of environment into CASs and PRSPs, input to DPLs, identification of strategic environmental assessments, and in some cases, improvement or facilitation of donor coordination” (Pillai, 2008). With a few exceptions, however, CEA recommendations have not been incorporated into DPL matrices. A reviewer suggested this may be due to the limited number of 4-6 conditions allowed in DPLs. Sector DPLs will also be likely to prioritize other conditions over the environment. Therefore, stand-alone environment DPLs may be required to move the recommendations of CEAs forward.

3.2 Length of Engagement

As Table 3 above indicated, the principal instrument currently being used in the lending projects is Specific Investment Loan, accounting for 63% of all lending operations. Though there are a relatively few number of DPLs, these are likely to swamp the portfolio in terms of loan amounts. Furthermore, the average length of lending projects was 5.0 years. While some elements of strengthening institutions and governance, such as reforming formal rules that govern institutions, do not require long-term engagement, other elements, in particular capacity development, do. A 2008 IEG review of the WBG's environment portfolio noted that capacity development projects that entailed long-term engagement on the order of ten to fifteen years were more appropriate and successful as compared to projects of shorter length.² Consequently, while SILs and DPLs (which are increasingly become the instrument of choice) are likely to help reform formal rules, other instruments which allow for long-term engagement, such as APLs, will be needed to help develop capacity.

Table 3: Average Project Length of Primary Lending Instruments

Lending Instrument	Avg. Length (Years)	Std. Dev.	# of operations
Specific Investment Loan (SIL)	5.3	1.5	116
Adaptable Program Loan (APL)	5.0	3.0	14
Technical Assistance Loan (TAL)	4.9	2.1	10
Development Policy Loan (DPL)	1.8	1.7	11
Other	3.8	2.4	33
TOTAL	5.0	1.9	184

3.3 Differentiated Approach

In order to assess whether the WBG has properly tailored institution building efforts to country contexts, countries were grouped according to income and political stability, government effectiveness, and degree of democracy. These factors have been argued to be relevant for the success of institution building efforts and thus important considerations in the design of projects. First the portfolio sample was compared to the overall WBG portfolio in order to gauge whether the WBG engages different types of countries in the area of environmental institutions and governance than in other areas. Secondly, projects were compared across country types to assess whether the WBG differentiates targeted institutional abilities, points of entry, or particular activities when working across types of countries.

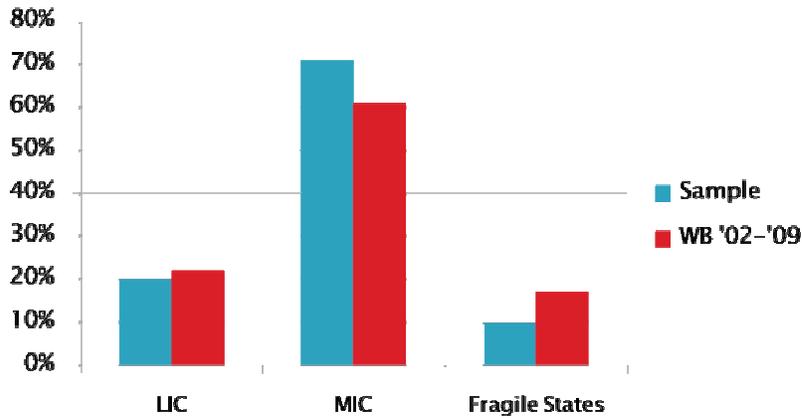
Income and Political Stability

Countries were grouped according to the WBG income classification of low income country (LIC) or middle income country (MIC) in order to capture a country's general level of development. In addition, countries designated as fragile states by the WBG were grouped separately in order to

² Environmental Sustainability: An Evaluation of World Bank Group Support, IEG (2008), pg 72.

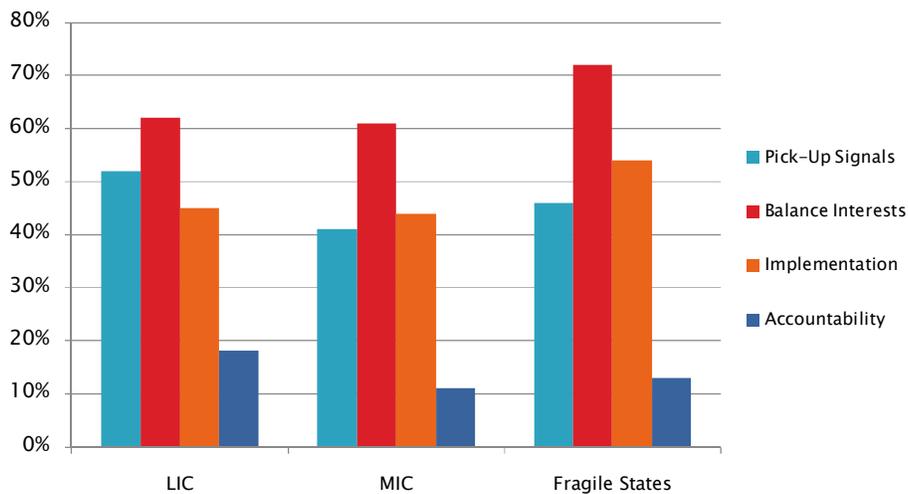
test whether political stability was a relevant point of differentiation.³ Fig. 2 compares the distribution of the portfolio sample across these country groups with the greater Bank portfolio. The portfolio sample includes a greater proportion of projects in MIC relative to the WBG portfolio with 71% in the portfolio sample and 61% of WB projects. Projects in fragile states represent a smaller proportion relative to the WBG portfolio perhaps reflecting demand.

Figure 2: Distribution of Portfolio sample vs. WB Portfolio across Income Categories



The lack of emphasis on the institutional ability of accountability in the overall sample is also apparent when comparing projects across LIC, MIC, and fragile states. Fig. 3 displays the percentage of the projects in each country group which involved some element of each institutional ability. No major differentiation in the institutional abilities targeted is evident between country types. Minor differences appear in a greater emphasis on balancing interests in fragile states.

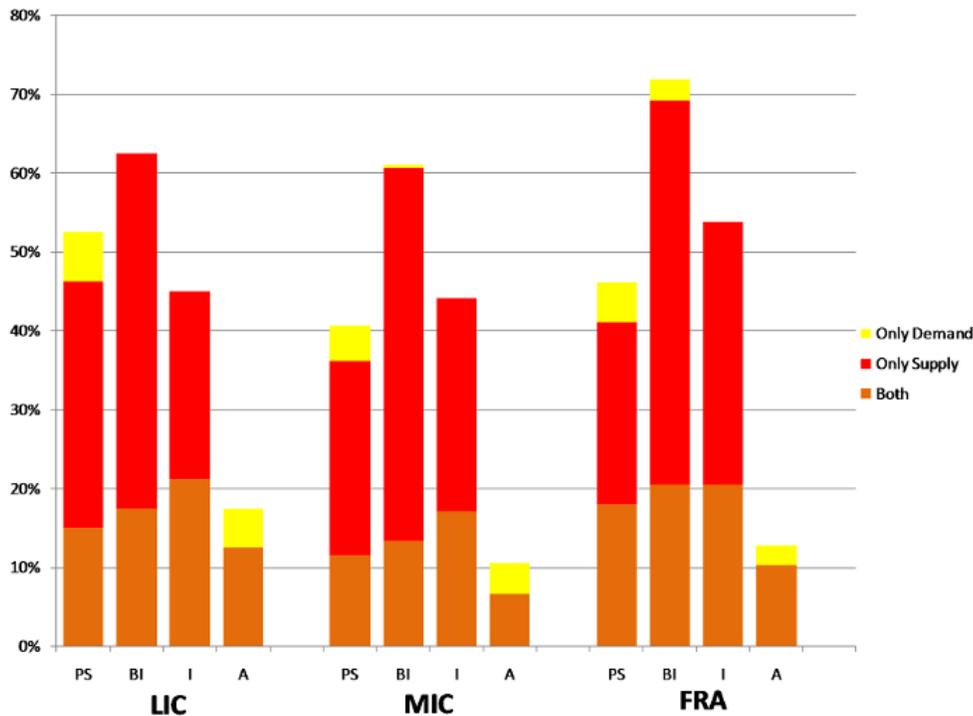
Figure 3: Projects by Income Group, Political Stability, and Institutional Abilities



³ WBG Harmonized List of Fragile Situations FY10 (http://siteresources.worldbank.org/EXTLICUS/Resources/511777-1269623894864/Fragile_Situations_List_FY10_Mar_26_2010_EXT.pdf)

Similarities across these country types in the institutional abilities targeted may however mask differentiation on the part of the WBG in the point of entry used or the particular activity undertaken. Fig. 4 displays the proportion of projects in each country type and institutional ability subcategory which were classified as involving only demand-side activities, only supply-side activities, or a mix of both supply and demand activities. The figure reveals that the point of entry used by the WBG does not differ materially across country types within a particular institutional ability.

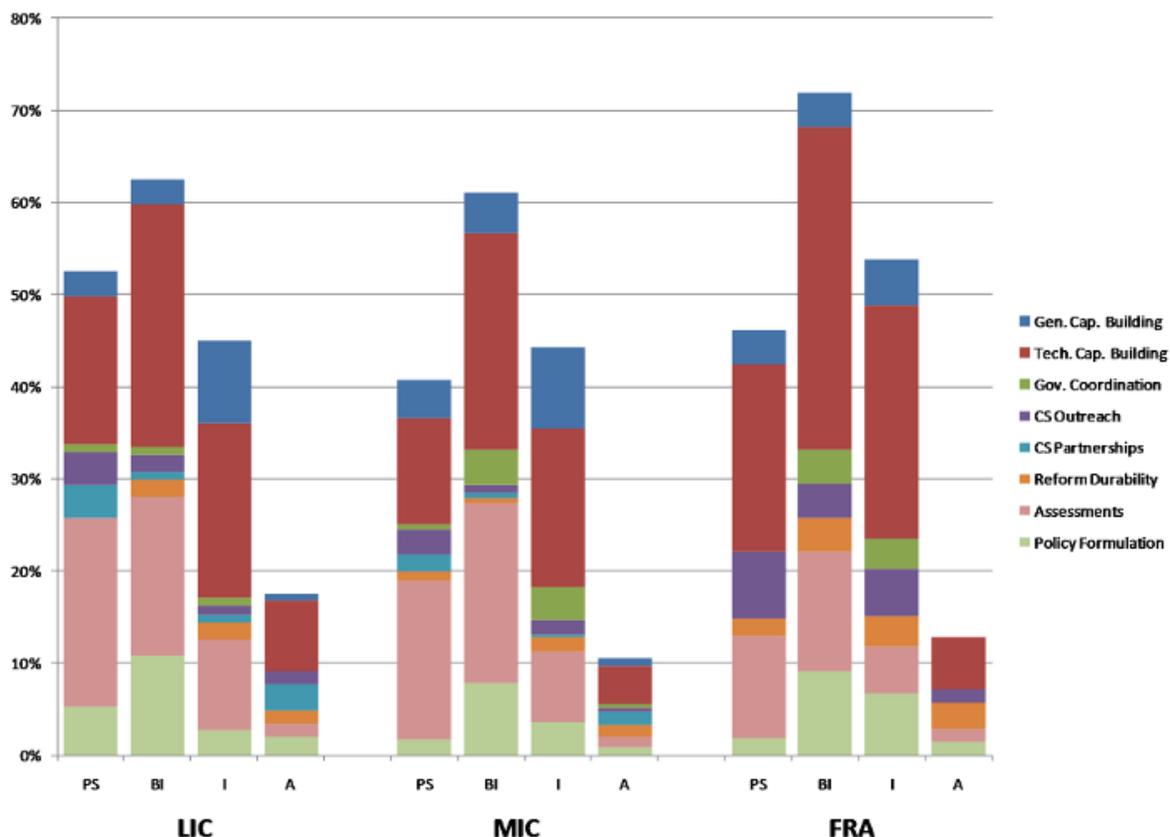
Figure 4: Projects by Income Group, Institutional Abilities, and Supply/Demand



Notes: The chart displays the percentage of projects in low income, middle income, and fragile states that had some component classified as picking-up signals (PS), balancing interests (BI), implementation (I), and accountability (A). These percentages are represented by the height of the bars. The projects that fall into a particular country type and institutional ability category are further broken down into the proportion of those projects that were classified as strictly demand-side, strictly supply-side, or elements of both supply and demand activities.

The particular activity undertaken by the WBG represents another possible point of differentiation across LIC, MIC, and fragile states. Fig. 5 displays the activities that compose projects in a particular country type and institutional ability category. The first pattern that emerges is the smaller proportion of assessments done in fragile states relative to LIC and MIC regardless of institutional ability targeted. Technical capacity development is in turn more emphasized in these fragile states. Furthermore, civil society engagement in fragile states takes the form of outreach efforts rather than the partnerships that are more common in LIC and MIC projects in the sample.

Figure 5: Projects by Income Group, Institutional Abilities, and Categories



Notes: This chart displays projects in low income, middle income and fragile states across institutional abilities. The bars representing the proportion of projects in a particular country-type and institutional ability are further divided into sub-categories. These sub-categories reflect the proportion of components of projects in a particular country-type and institutional ability that are associated with each of the nine project activities indicated in the chart legend. Data from the World Bank.

In sum, we find no major differentiation across countries in this income and political stability grouping in the institutional abilities targeted and the point of entry used. The specific activities undertaken are also largely homogenous with the exception of more emphasis on assessments in LIC and MIC countries relative to fragile states, which received more emphasis on technical capacity development.

Government Effectiveness

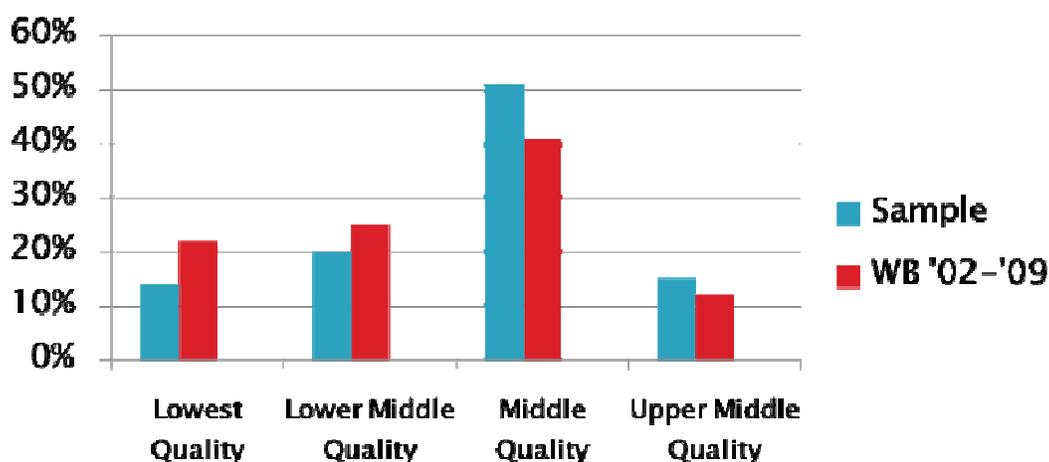
As discussed above, the 2001 Environment Strategy discussed the importance of taking into account a country's existing capacity when contemplating institutional development projects. In the past, institutional development projects have achieved limited practical success in part due to the poor attention interventions have given to the low capacity of client countries and the complexities of implementation.

In order to test whether the WBG has in fact tailored its approach to countries since 2002 on the basis of their capacity, we grouped countries according to a measure of government capacity, the

Government Effectiveness Index measure from WBG Governance Indicators. The index measures the ability of the government to effectively deliver public services and make policy.⁴ Ranking countries by the index and dividing them into five groups of equal size produced groups from low to high quality government effectiveness. As with the income and political stability grouping, we investigated whether the institutional abilities targeted, the point of entry, or the particular activities undertaken differed across these government effectiveness categories.

The distribution of the portfolio sample across the government effectiveness groups displayed in Fig. 6 is skewed toward higher quality government effectiveness countries relative to the greater WBG portfolio. The largest proportion of projects takes place in the middle quality government effectiveness group in large part due to the presence of Brazil, India, and China in this category.

Figure 6: Distribution of Portfolio sample vs. WB Portfolio across Government Effectiveness Categories



Considering the distribution of projects across targeted institutional abilities and government effectiveness categories in Fig. 7 reflects the general pattern observed in the overall sample. There is little differentiation. One trend is that balancing interests is being more targeted in all but the countries with upper middle quality governance.

Turning to the points of entry used to target each institutional ability across the government effectiveness categories in Fig. 8 reveals that exclusively demand-side interventions were hardly undertaken in the lowest quality category. The points-of-entry used for each institutional ability are otherwise fairly homogenous across categories. Fig. 9 confirms that similar activities were undertaken across government effectiveness groups when targeting various institutional abilities with the exception of fewer governance coordination activities undertaken in the upper-middle quality group.

⁴ <http://info.worldbank.org/governance/wgi/index.asp>

Figure 7: Projects by Government Effectiveness and Institutional Abilities

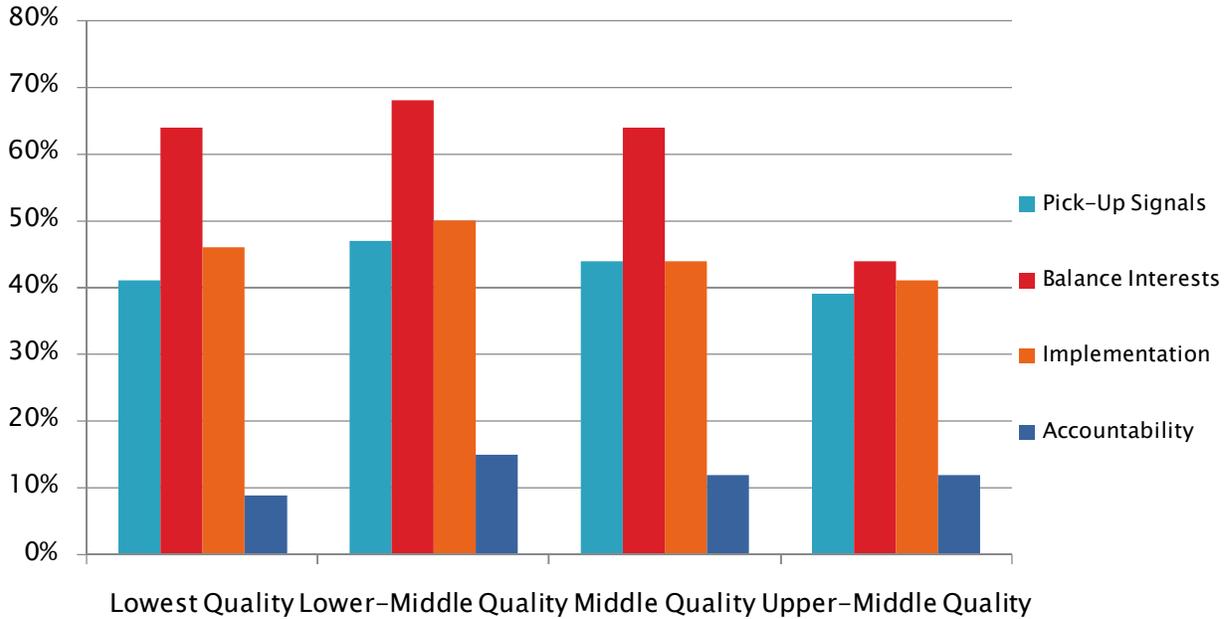
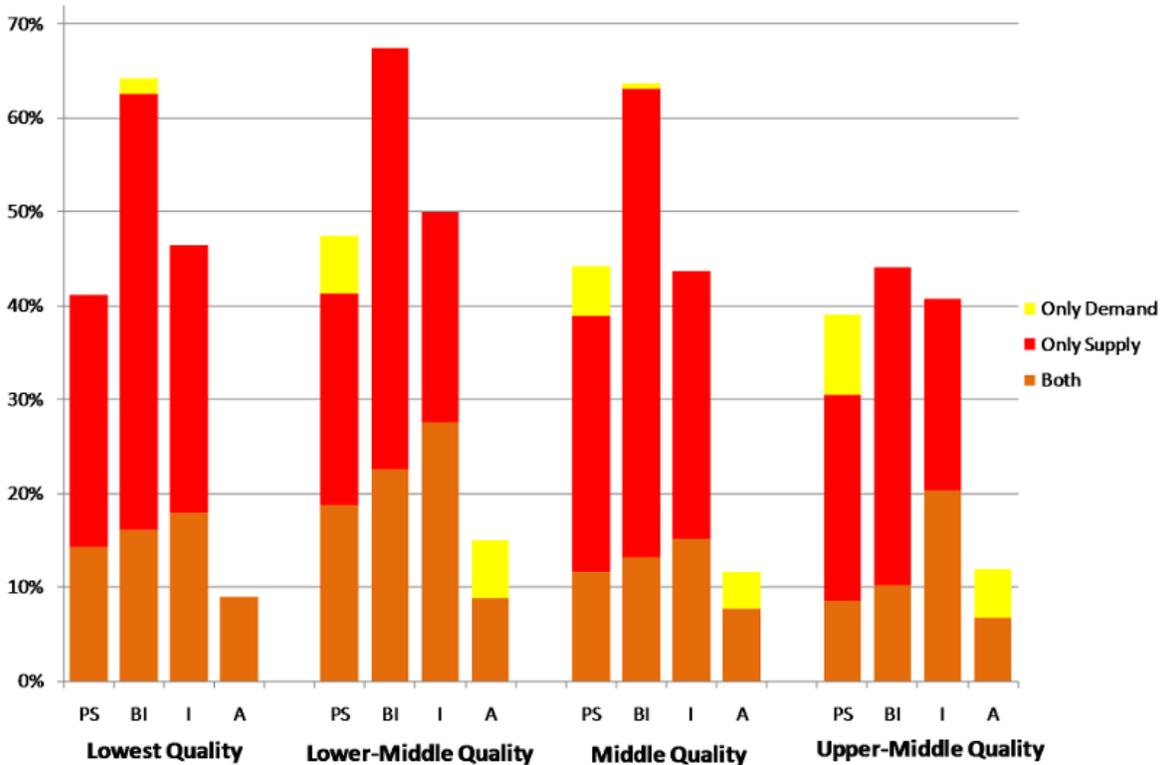


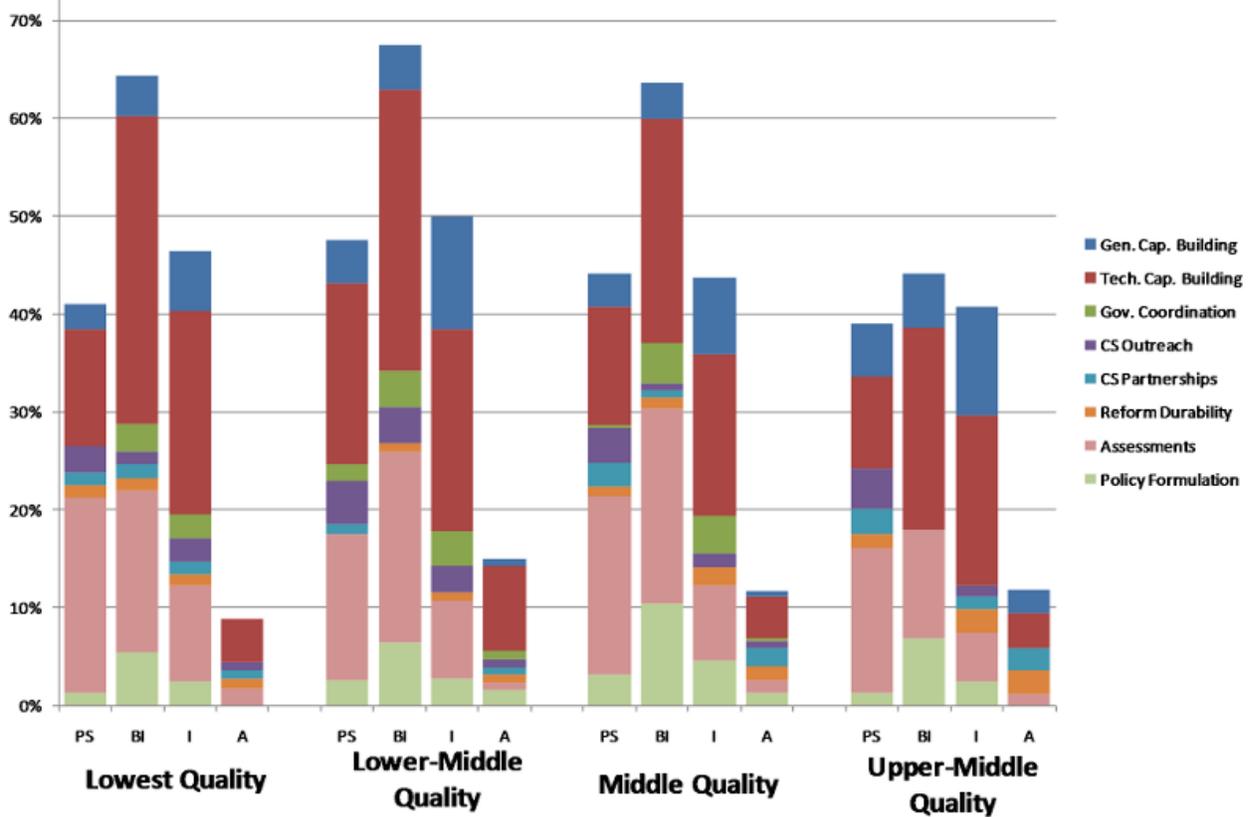
Figure 8: Projects by Income Group, Institutional Abilities, and Supply/Demand



Notes: The chart displays the percentage of projects across government effectiveness categories that had some component classified as picking-up signals (PS), balancing interests (BI), implementation (I), and accountability (A). These percentages are represented by the height of the bars. The projects that fall into a particular country type and institutional ability category are further broken down into the proportion of those projects that were classified as strictly demand-side, strictly supply-side, or elements of both

supply and demand activities. Data from the World Bank Governance Indicators. Countries were ranked based on the 2002 Government Effectiveness Index and divided into five groups of equal number of countries. Only four groups are displayed here due to lack of projects in the highest category.

Figure 9: Projects by Government Effectiveness, Institutional Abilities, and Categories



Notes: The chart displays the percentage of projects across government effectiveness categories that had some component classified as picking-up signals (PS), balancing interests (BI), implementation (I), and accountability (A). The bars representing the proportion of projects in a particular country-type and institutional ability are further divided into sub-categories. These sub-categories reflect the proportion of the components of projects in a particular country-type and institutional ability that are associated with each of the nine project activities indicated in the chart legend. Data from the World Bank.

Democracy

Given that the WBG works principally with governments to undertake development projects, the client government's level of accountability towards its citizens, the intended beneficiaries of the development projects, may be an important consideration in project design and ultimately project success. To operationalize a notion of accountability, we consider a country's level of democracy as measured by the Polity IV democracy index.⁵ The index range of -10 to 10 was divided into four parts with a score of -10 to -5 indicating a strong autocracy, -4 to 0 indicating a weak autocracy, 1 to 5 a weak democracy, and 6 to 10 a strong democracy. The distribution of levels of democracy in the portfolio sample relative to the overall WBG portfolio is displayed in Fig. 10. The portfolio sample is slightly skewed toward projects in strong democracies relative to the

⁵ <http://www.systemicpeace.org/polity/polity4.htm>

overall WBG portfolio. Next we test for a differentiated approach toward countries of varying levels of democracy in the institutional abilities targeted, the points of entry used, and the particular activities undertaken by the WBG.

Figure 10: Distribution of Portfolio sample vs. WB Portfolio across Income Categories

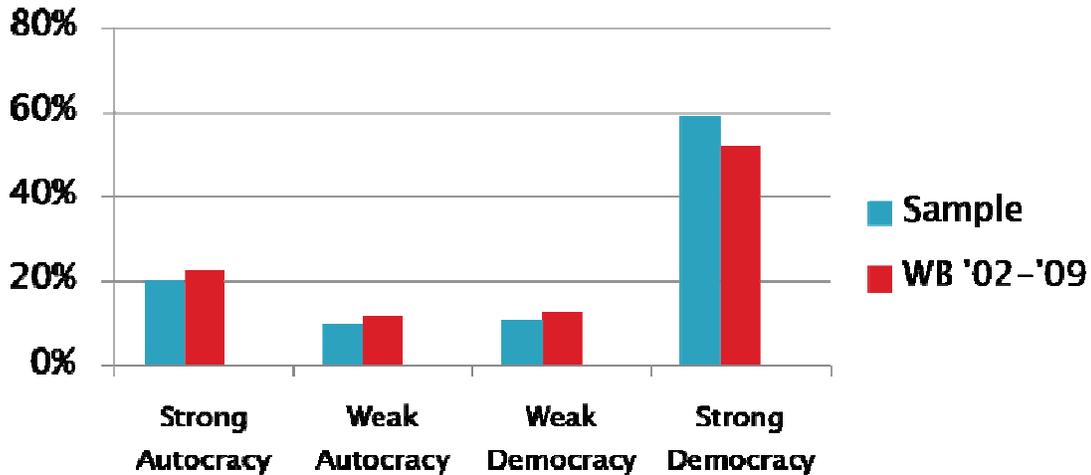
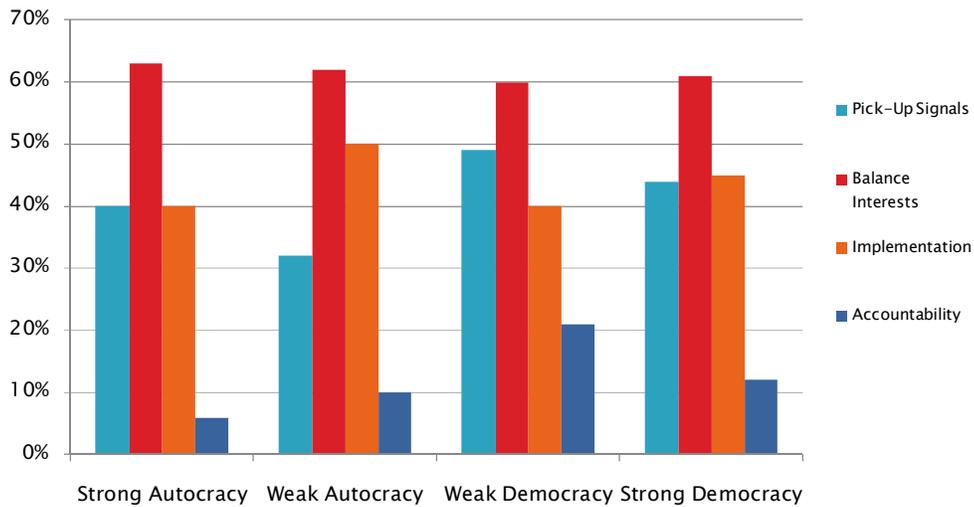


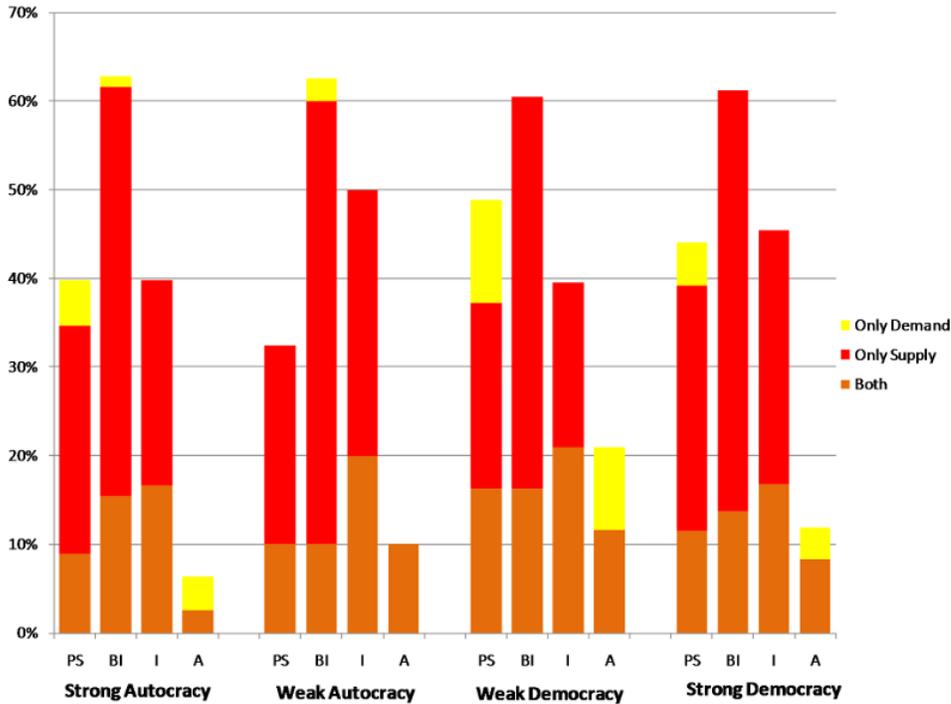
Fig. 11 displays the distribution of projects across targeted institutional abilities within each level of democracy. The WBGs approach toward weak democracies is distinct from the other democracy categories in its greater emphasis on picking-up signals and accountability.

Figure 11: Projects by Level of Democracy and Institutional Abilities



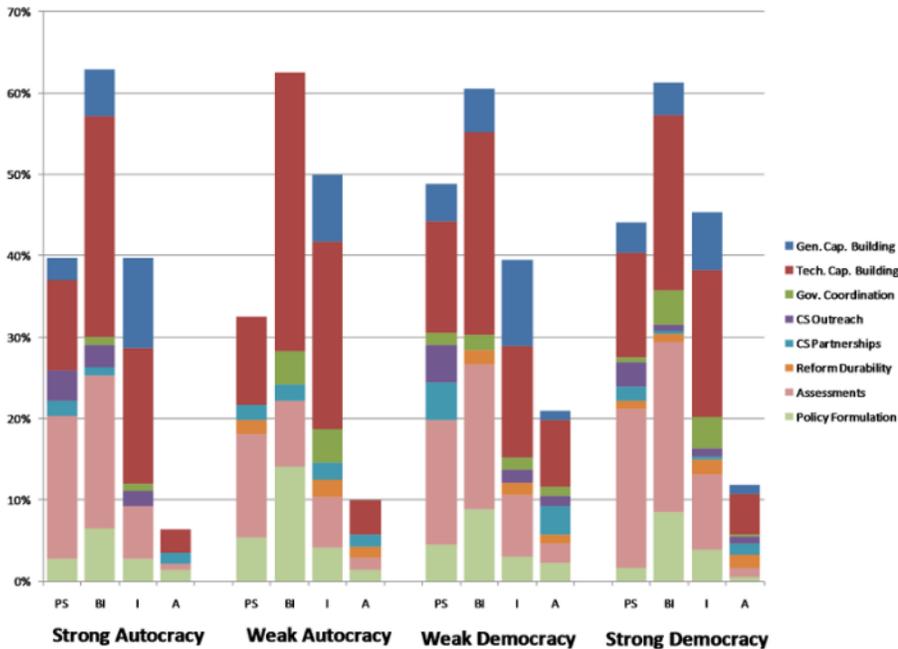
Breaking down the projects further by point of entry in Fig. 12 reveals that the greater proportion of projects dedicated to picking-up signals and accountability in weak democracies was achieved by more strictly demand-side interventions in these countries. As Fig. 13 demonstrates, the particular demand-side activities undertaken by the WBG in weak democracies to improve the ability to pick up signals and accountability involve in part a relatively larger investment in civil society partnerships.

Figure 12: Projects by Democracy, Institutional Abilities, and Supply/Demand



Notes: The chart displays the percentage of projects across countries of various degrees of democracy that had some component classified as picking-up signals (PS), balancing interests (BI), implementation (I), and accountability (A). These percentages are represented by the height of the bars. The projects that fall into a particular country type and institutional ability category are further broken down into the proportion of those projects that were classified as strictly demand-side, strictly supply-side, or elements of both supply and demand activities. Democracy classification based on the 2002 Polity IV democracy index. The score ranges from -10 indicating a strong autocracy to 10 indicating strong democracy. The range was divided into four equal categories as follows: Strong Autocracy [-10,-5], Weak Autocracy (-5,0], Weak Democracy (0,5], and Strong Democracy (5, 10].

Figure 13: Projects by Democracy, Institutional Abilities, and Categories



Notes: The chart displays the percentage of projects across countries of various degrees of democracy that had some component classified as picking-up signals (PS), balancing interests (BI), implementation (I), and accountability (A). The bars representing the proportion of projects in a particular country-type and institutional ability are further divided into sub-categories. These sub-categories reflect the proportion of the components of projects in a particular country-type and institutional ability that are associated with each of the nine project activities indicated in the chart legend. Data from the World Bank.

In sum, we find evidence of limited differentiation by the WBG across country types in environmental institutions and governance operations. The WBG engages clients in this area that are marginally more likely to be strong democracies, higher quality governance, and middle income countries than the wider WBG portfolio. When engaging these clients, the WBG appears to only marginally shift emphasis depending on country characteristics as reflected in the emphasis on balancing interests in fragile states, and picking-up signals and accountability in weak democracies. Moving forward, the WBG may need to take more care in ensuring that operations are properly tailored to country contexts. Future research will be required to identify the exact form of such a differentiated approach.

4. Effectiveness

Next we turn to a review of the available assessments of the effectiveness of our portfolio in order to glean further lessons for future WBG operations. Ideally, the effect of projects on in-country environmental outcomes ought to be assessed. However, project evaluations did not collect data on such outcomes. Additionally, the scale of these projects is generally small relative to all the other factors which may affect environmental outcomes in a given country. Even with environmental outcome data, causal inference would be very difficult. Focusing on outcomes related to institutional quality such as Country Policy and Institutional Assessments (CPIA) would similarly be difficult as factors unrelated to the projects would frustrate causal attribution.

The review of effectiveness was also constrained by the limited number of project evaluations in the portfolio sample, in part due to limited number of closed projects. When assessing the overall effectiveness in our portfolio sample, two of the main conclusions were the need for improved country ownership and the importance of providing recommendations to the client that do not override their existing capacity levels. These conclusions reiterate those discussed in the 2001 Environment Strategy and IEG (2009) review. We also review two particular assessment tools, CEA and SEA, due to emphasis placed on these tools in the 2001 Strategy.

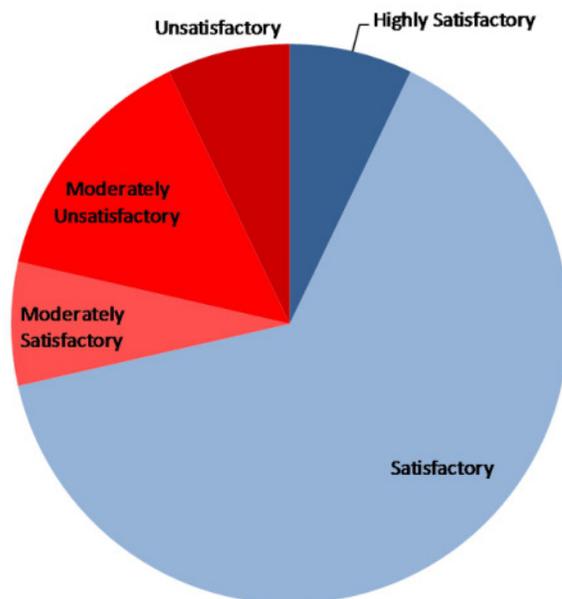
4.1 Measuring Effectiveness: AAA

Sample size: From our sample size of 299 closed operations, 219 were AAA (120 ESW and 99 TA). Unfortunately there are limited evaluations to accurately assess the effectiveness of closed AAAs. The Quality Assurance Group (QAG) has been carrying out assessments of AAA since fiscal year 2000. We were fortunate to obtain 14 useable QAG AAA reports.⁶ Both ESWs and TAs are assessed according to QAGs six point rating scale (Fig. 14). A majority, nine, of the project were rated satisfactory while only two projects were rated as moderately unsatisfactory and one project was rated as unsatisfactory.

Due to the WBG's rapidly growing share of Non Lending Technical Assistance (NLTA) in the AAA program, the QAG led a review of NLTAs in 2004. Though our sample of QAG reports only included four NLTAs, they received lower ratings than the ESWs in our sample.

⁶ In total, 19 QAG AAA reports were available, however among the 19, QAG deemed three operations miscoded and should not have been classified as an ESW, in addition, one operation was created by the managing unit to record staff costs and another operation was delivered to the client in 1999 however the managing unit forgot to record it as 'delivered' in SAP. The QAG noted that miscoding was apparent and may be due to a number of factors: "... primarily caused by a weak governance framework and may include: unclear product definition, low SAP user friendliness, insufficient guidance/support to Task Team Leaders, and unclear accountability" (<http://go.worldbank.org/28IWXDL4U0>). Therefore QAG did not assess the quality of those 5 operations. This left us with 14 operations that received QAG reviews.

Figure 14: QAG Outcome Ratings by ESW and TA [n=14]



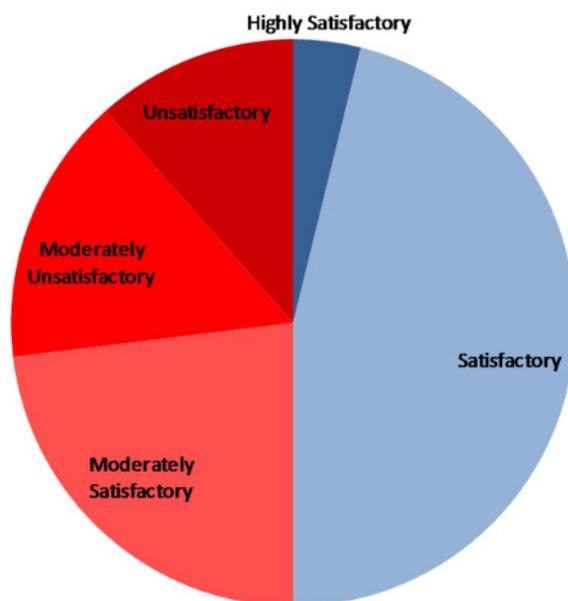
Main lessons: The limited sample of AAAs assessments nonetheless point to important lessons: the need for improved country ownership, the importance of providing sustained capacity development, and the value in defining policy and regulatory frameworks prior to TA activities. The reviews found that many AAAs continued to be supply-driven. In addition, Bank driven activities often led to limited government involvement and therefore little to no commitment of counterpart funding. Also, capacity development activities did not have an explicit strategy at entry to ensure sustained follow up support. Finally, it was suggested that prior to engaging in TA activities, it may be preferable to first conduct ESW work to better define policy and regulatory frameworks. For example, environmental assessment capacity is necessary but only works with appropriate policy and regulatory frameworks are in place.

4.2 Measuring Effectiveness: Lending

Sample size: Though project evaluations in general were sparse, we were able to review evaluations of 26 projects (Fig. 15) from our sample of 65 (35 GEF, 30 IBRD/IDA) closed lending projects. We reviewed eight projects that received QAG reviews, either Quality at Entry (QAE), Country Lending Assessment or Quality of Supervision (QAS). In addition, we reviewed 24 projects that received Independent Evaluation Group (IEG) Implementation Completion Report (ICR) reviews.⁷

⁷ Six of the projects received both an IEG rating and a QAG rating. In the case of 4 projects the ratings were not consistent with each other, due to the timing of the reviews. In this case, since IEG reviews are conducted after the ICR is completed the overall IEG rating was used rather than the QAG rating. Overall two projects were downgraded by IEG, two projects were upgraded after the QAG rating and 2 projects remained consistent in overall rating.

Figure 15: QAG and IEG Overall Ratings by Product Line [n=26]



The majority of our projects, 12, received satisfactory ratings for their overall outcome while 6 projects were rated moderately unsatisfactory or unsatisfactory. As compared to the majority of the portfolio, this sample of closed lending is supply-side heavy with only one exclusive demand-side project which received a highly satisfactory rating.

Main Lessons: Evaluations of lending projects made similar recommendations. For one the evaluations identified the need to greater country ownership, and in particular wider stakeholder involvement. The evaluations, for example, noted that intersectoral coordination, an important component of good governance, required a strong government champion. Also, to ensure ownership and successful project implementation high-level, early buy-in, and involvement of key stakeholders was recommended as was the need to work with implementing agencies that had influence with the government and overall political support. Secondly, the evaluations recommended providing sustained capacity development by focusing on existing, permanent national institutions rather than relying on temporary entities. Finally, they called for matching reform efforts to initial state of legal frameworks and institutional capacity. The evaluations noted that existence of pressing national political and economic management problems were likely to de-prioritize environmental issues resulting in low recipient ownership. It was essential then that political-economic changes be assessed even for environmental projects and that human, financial, and institutional constraints be carefully assessed prior to implementation in order to ensure realistic expectations.

4.3 Measuring Effectiveness: CEA

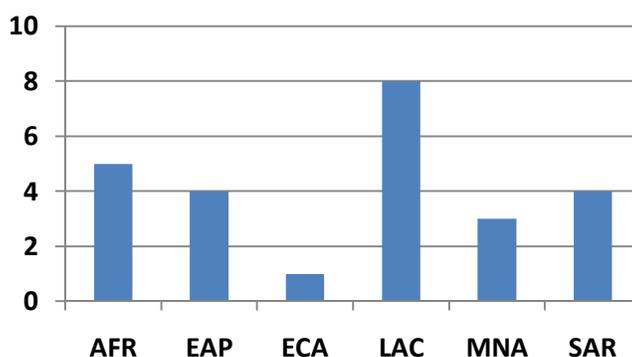
CEA is an internal WBG analytic tool undertaken in consultation with clients to integrate environmental considerations into country assistance strategies and to guide institutional reform

and capacity development efforts. The primary objective of a CEA is not capacity development but to undertake an assessment. To the extent that CEA is undertaken in a consultative manner it can indirectly lead to capacity development. CEAs also enable donor coordination. The need for such a systematic tool was identified by the 2001 Environment Strategy, in particular a tool that would link capacity to specific environmental problems that have been identified as priorities. Initially funding for CEAs was provided through BNPP and TFESSD and about four years ago a special trust fund for CEAs was set up which will close in FY11.

The detailed analytic work of local conditions in CEAs can help to address several of the shortcomings of past WBG operations in environmental institutions and governance discussed above. In particular, CEAs can help ensure that reform efforts match initial client institutional conditions and that the WBG is adequately differentiating its approach to clients. CEAs can also provide the necessary analytic work prior to TA activities which reviews have deemed necessary to improve TA effectiveness. Importantly, the consultative nature of CEAs can strengthen client commitment to reform efforts through wider stakeholder involvement. Given the promise of CEAs to address these issues in future institutional development operations, below we discuss the CEAs in our sample and gather lessons to improve their effectiveness moving forward.

Sample selection: In our portfolio sample there were 25 CEAs, of which 20 CEAs were closed and 5 were ongoing. Fig. 16 shows the regional distribution of the 25 CEAs in the portfolio sample. The majority of CEAs are in the LAC region.

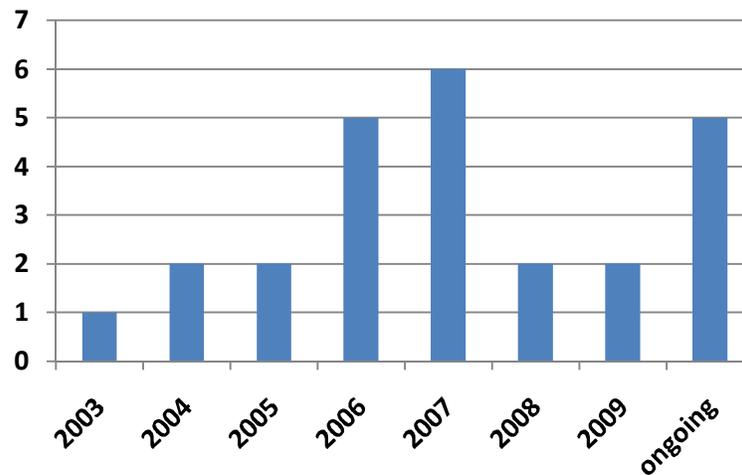
Figure 16: CEA distribution by Region [n=25]



When looking across the years that the CEAs were conducted nearly half of them took place during 2006 and 2007 (Fig. 17). Several CEAs during those years were initiated by Operational Policy 8.6.⁸

⁸ Operational Policy 8.6: If a proposed Development Policy Loan is expected to have a significant impact on the country's environment, forests, and other natural resources, then the project document needs to describe the client country's systems for reducing such adverse effects and enhancing positive effects, drawing on the relevant country-level or sectoral environmental analysis. If there are significant gaps in the analysis or shortcomings in the borrower's systems, then the project document needs to describe how such gaps or shortcomings would be addressed before or during the program implementation, as appropriate.

Figure 17: CEA distribution by Year [n=25]



Though CEAs are assessments, they have led to a number of follow-on activities to strengthen environmental institutions and governance. According to Pillai (2008), although CEAs have helped improve the quality of institutional analysis, they have focused on public sector institutions rather than private sector or civil society, and within public sector, focused on mandates, staffing, and resources, rather than decision-making processes or assessment of vertical and horizontal accountability structures.

Based on our sample and associated project documents, we identified some follow-on activities specifically pertaining to institutional strengthening:

- **Vietnam:** The CEA helped create a clearer picture of the pollution situation caused by specific sub-sectors. An IDF grant was implemented during 2008-2009 to address strengthening institutional capacity in industrial wastewater control.
- **Egypt:** One of the main recommendations in the CEA was to establish the Committee for Sustainable Development headed by the Ministry of Environment composed of other Ministries.
- **Serbia:** The CEA directly contributed to the establishment of the Environmental Protection Agency; however, enforcement of this agency remains problematic.
- **Guatemala:** The dissemination of the CEA resulted in several positive developments such as: i) the approval of the National Environmental Policy by the cabinet and the President; ii) the supplementary allocation of Q5 million to the Ministry of Environment and Natural Resources (MARN); iii) the expansion and consolidation of initiatives such as the environmental laboratories (with a possible further expansion to the Central American region); and (iv) establishment of a donor roundtable on environmental issues led by MAFW

which is seeking to prioritize and harmonize environmental initiatives, guided in part by the priorities established in the CEA.⁹

- **Ethiopia:** In response to the CEA recommendations, the Government has made progress to strengthen the institutional capacity for environmental management, including enactment of environmental proclamation and implementation guidelines and standards at the federal level on environmental protection institutions, environmental impact assessment, and pollution control. Two Regions, Oromiya and Amhara, have passed similar laws at the regional level. In addition, all Regions have established institutions for environmental management.¹⁰

Also, as noted by Pillai (2008), although CEAs have provided “input to policy and institutional changes, identification of lending operations, integration of environment into CAS and PRSPs, input to DPLs, identification of strategic environmental assessments, and in some cases, improvements of facilitation of donor coordination,” several of the CEAs were initiated in the context of OP 8.60 while the CEA recommendations have not been fully incorporated into the DPL matrices or the country program. A reviewer has suggested this may be due to the limited number of conditions allowed in DPLs, which may warrant stand-alone environment DPLs to move the recommendations of CEAs forward. Yet another reviewer offered that the timing of CEAs just prior to preparation of DPLs is a critical factor in determining the take-up of CEA recommendations.

Six of the countries with closed CEAs in our sample had a DPL or a PRSC with some percent allocated to the Environmental Policies & Institutions sub-theme: Ghana, Colombia, Peru, Vietnam, India, and Indonesia. However, three of these countries failed to mention the CEA in their project documents; the Vietnam PRSCR VII, the India DPLs and the Indonesia DPL VI. See Box 6 for some key findings in the remaining three CEAs and DPLs.

⁹ http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2008/10/01/000333037_20081001020613/Rendered/INDEX/449960PGD0P1121E0ONLY10R20081019811.txt

¹⁰ http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2004/11/08/000090341_20041108095231/Rendered/INDEX/297720ET.txt

Box 6: Key Findings of Ghana, Colombia, and Peru CEA and DPLs

Ghana

The cost of degradation analysis helped generate government interest and raise overall awareness of environmental issues. In addition to contributing to several investment operations, institutional capacity gaps were identified in the CEA and formed the basis for the institutional reforms in the DPL entitled Natural Resources and Environmental Governance Project (NREG). According to the DPL document the NREG program was designed as the “response” to the CEA’s findings, and a way to engage with the Government to address the issues raised in the CEA. Policy matrices developed under the CEA for forestry and wildlife, mining, and environmental protection provided a foundation for the elaboration of the NREG program matrices by the Government of Ghana. The CEA also underlined important issues concerning the social and distributional aspects of forestry and mining.

Colombia

Though some may argue that the Colombia CEA was an exception to the rule, it is one of the most comprehensive CEAs to date. The CEA was timed to feed into the design of the programmatic sustainable development DPL. Findings from the subnational-level institutional analysis led to real-time reforms which ultimately resulted in budget reallocations, new arrangements for aligning specific regional environmental objectives with national ones, and stronger accountability mechanisms for regional environmental agencies. The CEA was conducted in parallel with preparation of the SusDevDPL, to provide the government with an analytical basis for decision-making on how best to improve institutional structures for environmental management as it moves forward with reforms to the National Environmental System. The CEA was carried out in parallel with the preparation of the first Sustainable Development DPL to provide the Colombian government with an analytical framework to support its efforts toward achieving the MDGs, with its findings expected to support the design and implementation of policies focused on protecting the most vulnerable groups, especially poor children under age of five. The preparation and dissemination of the CEA benefited from close client engagement and wide stakeholder consultation, from the government officials responsible for setting environmental policies and programs to poor and marginalized groups that are most vulnerable to environmental degradation. Colombia’s National Planning Department has used the findings of the CEA to help design programs and policies, particularly in terms of enhancing sustainable development strategies. The CEA provided a basis for the structure of the SusDevDPL Program and Sustainable Development Investment project, and helped ensure that reforms under the SusDevDPL are based on the best available information.

Peru

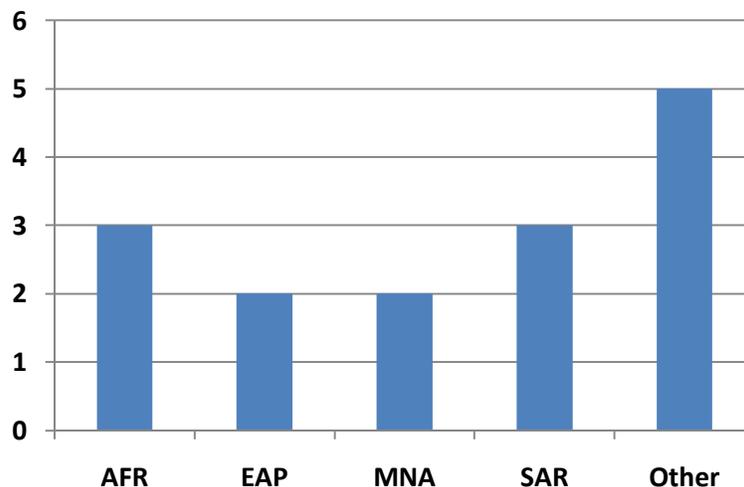
Though there was a time gap between the CEA and DPL, the DPL document included a substantial amount of results and findings from the CEA which served as an underlying basis for the suggested actions in the DPL. The CEA included assessments of institutional needs and shortcomings of the national environmental system in Peru. Overall, many of the recommendations from the CEA were included in the government’s planned reform program for the environment sector, and were clearly highlighted in the policy actions matrix. As noted earlier, donor coordination is essential in order to avoid duplication. For example, issues such as water resource management which were identified as ‘crucial’ in the CEA were not included in the DPL because they were already being addressed in two separate Inter-American Development Bank (IDB) DPLs and a WBG TA loan. In addition to the DPL, the CEA discussion in general helped bring the brown agenda to the forefront. Discussions based on institutional analysis relating to natural disasters in Peru led to a request by the president for a loan specifically for natural disasters.

4.4 Measuring Effectiveness: Strategic Environmental Assessments (SEAs)

SEAs refer to a range of approaches and tools for integrating environmental and social considerations at the policy, plan or program level. According to the 2001 Environmental Strategy, SEAs were to be used more systematically as analytical tools through a structured learning program involving clients and partners for addressing complex cross-sectoral environmental issues and for integrating environment at early stages in sectoral decision making and planning process. The 2001 Environmental Strategy also mentioned that the Bank would “play a catalytic role in building and strengthening SEA capacity in client countries. Over time, a more systematic application of SEAs will reduce the costs of project-level safeguards, improve compliance, and help integrate environment into upstream policy dialogue and programmatic lending programs.”

In our sample portfolio (Fig. 18) there were 15 SEAs of which 10 had closed and 5 were active; however, the team recognized that it was often difficult to properly identify a SEA. The 15 SEAs were identified by either their Report Type or their title which mentioned SEAs. The 5 SEAs classified under “Other” were primarily learning tools for the WBG, for example an analysis of SEAs, frameworks to describe key elements of SEAs or guidance on how to appropriately apply SEAs to specific country policies. Ten of the SEAs were linked to the Environment Sector (ENV), this includes the 5 above mentioned projects that fall under “Other,” while three were Water (WAT), one was Agriculture and Rural Development (ARD) and one was Transportation (TR). It is also important to note that some sectoral assessments could also be considered SEAs or they could integrate in their preparation SEA activities, however are not labeled as SEAs. For this reason, there could be some SEAs that were not accounted for in our portfolio selection.

Figure 18: SEA distribution by Region [n=15]



Because policy-oriented SEA was globally and within the Bank the less developed field of SEA, by the mid-2000s the Bank building on its experience in sector reform and increasing experience in policy lending suggested the need for a new approach on policy SEA focused on strengthening institutions and governance systems . Globally, under the umbrella of the Paris Declaration on

Aid Effectiveness, donor countries, some multilaterals, SEA practitioners and environmental NGOs grouped in the SEA Task Team of the OECD Development Assistance Committee produced Guidance for applying SEA in development cooperation. In the Guidance, SEA is acknowledged as a family of approaches. The Guidance also acknowledges that approaches required for SEA in programs and plans are different from those needed for SEA at the policy level. Accordingly, since FY 2006 the learning program on SEA set in the 2001 Environment Strategy was substantively revised and refocused on policy SEA with the purpose of drawing lessons for applying SEA to policies and sector reform. Pilots were developed in forestry, mining, urban development planning, transport and climate change adaptation; and in different regions, namely, Africa, East Asia and Pacific and South Asia. The pilot program was reviewed between FY09-FY10 and as a result a conceptual model and operational guidance for applying SEA in sector reform has been produced (See Box 7 for the evolution of SEA in the World Bank.)

Forestry

The Bank is continuing to promote the preparation of SEAs in the forest sector, disseminating good practice guidance notes on the use of methodologies and doing seminars on the preparation of and lessons learned from these SEAs. In FY10, the Bank has undertaken forest sector SEAs in Liberia, the Democratic Republic of Congo (DRC), and Yemen. The Liberian forest policy is focused on the commercial, conservation and community aspects of forest management (3Cs). The SEA is examining strategic challenges posed by each of the 3Cs – namely, a rapidly expanding commercial forestry industry, an expanding protected area system, and increased community forestry – but also the challenges posed by the interrelationship between the forest sector and other sectors, such as agriculture and mining. In the DRC, an Environmental Impact Assessment is being conducted for the National Forest and Nature Conservation Program which also covers the Bank's support to DRC in the forest sector. The SEA in Yemen is focused on the role of forests in adaptation to climate change, with a focus on the “fog” forest stands.

Mining

Africa is a region with large minerals resources that could have a critical role in starting up development. However, this region is also plagued with institutional and governance weaknesses which has not only resulted in squandering some of this wealth but also in internal and international conflicts. Along with other initiatives like the Extractive Industries Transparency Initiative (EITI), SEA is being widely used by the Bank in technical assistance and adjustable program loans to support mining sector reform. Policy oriented SEAs have been undertaken at the regional level for the Mano River Union comprising Sierra Leone, Liberia and Guinea (The West Africa Minerals Sector Strategic Assessment) and at the national level for Sierra Leone, Malawi, Gabon and Tanzania. SEAs for the mining sector are being undertaken with support of the World Bank also in Afghanistan and Pakistan.

Over the last five years or so, the World Bank has been at the forefront of developing approaches for applying SEA at the policy level. Policy SEA is envisioned as a process of institutional and

governance strengthening that contributes to better policy making rather than environmental safeguarding. This contribution derives from the ability of SEA to expand policy capacities, broaden policy horizons and modify decisions regimes. By influencing these underlying conditions policy-oriented SEA can enable long-term changes in policy formulation and implementation, enhancing environmental mainstreaming. The evaluation also suggests five main lessons for effective policy SEA:

- Strengthen country ownership and capacity.
- Building trust among key stakeholders.
- Need for long-term constituency-building/
- Contextual factors are of overriding importance in hindering or facilitating the attainment of the main benefits of policy SEA.
- Need to clearly articulate the potential benefits of policy SEA.

Box 7: Evolution of SEAs in the Bank

Since the 2001 Environment Strategy, the World Bank has conducted several reports that shed light on both the evolution of SEAs as well as future opportunities and the World Bank's overall comparative advantage in implementing SEAs.

(i) Strategic Environmental Assessment in World Bank Operations: This 2002 Report highlighted the need that SEAs have indeed advanced to a stage where it can contribute important value to the Bank's work and it should be introduced through a more systematic testing and learning program. In 2002 it was found that the key shortcoming of SEAs was the lack of methodological definition and robustness. It was first in this paper that a pilot program was suggested.

(ii) Integrating Environmental Considerations in Policy Formulation: This 2005 Report, reviewed the comparatively less extensive experience of application of SEA to policies specifically and draws lessons from it. The principal conclusion was that current SEA approaches, based on EIA methodology, of the sample reviewed had some influence on policy design but it was difficult to evaluate whether the SEA recommendations that have been incorporated into the policy are the key for sustainability or whether they only affect peripheral issues. SEA, seen as an evolving tool, could improve its influence on policymaking by more directly addressing institutional and governance dimensions. It was also noted that long periods of time and continuous engagements would be necessary to strengthen institutional capacity for good environmental governance.

(iii) First-Generation Strategic Environmental Assessments: In 2007, a review was released entitled Learning from First-Generation Strategic Environmental Assessments Supported by the World Bank. In this review, it was highlighted that SEAs served as important decision-making tools for consideration of alternatives based on environmental considerations. The review also highlighted some key factors to ensure positive results. For example, the odds of guaranteeing buy-in were increased if the SEA was located in a sector ministry that included staff from environmental ministries and agencies. The overall visibility of a particular sector and its importance in the country context also plays a key role. Continued consultations and participation of a variety of stakeholders is crucial to maintaining a transparent SEA process. Overall, it is essential to remember that SEAs are not mere documents but are part of a longer-term engagement leading to enhanced sustainability of sector reform.

(iv) Policy SEA: Conceptual Model and Operational Guidance for Applying Strategic Environmental Assessment in Sector Reform: The Environment Department of the World Bank in partnership with the Environmental Economics Unit at the Department of Economics of the University of Gothenburg (EEU), the Swedish EIA Centre at the Swedish University of Agricultural Sciences, and the Netherlands Commission for Environmental Assessment (NCEA) evaluated the World Bank's SEA Pilot program. The main finding is that policy SEA contributes to the enhancement of development policy and sector reform by calling attention to environmental and social priorities, strengthening constituencies, enhancing policy capacities, and improving social accountability. The report also provides guidance for undertaking policy SEA. It suggests scaling up policy SEA in sector reform over the next 10 years, by focusing on key sectors for growth, poverty alleviation and climate change in 8-10 developing countries, and by letting countries take full ownership of the process and lead the SEA work. It also argues that the time is ripe to establish a global alliance on environmental and climate change mainstreaming where SEA applied to sector and development policy is a critical step.

5. Conclusion and Recommendations

As mentioned above, stakeholders participating in consultations on the Concept Note of the 2010 Environment Strategy have emphasized the need to help strengthen environmental institutions and governance in client countries. Learning from the 2002-2009 portfolio points to a strategy that links assessment (such as CEAs and SEAs), Development Policy Loans, and blended instrument and strategic alliances.

Assessments

CEA and SEA have played and should continue to play an important role in guiding institutional reform and capacity-development efforts. They can, for example, help ensure that reform efforts are differentiated according to the initial state of client legal frameworks and institutional capacity. The need for this differentiation is suggested by our portfolio review which found that the WBG has only minimally altered its approach when dealing with very different types of countries. Future research, however, is required to determine precisely how the WBG's approach should be differentiated.

A challenge will also be to strengthen country ownership of such tools while contending with the fact that strengthening environmental institutions and governance is a low priority for clients. One solution would be to establish a multi-donor trust fund that can be accessed by countries to undertake CEAs and SEAs. Availability of funding will help to create demand for these tools. Requiring that relevant sector agencies take the lead in these assessments, on the other hand, will help to ensure country ownership and making the fund accessible to civil society partners in client countries to ensure wider stakeholder participation. Linking the assessments to projects, such as DPLs, TALs, APLs, etc. can also help to increase country-ownership and to link these assessments to development outcomes.

Development Policy Loans

DPLs should continue to be used to reform formal rules that govern environmental institutions and to recognize achievements. It is important though that the DPLs incorporate the recommendations of CEA and SEA. In the past even when CEAs were initiated in the context of OP 8.6, CEA recommendations were not fully incorporated into the DPL matrices or country program. To facilitate the incorporation of CEA recommendations, the Bank may consider stand-alone environment DPLs. Furthermore, our portfolio review found that the critical institutional function of accountability was relatively under-emphasized. Efforts to improve accountability may include greater civil society engagement, strengthening the role of the judiciary, and improving the independence of oversight institutions. It is important that DPLs be used to strengthen all four key abilities of capable institutions and good governance structures---ability to pick-up signals, ability to formulate balanced policy, ability to implementation, and ability to be held accountability.

Blended Instruments and Strategic Alliances

Finally, the strategy should continue to support capacity development though it needs to do it better. The portfolio review found that the average length of project was five years. While such project lengths are appropriate for reforms of formal rules, capacity development has been argued to require project lengths on the order of ten to fifteen years to be effective. Given that effectiveness critically depends on sustained engagement, one possibility is to emphasize the use of APLs (over SILs), but more importantly to establish strategic alliances with agencies that have a longer-term presence on the ground, such bilaterals, UN Poverty and Environment Initiative, etc. As with assessments, where capacity development is not a priority, use of blended instruments (lending and grants such as through the Global Environment Facility) can help to create demand for it.

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Annex 1: Methodology

This section describes how the portfolio of projects to strengthen environmental institutions and governance was selected, presents a simple description of the sample, and finally discusses how the sample was categorized to identify the types of WBG activities, institutional abilities targeted, and points of entry used.

1. Defining the Portfolio

Our portfolio of interest consisted of both active as well as closed WBG Group operations from 2002-2009 classified under the Environment and Natural Resources Management (ENRM) theme.¹¹ This extraction from Business Warehouse consisted of over 2,000 operations. The master list was restricted to projects which had 65% or more allocated to the ENRM theme and some percent allocated to the Environmental Policies and Institutions sub-theme. The final sample yielded 499 projects across lending operations and analytical activities.

The Environmental Policies and Institutions sub-theme includes activities aimed at:

- Establishment and strengthening of environmental regulatory institutions (national, subnational, local) environmental policies, regulations, monitoring, and enforcement.
- Environmental assessment and management-capacity improvement.
- Financing mechanisms and economic instruments for environmental management.
- Environmental awareness building, education, and training.

The portfolio sample was supplemented with two additional sets of projects: 17 from the IEG 2009 Annual Review of Development Effectiveness: Achieving Sustainable Development, and 6 from Global Programs and Partnerships (GPP).¹² For the IEG 2009 review, IEG conducted an in-depth analysis of the environmental objectives and components of the entire population of ENRM projects that were approved since 2000, closed in 2007 or 2008, and had been reviewed by IEG. This consisted of 51 projects of which 17 had some percentage allocated to the Environmental Policies and Institutions sub-theme. GPPs are listed as neither lending instruments nor analytical activities and therefore they did not appear in the above Business Warehouse sample extractions. There were 6 GPP's which had 65% or more dedicated to ENRM theme and had some percentage allocated to the Environmental Policies and Institutions sub-theme that were included in the overall portfolio review.

¹¹ All WBG activities that directly serve an external client must be coded by a sector and themes. Projects are listed with a percentage representing a specific sector or theme, up to 5 different ones can be entered per project.

¹² The six projects were the Regional Seas Program; Global Chemicals Management; Communities, Conservation and Markets; Implementation of the Global Forest Partnership, Growing Forest Partnerships Initiative – Phase II; and Addressing Climate Change in the MNA Region.

It is important to note that project leaders often do not accurately report percentages, sometimes leaving default values to be randomly allocated by the system, and eventually misrepresenting the real amounts allocated to specific themes. This can create both an overrepresentation as well as an underrepresentation of the degree in which the Environmental Policies and Institutions sub-theme is actually represented within projects. There is, however, no alternative available but to use the current system.

2. Portfolio Characteristics

Sector Board: There are currently 20 sector boards at the World Bank reflecting interventions in different parts of the economy. Project leaders map each project to a sector board which has the primary responsibility for the quality of the activity. Typically the assigned sector board corresponds either to the most important theme or sector assigned to the activity. The sample of projects analyzed in this paper is distributed among 11 sectors, and, not surprisingly, the largest sector represented is Environment with 75% of the portfolio. Agriculture and Rural, and Energy and Mining, each account for 8% and Water for 6%.

Table A1.1: Classification of Projects by Sector Board

Sector Board	# of operations	% of portfolio
Environment (ENV)	389	75%
Agriculture and Rural (ARD)	44	8%
Energy and Mining (EMT)	42	8%
Water (WAT)	30	6%
Transport (TR)	5	1%
Urban Development (UD)	3	<1%
Financial and Private Sector Dev. (FPD)	2	<1%
Public Sector Governance (PS)	2	<1%
Social Development (SDV)	2	<1%
Economic Policy (EP)	1	<1%
Global Info. and Comm. Tech. (GICT)	1	<1%
N/A	1	<1%
TOTAL	522	

Product Lines: The WB offers several product lines to its clients both funded by grants and by loans. The two primary product lines represented by our portfolio sample were Economic & Sector Work (ESW) and Technical Assistance Non-lending (TA), which are both classified under Analytic and Advisory Activities (AAA). ESW refers to activities that involve analytical effort with the intent of influencing client countries' policies and programs and comprise formal and informal studies of critical issues, either at the country level or for specific sectors. TA captures services provided by the WBG to clients as a way to assist them in policy / program implementation, developing / strengthening institutions, and facilitating knowledge exchange. The third most represented product line was Global Environment Facility (GEF). The GEF “was established in 1991 by a Resolution of the WB Executive Directors as a pilot program to assist in

the protection of the global environment and to promote environmentally sound and sustainable economic development. The GEF operates as a mechanism for providing new and additional grant and concessional funding to meet the agreed incremental costs of measures to achieve agreed global environmental benefits in the focal areas of Climate Change, Biological Diversity, International Waters, Ozone Layer Depletion, Land Degradation and Persistent Organic Pollutants (POPs).”

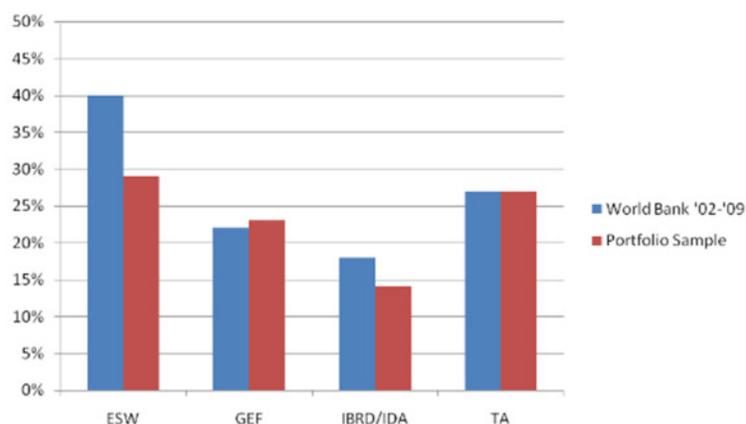
Table A1.2: Projects by Product line and Grant vs. Loan

Grant	Number
Economic and Sector Work	152
Non-lending Technical Assistance	142
Global Environment Projects	120
IDF	13
Others	21
	448
Loan	
IDA	39
IBRD	34
IBRD/IDA	1
	74
TOTAL	522

It is important to note that the majority of the lending operations were grants, and less than 8% were loans. This would suggest that client governments are not willing to borrow for strengthening environmental institutions and governance.

As shown in Figure A1.1, for the four largest products line in our sample, the sample is fairly representative of the overall work that the WB conducted between the years 2002-2009 (12,889 operations).

Figure A1.1: Product Line percent Distribution: World Bank 2002-2009 compared to Portfolio Sample



Investment Lending Instruments: The 222 lending operations were distributed among 10 investment lending instruments. The four most represented investment lending instruments were Specific Investment Loans (SIL), Adaptable Program Loan (APL), Technical Assistance Loan (TAL), and Development Policy Lending (DPL) (see Box A1.1 for a description), with SILs accounting about 60% of total number of operations.

Box A1.1: Investment Lending Instruments

Specific Investment Loan (SIL): SILs support the creation, rehabilitation, and maintenance of economic, social, and institutional infrastructure. In addition, SILs may finance consultant services and management and training programs.

Adaptable Program Loan (APL): APLs provide phased support for long-term development programs. They involve a series of loans that build on the lessons learned from the previous loan(s) in the series.

Technical Assistance Loan (TAL): TAL is used to build institutional capacity in the borrower country. It may focus on organizational arrangements, staffing methods, and technical, physical, or financial resources in key agencies.

Development Policy Lending (DPL): DPLs provide rapidly-disbursing financing to help a borrower address actual or anticipated development financing requirements of domestic or external origins. DPL aims to help the borrower achieve sustainable poverty reduction through a program of policy and institutional actions, for example, strengthening public financial management, improving the investment climate, addressing bottlenecks to improve service delivery, and diversifying the economy. It supports such reforms through non-earmarked general budget financing that is subject to the borrower's own implementation processes and systems.

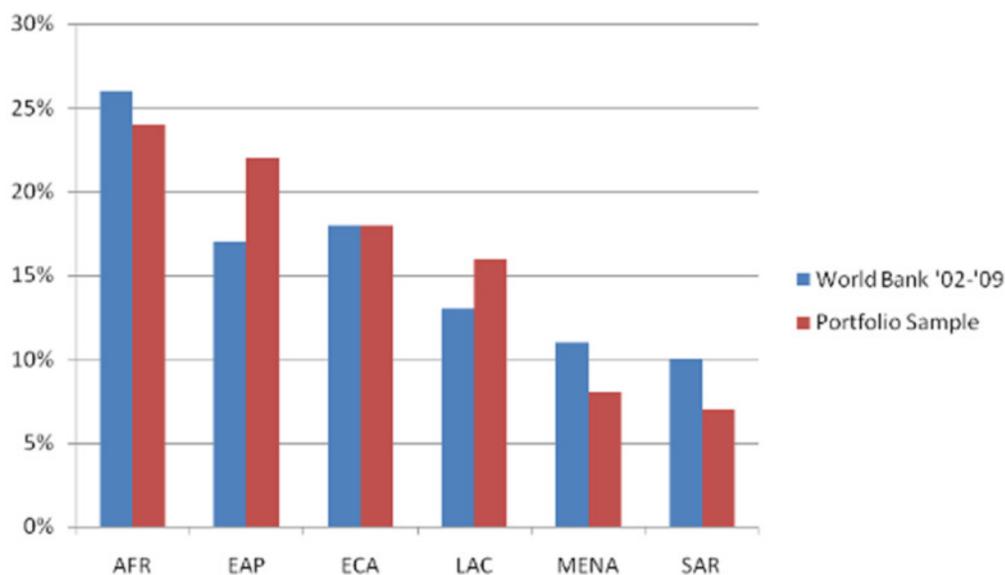
Table A1.3: Distribution of Projects by Lending Instrument

Lending Instrument	# of operations	% of lending portfolio
Specific Investment Loan (SIL)	140	63%
N/A	26	12%
Adaptable Program Loan (APL)	17	7%
Technical Assistance Loan (TAL)	16	7%
Development Policy Loan (DPL)	13	6%
Other	10	4%
TOTAL	222	

Regional Distribution

As with product line, the regional distribution of our sample portfolio was comparable to that of the overall WBG portfolio during the same time period.. This is shown in Fig. A1.2.

Figure A1.2: Regional Distribution: WBG 2002-2009 compared to Portfolio Sample



3. Categorization of Portfolio

In order to better assess past and current efforts within the WBG to strengthen environmental institutions and governance mechanisms, the team closely examined individual projects. Projects were coded according to the particular activity undertaken, whether supply or demand-side organizations were engaged, and which of the key institutional abilities highlighted in the 2003 WDR were targeted for reform. In particular, the categorization was used to assess whether the WBG differentiates targeted institutional abilities, points of entry, and particular activities when working across different types of countries. Also, in light of the emphasis in past reviews on the length of WBG engagement in institutional development projects, we check whether the length of projects in the portfolio is appropriate.

Based on the different activities that are incorporated under the Environmental Policies and Institutions sub-theme the team created a list of eight categories to capture the range of WBG operations in this area:

1. *General Capacity Development*: Improving internal administrative and financial processes within key organizations such as management, operations, auditing, and staffing.
2. *Technical Capacity Development*: Improving technical processes within key organizations. This activity may involve training, technical assistance, or creating new technical divisions or organizations.
3. *Coordination between Different Stakeholders*: Improving coordination between key national and sub-national ministries as well as cross-sector coordination. Such coordination is key to integrating environmental concerns and protection into other sectors.

- 4a. *Civil Society Outreach*: Public awareness campaigns designed to promote transparency, advertise government efforts, and conduct community outreach.
- 4b. *Establishment of Civil Society Partnerships*: This activity involved building partnerships with key civil society organizations such as NGOs, universities, and the private sector.
5. *Reform Durability*: Ensuring that reforms endure. Examples include formulating policy which requires new legislation to reverse and which requires judicial oversight. Reform durability is also strengthened by finding sustainable funding for key organizations.
6. *Assessments*: Assessments conducted by the WBG often in partnership with clients. These may include CEAs, SEAs, Public Environmental Expenditure Reviews (PEERs), or assessments in support of civil society outreach, governance coordination, or policy formulation among others.
7. *Policy Formulation*: Formulating policy with key stakeholders. These may include developing regulatory frameworks, legal reforms, and mainstreaming lessons learned from CEAs and SEAs into policy.

A multitude of documents were used in reviewing projects to categorize them, some of which included but are not limited to the following: Project Appraisal Documents (PADs), Implementation Completion Reports (ICRs), Independent Evaluation Group (IEG) ICR Reviews, Project Concept Notes, Grant Agreements, Aide Memoires, etc. When reviewing the above mentioned documents, the team took into consideration the specific percentage allocated to the Environmental Policies and Institutions sub-theme. Rather than coding a project based on its overall objective, the team took into account the percentage allocated to the Environmental Policies and Institutions sub-theme, examined specific activities and outputs related to that sub-theme, and then categorized the projects. For example, a project may be associated with both the Environmental Policies and Institutions sub-theme and the Water Resource Management sub-theme. If all of the general capacity development components, for example, were related to the Water Resource Management sub-theme and none related to the Environmental Institutions and Policy sub-theme, then the project would not be coded as involving general capacity development for the purposes of this study.

Every project received at least one and at most three category codes. Two categories---Technical Capacity Development (2) and Assessments (6)---were further sub-divided to reflect a diversity of interventions. For example, if technical capacity development was provided for civil society organizations, then the project was coded as 2.4A or if an assessment was completed to assess the general capacity of an institution it was coded as 6.1. After reviewing several of the non-lending operations it was apparent that some assessments were for the use of the WBG and therefore were coded 6.WB. For example, if an assessment of the WB's overall biodiversity portfolio was conducted it was coded as 6.WB.

To understand whether the “demand” side of governance activities were being targeted, as opposed to the “supply” side, the eight categories were matched to this coarser coding---demand and supply. Supply refers to activities targeted at those organizations and stakeholders tasked with the supply of environmental services, while demand-side generally refers to civil society organizations which demand the environmental service and to activities aimed to increase their participation. Often supply and demand designations were made based on the type of stakeholder engaged in that activity. For example, if an activity categorized as “coordination between stakeholders” only engaged various ministries and levels of government, it was coded as a supply-side activity (See Table A1.4 for a full description).

Similarly, the team associated the eight different categories with the four key institutional abilities highlighted in the WDR 2003 – ability to pick up signals and understand the cause of problems, ability to balance interests fairly and efficiently in formulating policies, and ability to execute policies, and ability to be held accountable. The question here was to understand what characteristics and specific WBG interventions determine these abilities.

Table A1.5 provides examples of specific functions that characterize the four key institutional abilities and the associated WBG interventions which seek to impact these abilities. First, institutions able to pick-up signals should specifically be able to gather and disclose information about environmental trends; provide mechanisms of public participation and respond to feedback; and work with stakeholders and ministries to understand the causes of problems. Examples of WBG activities which strengthened this ability were assessments done of client environmental conditions, as well as building clients’ technical capacity to conduct environmental assessments. Strengthening of civil society organization capacity also served to increase the ability of those organizations to report on environmental conditions.

Second, capable institutions must be able to balance interests fairly and efficiently in formulating policies. This ability refers to creating forums for negotiation to take into account the perspectives and incentives of different stakeholders; and mechanisms for coordination across sectors and between levels of government. As Table A1.5 indicates, some WBG activities aimed at supporting these functions involved participating in the development of regulatory frameworks with stakeholders and working to facilitate the integration of environmental concerns in other sectors.

Regarding the third and fourth ability, accountable institutions will have the staffing, expertise, and resources at all-levels of government to implement policy. Such institutions will be held accountable by mandates circumscribed by clear formal rules along with independent oversight institutions and the judiciary. The WBG strengthens these abilities by activities such as securing independent sources of funding to ensure reform durability, supporting the drafting of policy which requires judicial oversight, and again supporting civil society organizations.

Limitations to the categorization process were inevitable. For one, the team categorized projects by the project *intent* and not by project *results*, as assessments were only available for a handful of

projects. Secondly, the majority of the projects were associated with several sub-themes (not just Environmental Policies and Institutions) making it hard to delineate the components that were targeting environmental institutions and governance. This also made it hard to assess the total financial resources that had been committed to operations in this area over the last ten years. For example, if a project assigned 50% to the Environmental Policies and Institutions sub-theme then this reflected 50% of activities and not 50% of financial resources of the project.

Table A1.4: Project Categorization

Coding	Type	Description	Stake-holder	Example
1.0	General Capacity development	Improving internal administrative and financial processes within key organizations	Supply and Demand (S& D)	Management, Operations, Auditing, Staffing
2.X	Technical Capacity development	Improving technical processes within key organizations 2.A – Ministry of Environment 2.B – Ministry of Finance / Planning 2.C – Other Ministries 2.D – NGOs and Other Institutions Projects which were exclusively workshops: 2.AW, 2.BW, 2.CW, 2.DW	2A: Supply 2B: Supply 2C: Supply 2D: Demand 2.AW: Supply 2.BW: Supply 2.CW: Supply 2.DW: Demand	Training, Technical assistance, Creating new technical divisions or organizations
3.0	Governance Coordination	Improving coordination between key national and sub-national ministries and cross-sector coordination	Supply	Integrating environmental concerns/protection into other sectors
4A	Civil Society Outreach	Public awareness campaigns	Demand	Transparency, advertisement, community outreach
4B	Civil Society Partnerships	Building partnerships with key civil society organizations	Demand	Partnerships with NGOs, Universities, private sector
5	Reform Durability	Formulate ways of strengthening sustained commitment to reform. Reform durability is also strengthened by coordinating search for sustainable funding for key organizations.	S & D	Formulate policy which (1) requires new legislation to reverse, (2) requires judicial oversight. Identify investment opportunities, devising fund raising strategy
6.X	Assessments	6.0 – Environmental Assessments 6.X where X is a coding category E.g. 6.4A Assessment of how “Public Mobilization” should be conducted 6.2A Assessment conducted for the Ministry of Environment 6.WB Assessment on the WB Biodiversity portfolio in country Z	6.0: Supply 6.1: S & D 6.3: Supply 6.7: Supply 6.2A: Supply 6.2C: Supply 6.4A: Demand 6.4B: Demand 6.5A: S & D 6.WB: N/A	CEAs, SEAs, PEERs
7.0	Policy Formulation	Formulating policy with key stakeholders	Supply	Regulatory frameworks, legal reforms, mainstreaming lessons learned from CEAs and SEAs into policy

Table A1.5: Four Abilities

Ability	Link to our categorization
Ability to pick up signals depends on: <ul style="list-style-type: none"> • Gathering information about environmental trends • Disclosing information • Giving citizens a voice (through mechanisms for public participation) • Responding to feedback (mechanisms for transparency) • Working with network of stakeholders and analysts to prioritize and understand causes of problems (using this to identify key stakeholders and ministries) 	4A 4B 6.0 6.4A 6.4B
Ability to formulate balanced policy: <ul style="list-style-type: none"> • Creating forums for negotiating and taking into account perspectives and incentives of different stakeholders • Mechanisms for cross-sectoral coordination • Links between national and sub-national public sector agencies 	2.B & 2.BW 2.C & 2.CW 3.0 7.0 6.3 6.7 6.2C
Ability to implement: <ul style="list-style-type: none"> • Administrative capacity at the national and sub-national level • Cross-sectoral coordination • Law enforcement and regulatory capacity • Legislation and policymaking is reflected in the actions of the bureaucracy 	1.0 3.0 5A 5B 6.1 6.3 6.5A
Ability to implement in an accountable manner: <ul style="list-style-type: none"> • Adequacy of formal rules • Role of judiciary in providing accountability • Independence of oversight institutions (to deal with problems that arise when management and oversight functions are combined within the same agency) 	4B 5B 5A 6.4B 6.5A

Cross cutting categories: 2.A, 2.AW, 2.D, 2.DW, 6.2A

Annex 2: Extractive Industries Transparency Initiative (EITI)

History: The WBG Group announced in 2000 that it would conduct a comprehensive 2-year evaluation of the development impacts of its support for oil, mining, and gas projects worldwide. The Extractive Industry Review (EIR) recommended that the WBG adopt significant reforms, including immediately ceasing funding for coal projects worldwide and phasing out its support for oil production by 2008. The review also recommended enhanced human rights protections, prior informed consent for indigenous and project-affected peoples, and an end to support for destructive mining technologies. One of the outcomes of the EIR was the WBG Group decision to endorse and support the then nascent Extractive Industries Transparency Initiative (EITI).

Summary: The Extractive Industries Transparency Initiative (EITI) was established in 2002 to promote and support improved governance in resource-rich countries through the full publication and verification of company payments and government revenues from oil, gas, and mining. Since 2004 the WBG Group has been the primary source of technical and financial assistance for countries implementing EITI. In general, to build accountability at the national level transparency is first needed. The EITI is the global standard for promoting transparency of payments and revenues in countries rich in oil, gas, and mineral resources.

Benefits to implementing EITI: According to the “*Implementing the EITI: Applying Early Lessons from the Field*” report published in 2008¹³, some of the benefits to countries that implement EITI may include the following:

- A systematic framework for collaboration: Greater accountability of governments, companies, and civil societies via EITI can improve trust among these groups. By providing a platform for communication among all stakeholders, EITI can facilitate the development of consensual solutions to problems.
- Demonstrating a national commitment to transparency: Implementing EITI can send a clear signal to all stakeholders that a government is serious about the transparent and accountable payment and receipt of extractive industry revenues—perhaps within an overall program of governance reforms in these sectors. In countries participating in the EITI, companies are required to publish what they pay to governments and governments are required to publish what they receive from companies (www.revenuewatch.org).
- Promotes accountability: When amounts paid to different government agencies (and in some cases to sub-national levels of government) are clearly stated and known to the public, citizens can then better organize themselves to hold agencies accountable for how revenues are used in public expenditure programs.

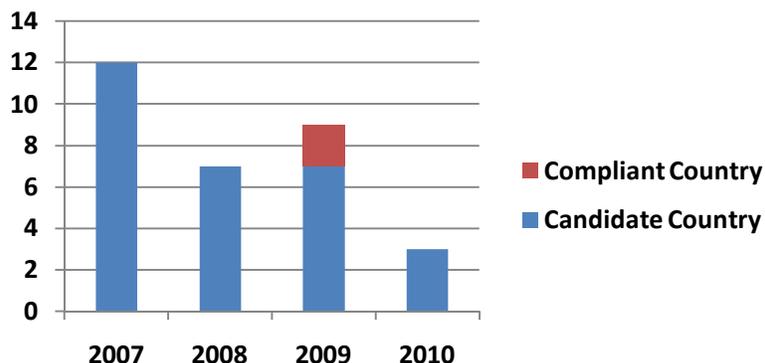
¹³ 2008 The International Bank for Reconstruction and Development / The WBG, *Implementing the EITI: Applying Early Lessons from the Field*.

Table A2.1: EITI Candidate and Compliant Countries

Country	Candidate Status	Compliant Status	Intention to work towards EITI compliance
Liberia	N/A	2009	
Azerbaijan	N/A	2009	
Afghanistan	2010		
Chad	2010		
Iraq	2010		
Guinea*	2009		
Zambia	2009		
Albania	2009		
Burkina Faso	2009		
Mozambique	2009		
Norway	2009		
Tanzania	2009		
Central African Republic	2008		
Cote d'Ivoire	2008		
DRC	2008		
Madagascar	2008		
Republic of Congo	2008		
Sierra Leone	2008		
Timor Leste	2008		
Gabon	2007		
Ghana	2007		
Cameroon	2007		
Kazakhstan	2007		
Kyrgyz Republic	2007		
Mali	2007		
Mauritania	2007		
Mongolia	2007		
Niger	2007		
Nigeria	2007		
Peru	2007		
Yemen	2007		
Equatorial Guinea	Lost candidate status		
São Tomé and Príncipe	Lost candidate status		
Indonesia			In progress
Ethiopia			In progress
Ukraine			In progress

* Guinea has voluntarily suspended its EITI Candidate status in the EITI starting from 19 December 2009

Figure A2.1: Year of becoming either EITI Candidate Country or EITI Compliant Country



Initial findings: According to the 2008 report, initial findings point to the overwhelming benefits that accrue for governments that have included EITI as part of the “broader good governance/natural resource management program of reform.” Due to the fact that the EITI uses a participatory multi stakeholder approach, stakeholders outside of the government, such as extractive industry companies and civil society organizations, are involved in the governing process.

Government involvement: Though multiple stakeholders are involved in all EITI programs, the government continues to play an important role. For example, governments often provide political leadership and support, a legal basis for implementation, and detailed information on government revenues pertaining to extractive industries.

Capacity development: A certain level of capacity development within the implementation unit must precede a successful EITI process. Successful implementation units are those that:

- Have adequate incremental human and government financial resources at an early stage.
- Have easy access to members of the multi-stakeholder steering group and are responsive to the decisions of the group.
- Are led by an individual capable of working cooperatively with companies and civil society organizations.
- Have easy access to the EITI champion as well as government ministries concerned with EITI.
- Are based in an agency that either has its own resources to implement the Initiative or is familiar with the fiduciary processes involved in managing externally sourced funding.
- Have staff with a broad mix of the skills and experiences required to implement an initiative.

The Role of Companies and Civil Society Groups: Overall there are four main areas where companies and civil society groups often contribute to the EITI process; by actively encouraging governments to commit to EITI; by shaping the EITI scope through their involvement in the EITI steering group; by providing data reporting; and, by communicating and disseminating the EITI results to other civil society groups, companies and the general public. This dissemination process helps promote a certain level of accountability of governments and companies while enabling citizens to know about, understand, and have a stake in the overall EITI program and the information it generates.

Lessons and Impact of National EITI Programs: It may be too early to report on findings since the majority of countries joined the initiative in 2005; however, some anecdotal evidence of the results of EITI is beginning to emerge. Initial results include the following:

- The growing momentum is a sign of governments' and companies' **overall commitment** to the EITI initiative.
- EITI programs provide an effective mechanism for **collecting information** in one place.
- The **collaborative process** creates trust among the multiple stakeholders that are involved in any given EITI program. In general, civil society can participate and engage, not simply observe.
- EITI programs stimulate demand for **greater transparency and accountability** over extractive resources in any given resource rich country.
- **Legislation can help to create greater certainty.** Because of EITI's 'voluntary' nature, some countries have found that EITI works best when given legislative or regulatory backing and provides a defined playing field.

EITI countries and Corruption: It remains difficult to claim a causal link between EITI implementation and corruption perceptions. After reviewing the 2006 and 2009 Transparency International's annual Corruption Perceptions Index (CPI), which measures the perceived level of public-sector corruption in 180 countries and territories around the world, it is clear that there is no significant decrease in the level of corruption in EITI specific countries compared to non-EITI countries.¹⁴

It is important to remember however that the EITI is a non-threatening voluntary initiative for countries to join. It is also noted that EITI by design never had the intention to be an anti-corruption tool at its inception, though many hoped the correlation would present itself. Therefore people are reminded to view the EITI process as an entry point to addressing corruption issues in the future.

¹⁴ http://www.transparency.org/policy_research/surveys_indices/cpi/2009

Recent developments: The EITI Board met in Berlin April 15-16, 2010. The Board discussed the request of 17 countries implementing the EITI to extend their deadline for completing EITI Validation. In addition, Sao Tome and Principe applied to voluntarily suspend their EITI Candidate status. The EITI Board has considered these applications on a case by case basis in accordance with the EITI rules. An extension of the Validation deadline is granted only if the country demonstrates that exceptional and unforeseeable circumstances outside the country's control. Having considered the merits of each application, the Board agreed to grant extensions to 16 countries.

Annex 3: LCR Institutional and Governance Briefs

The Case of Public Prosecutors in Brazil:

Their role in enforcing environmental regulations and lessons for other countries

Over the past 50 years, countries in the Latin American and the Caribbean region (LCR) have developed a wide range of environmental law and institutional frameworks aimed at protecting the environment and promoting sustainable development. However, overall compliance and enforcement of these laws and regulations remains a challenge in the region. Brazil is a notable exception; Public Prosecutors have played a central role in helping to promote compliance and enforcement of Brazil's environmental law and regulations. This paper analyses Brazil's Public Prosecutors as an enforcement institution, lists key aspects contributing to their success, discusses the possibility of replication in LCR and contributes to the technical discussion on the role of the World Bank in promoting environmental compliance and enforcement systems.

Natural assets decline when environmental institutions are weak. A large body of theoretical and empirical studies concludes that environmental performance is correlated with the quality of environmental institutions and the regulatory regime in place – as well as the underlying economic context. The rigor and structure of environmental regulations is one of the main factors, as is an emphasis on enforcement (Esty and Porter, 2000). The World Development Report 2003 which focused on Transforming Institutions, Growth and Quality of Life stated that *“protective institutions, those that define and control the access and use of assets through norms or the threat of punishment, are essential for environmental assets to thrive [...] and contribute to growth and human well being.”*

The World Bank Environment Strategy of 2001 recognized the importance of effective regulatory and enforcement frameworks for improving the quality of growth in developing countries and established the goal to *“promote the introduction and enforcement of efficient environmental and natural resources management institutions, policies and regulations.”* Moreover, the Regional Environmental Strategy for Latin America and the Caribbean Region considered as a priority action to *“provide targeted support to client countries for building regulatory and enforcement frameworks.”*

These statements still resonate today since many Latin American countries have substantial legal frameworks for environmental protection and have introduced or reformed their laws to enable institutions such as citizen groups or public prosecutors to legally defend environmental rights (e.g. Brazil and Colombia's *Ministerio Público*, Argentina and Costa Rica's *Defensor del Pueblo* in, or PROFEPA in Mexico). Still, enforcement remains a challenge. Brazil is a notable exception. Brazil's *Ministério Público* (MP) has been considered one of the most successful protective institutions in LCR due mostly to a wide constitutional mandate, appropriate legal tools, and functional, administrative and financial independence.

Efforts to increase compliance with environmental regulations include a wide range of policy tools needed to complement more traditional enforcement instruments. Brazil's MP embeds both deterrence and normative theories¹⁵ since they can protect environmental causes before courts but also reach cooperation-based enforcement programs – when the perpetrator agrees to stop the transgression or avoid committing it altogether, while the authority agrees to a flexible enforcement process. Cooperation-based enforcement could contribute to increased compliance at a minimal cost, preventing environmental harm rather than reacting to it. This paper looks at the specific case of the MP in Brazil, focusing on the pros and cons of this protective institution, the strategic aspects that could be applicable in the region, as well as the role of the World Bank in promoting it more broadly.

Brazil Public Prosecutors – A brief description

Since its creation in 1609, the role of the MP in Brazil has developed from an entity prosecuting in the name of the State to an entity that can prosecute the State if it breaks environmental laws and regulations. Two main legal milestones describe the rise of the MP as an environmental protective institution: (i) Public Civil Action Law of 1985, which established a legal instrument known as the *“public civil action,” through which the MP could take to court any “person or entity for harm done to the environment, consumer rights, or the artistic, cultural, historical, tourist and landscape patrimony of the nation”*, and (ii) the Constitutional reform of 1988, which amplified the scope of the public civil action to defend environmental interests and of other *diffuse and collective interests*.¹⁶

Since then MP has played a central role in enforcing environmental laws and regulations in Brazil. Indeed, MP has provided a partial remedy to the “non-enforcement problem” of environmental law in Brazil by overseeing environmental agencies, enhancing accountability, and facilitating access to courts for environmental problems (Mc Allister, 2008). In addition, MP has worked in Brazil as a countervailing constraint that impedes policy makers from neglecting environmental protection in favor of other pressing concerns such as macroeconomic issues (Mueller, 2008).

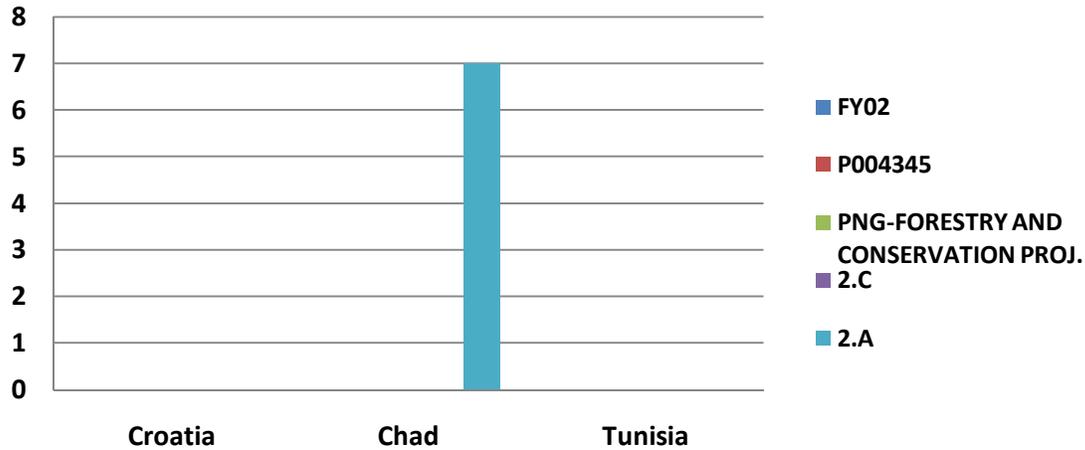
One of the MP's most unique characteristics is that in addition to taking a traditional legal approach—threatening or defending environmental causes in the courts—the MP supports environmental compliance by promoting agreement-based compliance using an Environmental Commitment Adjustment Instrument (*Termo de Ajustamento de Conduta – TAC*). TACs allow for the flexible application of legal terms and conditions in exchange for cessation of

¹⁵ Deterrence Theory: Probability of detention, severity of punishments and social stigma deter illegal behavior. Normative Theory: Rewards, incentives and technical assistance promote legal behavior.

¹⁶ Diffuse rights or interests are indivisible rights held by unidentifiable persons (community), which are bounded by specific factual circumstances. A typical example is the right of people undetermined and undeterminable people to have a sound and balanced environment. Collective interests are indivisible rights held by a group, a category or a class of persons linked to each other or to a certain third other party by a legal relationship.

environmentally destructive practices. In the last decade, the number of environmental and cultural resources procedures, both court proceedings and TACs, has increased significantly in all regions in Brazil (see Fig. A3.2).¹⁷

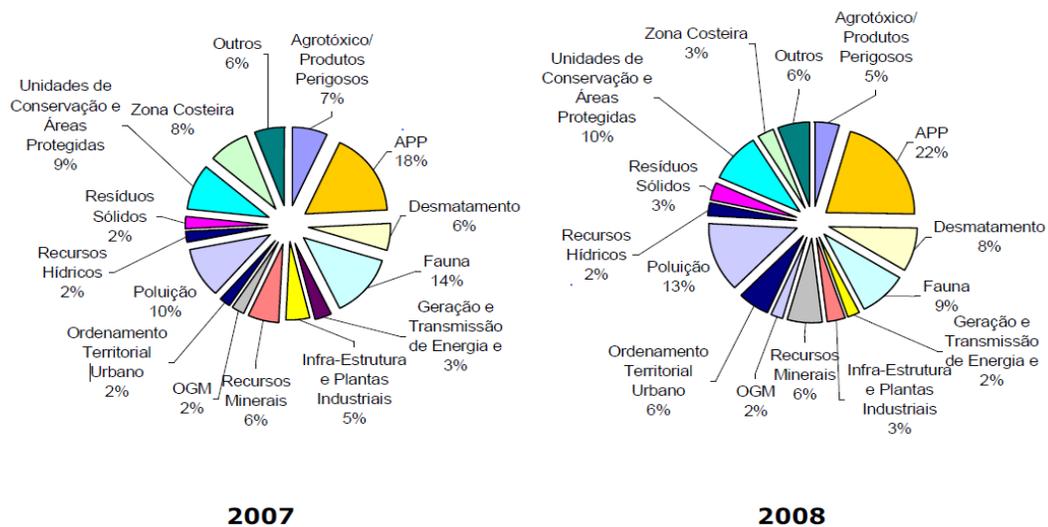
Figure A3.1: Number of Environmental and Cultural Resources Procedures



Source: Ministério Público General and author's calculations.

The MP has been very active in a variety of environmental areas. In 2008, the majority of environmental procedures were related to Permanent Protected Areas (22%), pollution control (13%), and Natural Protected Areas (10%).

Figure A3.2: Environmental Procedures by area



Source: Ministério Público General

¹⁷ The differences by region could be attributed to the disparity in capacities of MPs in less developed States located in the Northern region and more developed States located in the Southern region (Mueller, 2008).

The MP main characteristics

The success of the MP in protecting the environment is mainly due an enabling environment for carrying out its tasks. A number of studies indicate the following aspects as key contributors to MP success in promoting compliance and enforcement of environmental laws and regulations:

- Appropriate legal tools:
 - a. Civil investigations: The Public Civil Action Law of 1985 grants the MP with power to promote civil investigation. In practice, the MP can request free expert advice from police and other governmental organizations such as environmental agencies in order to build a case for environmental protection (Mueller, 2009).
 - b. Bring Public Civil Action: The Public Civil Action Law of 1985 grants the MP and other governmental on non-governmental organizations the power to bring Public Civil Actions before court. In practice, environmental organizations often bring complaints to the MP rather than filing legal actions themselves relying on the MP's expertise and capacity to investigate and manage complaints before court (Mc Allister, 2005).
 - c. Agreement-based compliance or TAC: The TAC is an instrument through which actual or potential perpetrators of the environment agree to take preventative measures to stop illegal acts or damages to public goods and enforce environmental laws and regulations. TACs are considered a faster and cheaper tool for environmental enforcement than filing a lawsuit, and have additional advantages such as the perpetrator's voluntary assumption of responsibility (Ninio, 2010), which could simplify a later court proceeding if needed. The majority of the MP's environmental investigations result in these types of settlements negotiated with the responsible party (Mc Allister, 2005).
- Functional, administrative and financial independence:
 - a. The MP annual budgetary allocation is fixed and automatic.
 - b. Public prosecutors, working for the MP, have lifetime tenure which is accessed via public examination open to all citizens with the necessary qualifications, (though public examinations are difficult and the number of candidates often significantly exceeds available vacancies). The 1988 Constitution establishes that prosecutors cannot be fired, transferred nor have their salaries reduced.
 - c. Salaries are among the highest in the country for public sector jobs and, as a consequence, they attract highly competent people.

However, MP's unfettered autonomy, free from hierarchical or external control has also raised concerns. Public Prosecutors' main challenges include:

- a. **Scope of Action:** Prosecutors have a broad mandate to influence issues that do not fall directly or explicitly into the MP's legal or technical mandate, which could constrict and delay key processes such as environmental licensing.
- b. **Institutional coordination:** The lack of information sharing mechanisms and coordination between MP and other environmental institutions might compromise their efforts for environmental protection. MP could place high demands for technical information and assistance on agencies with limited budgetary and staff resources.
- c. **Legal Certainty:** There is little consistency in the response of prosecutors to similar environmental matters. Moreover, for TAC processes there is currently a lack of a standardized process and format, criteria of uniformity, and transparency, which could hinder the use of TAC as a viable alternative for managing environmental conflicts.
- d. **Cost benefit assessment:** There is little economic analysis comparing the pros and cons of the MP approach to environmental compliance and enforcement. Ideally, this analysis would facilitate a comparison of the benefits of increased environmental performance directly applicable to the MP intervention with the cost of said intervention (e.g. time spent preparing and filing a lawsuit). Moreover, economic analysis of the alternative legal tools used by the MP would be desirable. There is a general understanding of the cost effectiveness of TACs over of court proceedings, but there is little analytical underpinning supporting that statement.

Should the MP approach be replicated in other countries?

Despite the need to assess the economic and environmental impacts of the MP, it is clear that it has played a defining role in promoting compliance and enforcement of environmental law and regulations in Brazil. Many Latin American and Caribbean countries are focusing now on finding innovative ways to promote environmental compliance and enforcement. Some of these countries have similar institutions for environmental protection granted with more or less power, independence and scope. Certain aspects of Brazil's MP could be replicated in other countries leveraging and strengthening existing institutions with a:

- *Developed Legal Framework:* Protective Institutions need to base their actions on an adequate legal framework covering the country's main environmental challenges in a cost effective manner.
- *Protective Institutional Framework:* Protective Institutions must be granted independence (e.g. through automatic and fixed budgetary allocation, adequate legal tools, etc...), as well as be subject to accountability to achieve the optimum level of enforcement.

- *Receptive Judiciary:* The Judicial System should have adequate human and budgetary resources as well as incentives to address cases presented by Protective Institutions.
- *Active and engaged Civil Society:* Although Civil Society does not generally have a strong role in Court proceedings or ruling, it plays a fundamental role in initiating the process by bringing the attention of Protective Institutions to a particular case.

Role of the Bank in promoting environmental compliance and enforcement

In 2001, the World Bank Environment Strategy established the “*introduction and enforcement of efficient environmental and natural resources management institutions, policies and regulations*” as a strategic objective for sustainable growth. Since then, the World Bank has lead numerous initiatives aimed at strengthening environmental institutions and governance, largely focused on technical capacity and assessments. Indeed, 60% of the World Bank’s portfolio has been dedicated to Analytical and Advisory Activities (AAA) with the remaining 40% going to lending operations, mostly through Specific Investment Loans. The majority of AAA and lending activities have been considered satisfactory or better, but the impact could improve with sustained capacity development as well as stronger country-ownership. While progress has been made in improving environmental institutions and governance worldwide, enforcement continues to be a persisting environmental challenge. There is no available data on World Bank performance in the area of environmental enforcement.

In LCR, the World Bank has played an important role in promoting environmental compliance and enforcement. Enforcement focused country assistance has been addressed mostly through two business lines: addressing specific enforcement needs through non lending technical assistance and trust financed operations as well as the mainstreaming of environmental enforcement through Development Policy Loans (DPL).

Increasing the capacity of Public Prosecutors (or a similar protective institution) to enforce environmental regulations is instrumental to enhancing environmental compliance and performance.¹⁸ The World Bank is uniquely positioned to provide Public Prosecutors or similar protective institutions with resources and technical assistance.

For instance the World Bank is providing technical assistance to the MP in Minas Gerais, Brazil aimed at: (i) modernizing and strengthening their procedures and practices, (ii) enhancing coordination with other institutions, (iii) improving transparency and accountability mechanisms, and (iv) developing specific tools for improving environmental performance such as methodologies for quantification of environmental damage and compensation, targeted conflict resolution techniques applied to compliance agreements such as TACs, or performance standards mechanisms.

¹⁸ In addition, Public Prosecutors could become a strategic ally in monitoring compliance with country and World Bank environmental and social safeguards in investment operations – MPs in Brazil have actively monitored hydropower investment operations and their environmental impacts.

Blended operations, that combine investment and trust financed operations, could be instrumental in the development of enforcement frameworks such as public prosecutors. For instance, combining an environmental DPL with a trust fund operation (e.g. Institutional Development Fund) to strengthen the capacity of environmental institutions to enforce the environmental policies developed under the DPL. An in depth review of World Bank Assistance in this area would show if there is a need to create a specific compliance and enforcement product line for the World Bank (e.g. a Country Environmental Compliance and Enforcement Assessment). In addition there is a need to undertake analytical work to understand the economic and environmental impacts of the MP program, as well as its potential replicability in other countries.

Finally, the World Bank has a wide range of professionals with the relevant expertise. Specifically in the area of environmental law, the World Bank has a strong legal department that can provide technical guidance. In addition, The World Bank can cooperate with existing initiatives leveraging expertise. For example, the World Bank Institute has cooperated with the International Network for Environmental Compliance and Enforcement (INECE) on piloting the application of Environmental Compliance and Enforcement mechanisms in Mexico, Argentina and Brazil.

Strengthening Environmental Regulation: the Case of Air Quality in Colombian Cities

Air pollution levels in Bogota, Medellin and Bucaramanga are comparable to those of Latin American cities with severe air pollution problems, including Mexico City and Santiago. Measured by average particulate matter (PM) concentration levels, pollution levels in those Colombian cities—between 50 and 70 $\mu\text{g}/\text{m}^3$ of PM10—are nearly twice the levels observed in Los Angeles, Madrid and Rome, and more than twice the levels in New York and Paris.¹⁹ As estimated by World Bank's 2006 Country Environmental Analysis (CEA) for Colombia, every year 6,000 people died in Bogota prematurely; and there were 7,400 new cases of bronchitis each year as a result of urban air pollution.

The annual cost of urban air pollution from PM alone was estimated at 0.8 of GDP of Colombia; and air pollution in Bogota alone accounted for half of those costs. A preliminary assessment of pollution sources revealed the major contribution to pollution levels from mobile sources; and the lowering of sulfur content in fuels had been identified by the CEA as a priority measure. The striking findings about the high health and economic costs of air pollution helped shape the strategic component of Colombia's 2006-2010 National Human Development Plan (PND) on air quality and strengthen the emphasis of the plan on the urgent need to improve air quality.

¹⁹ World Bank (2005). World Development Indicators. Cited in World Bank (2006).

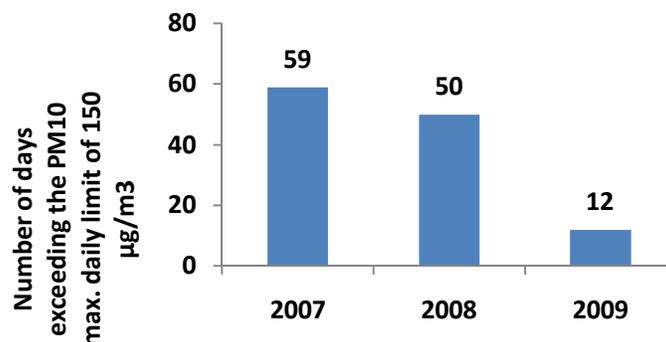
The passage of the 2008 Fuel Quality Law and a Voluntary Pact with Ecopetrol

The estimates of health costs from the CEA were taken up by a media campaign and by congressional leaders, who led public protests with white blankets which were quickly soiled by air pollution; improving fuel quality by adopting more stringent air quality regulations on sulfur content in diesel was understood to be the most urgent priority. The challenge was to ensure that compliance with the new fuel quality norms, under discussion for mobile sources, would be achieved. Over the course of ten years prior to that, thirteen attempts to pass stringent fuel quality standards had failed, mainly because of an absence of a roadmap for implementing those standards. This time, the preparation of the Law on Fuel Quality in 2008 with stringent standards on sulfur content in transport fuels was accompanied by a series of consultations with the regulated community led by the Ministry of Environment, Housing and Territorial Development (MAVDT) jointly with the Ministry of Energy and Mining and—very importantly—with the engagement right from the start of the Colombian petroleum company Ecopetrol.

Measurable improvements in air quality in Bogota have already been observed and they have been attributed at least in part to the implementation of the Fuel Quality Law. Sulfur content in diesel fell from 1,200 parts per million (ppm) in January of 2008 to 500 ppm in July and further to 231 ppm in October 2009. The concentration of particulate matter in Bogota, based on air quality monitoring data, fell by 8% in 2008 and continued to further decline in 2009. The numbers of consecutive days with PM levels out of compliance with the norms fell from 50-59 in 2007 and 2008 to only 12 in 2009 (Fig. A3.3).

According to the Bogota District Health Secretariat, no reductions in the rates of respiratory illnesses have yet been detected, but the impacts may be indirect and in-depth environmental health and monitoring studies are required to ascertain those impacts. Additional regulatory changes apart from the implementation of the new stringent sulfur limits, the strengthening of the monitoring networks and the establishment of a new urban air quality information system with the latest monitoring data are likely to result in further air quality improvements in the medium to long term.

Figure A3.3: Bogota's air quality significantly improved, partly due to sulfur reduction in fuels



Note: Air quality improvements have been observed, when measured by the number of days in excess of the maximum PM10 limit of 150 µg/m³, established by Resolution 601 in 2006. The District Secretariat of the Environment attributes this improvement in part to the introduction of cleaner diesel in the city's fuel distribution network, and in part to greater dispersion of pollutants in 2009 compared to 2008 because of more windy conditions. Sulfur content of diesel has been reduced from 1,200 ppm to less than 500 ppm starting in July 2008, in compliance with the commitment by ECOPETROL in the "Pact for Better Air Quality in Bogota" to introduce cleaner diesel.

Source: District Secretariat of the Environment, October 2009.

Ecopetrol played key role in achieving compliance with the new emissions regulations established by the Fuel Quality Law. The President of Ecopetrol, the Ministry of Environment (MAVDT), and the Mayor of Bogota signed a voluntary pact in February 2008, whereby Ecopetrol would install an additional refinery process to improve diesel quality; and a similar pact has been signed for Medellin. The Pact stipulated that Ecopetrol would lower the sulfur content in diesel for Bogota to 50 PPM by the end of 2010. This is more stringent than the levels stipulated in the 2008 Law on Fuel Quality, and Ecopetrol is complying with this voluntary commitment. The estimates of the health costs of air pollution have been instrumental for putting together the financing for the new refinery, as the management of Ecopetrol argued that this investment would result in large savings in terms of the health costs of pollution to justify this project. It must be noted that Ecopetrol used to be a state owned enterprise until 2007, when a portion of it was sold to the private sector.

While this is a striking story of how the private sector has helped ensure compliance with the new regulations on sulfur content, this was a unique case that may not be as easy to replicate elsewhere. De-facto, the government has at least partially financed the investment in the additional refining capacity that has enabled compliance by Ecopetrol. Furthermore, retail diesel prices remained at the pre-reform level in order to avoid arbitrage and illegal sale of lower quality diesel in the cities with stringent fuel quality standards. The relative ease of enforcement of the new sulfur content requirements was also due to the unique situation of Ecopetrol being a joint public-private company and its desire to improve its public image.

Negotiations with Ecopetrol, its involvement in the discussions preceding the passage of the new regulations, and congressional involvement in the consultations within the framework of the Health Forum (*Congreso de Salud*) have helped get Ecopetrol on board with the preparation of the new regulation and develop a compliance strategy with the new law--which Ecopetrol's management knew was under preparation. Two congressmen involved in the discussions of Health Forum later on prepared and facilitated the Congressional approval of the new 2008 Law on Fuel Quality.

This success in tackling the mobile sources has helped achieve progress in the efforts to collect data on sulfur emissions from for industrial sources (also regulated by the new law), with the eventual objective of achieving compliance with the law for the fixed sources. The industry representatives used to claim that at first the Government needed to tackle the bigger problem - - sulfur content of mobile sources -- before addressing the fixed sources (the relatively smaller source of sulfur emissions than the mobile sources).

The application of the new law to the mobile sources and the pact with Ecopetrol have demonstrated that the intentions of the Government to pass and, very importantly, to enforce compliance with the new regulations are serious. The regional environmental authorities (CARs) which did not previously succeed in their efforts to improve the quality of emissions-related air from industrial sources, were now able to obtain the required information on emissions from fixed sources. This time when the industrial sources were given two months to comply with the reporting requirements, they realized that the efforts to enforce compliance are serious, and provided the required data.

The elements of success and the role of the World Bank

The legal framework for Colombia's air quality management system dates back the 1974 National Code for Renewable Natural Resources and Environmental Protection, and Colombia has a fairly long history of air quality monitoring. More recently, the Government of Colombia (GoC) implemented a series of regulatory reforms, accompanied by the adoption of policies, strategies, and the creation of inter-sectoral coordination mechanisms which have built upon the strategic component on air quality management of the 2006-2010 National Human Development Plan (NHDP) and helped achieve notable reductions in air pollution in the country's most contaminated cities.

At the time the GoC requested World Bank assistance to help strengthen air quality management, the conditions for reforms in that area were favorable and the reforms had strong supporters at MAVDT and in DNP. The strategy included: (i) the development and implementation of protocols to measure emissions; (ii) the creation of emission inventories; (iii) research to better understand the causal links between pollution and health; (iv) the design and approval of an action plan; design and approval of a national policy.

The benchmark achievements in this area are the passage of the Air Pollution Prevention and Control Policy [CONPES 3344 (2005)], the Law on Fuel Quality [Law 1205 (2008)], the passage of the Air Quality Law by CNA (2009) and the creation of the National Intersectoral Technical Commission on Prevention and Control of Air Pollution [CONAIRE (2006)], charged with the preparation of action plans to attain the goals of the 2005 and 2009 Air Quality Policies (Fig. A3.4). Environment ministries do not always have the convening power needed to coordinate powerful sectors, such as energy and transport. The DPL facilitated the coordination needed to blend the work of the many different sectoral authorities.

Figure A3.4: Benchmark achievements in air quality management and support by the Bank



Contribution of the World Bank technical and financial assistance

- The 2005-06 Country Environmental Analysis (CEA) influenced the formulation of the urban air quality objectives in the 2006-2010 National Human Development Plan (NHDP), helping solidify the political commitment to reform
- The 2007-08 “Fuels” and “Environmental Health” Strategic Environmental Assessments (SEAs) laid out priorities for an action agenda to implement the NHDP’s priorities
- The DPL program has supported the passage of benchmark policies, the Fuel Quality Law, and the formation of the National Intersectoral Technical Commission on Prevention and Control of Air Pollution (CONAIRE) as the prior actions agreed with the government for loan disbursement
- The SEAs informed the discussions of the Academic Forum with 70 stakeholders from government and other institutions and the action plans of CONAIRE; and helped establish priorities eventually addressed by the Fuel Quality Law and the Environmental Health and Air Pollution Control Policies
- The Sustainable Development Investment (SusDevInv) Project that has accompanied the DPL program, has financed the preparation of the SEAs, the establishment of emissions monitoring protocols, emissions inventories, environmental health studies of air quality in the most polluted sites and other specific investments in strengthening air quality management

A step-by-step analysis of the reform steps shows that the World Bank played an important role in support of several dimensions of this program, but domestic commitment to reform was very strong. The key elements of success are:

- Information about the costs of health damage from urban air pollution provided in the Country Environmental Analysis, and disseminated through multiple newspapers, leading public manifestations, and pressure for reform.
- Strategic direction for air pollution management set by the 2006-2010 National Human Development Plan (and strongly influenced by the findings of the CEA in the area of air quality).
- Champions in support of the reform and investment program and the strong political commitment to implement a series of institutional and regulatory reforms.
- Strong analytical foundation and evidence-based policy setting, with reliance on scientific assessments; air quality monitoring that has already facilitated follow up epidemiological studies to assess the health impacts in contamination hotspots; emission inventories; and the use of Strategic Environmental Assessments (SEAs) as the basis for policies.
- Reliance on cross-sectoral involvement via innovative intersectoral coordination mechanisms and consultative bodies.

- Financial and technical assistance by the World Bank through the Programmatic DPL, which has helped solidify the commitment to the reform program (totaling US\$ 900 mln over the course of four years), and technical assistance through a complementary technical assistance project (totaling US\$8 mln, with US\$ 7 mln of that amount provided by the WB).

The role of the Country Environmental Analysis. The Impact Evaluation (IE) of the CEA has found that the topic of environmental health became so pronounced in the 2006-2010 NHDP on the basis of the background studies carried out as part of the CEA (Chavarro Vasquez, 2006). The CEA also provided the analytical foundation for the definition of specific policies (CONPES 3343 and the 2005 guidelines), justification for the SEAs, and justification for carrying out a clean LPG program by Ecopetrol. It has also provided the technical foundations for the public debate that ensued in Colombian media. Congressman David Luna (the representative for the city of Bogota), “surprisingly well versed” on the CEA’s findings and the strategic actions proposed by the report and its background studies, reported that the main environmental priority was the introduction of cleaner diesel for public and heavy transport (Chavarro Vasquez, 2006, p. 33). The experts of the air quality group at MAVDT have reported that the CEA had made it possible to build up the public pressure and eventually succeed in passing the new law (Pers. comm., 2009).

The role of the Environmental Development Policy Loan (DPL) series and of the overall support program. The Stakeholder Workshop was held in May, 2010 to solicit the participants’ comments on the achievements of the program.²⁰ Overall, the DPL support has facilitated an evidence based policy setting process with clear assignment of resources and commitment at high levels and across sectors. According to the National Planning Department (*Departamento Nacional de Planeacion*, DNP), the DPL series has had a very positive impact on environmental management in Colombia. The DPLs have helped lock in the commitment to reform at the inter-sectoral level. The CEA, carried out at the start of the program, has helped focus the attention on identifying priorities in each area—particularly true in the area of air quality management where the cause-and-effect chain is complex—and then developing concrete action plans and regulations addressing those areas, and investing in specific measures to achieve progress in the areas identified as priority.

By helping define a set of clear priorities, the Bank program has (i) helped join the efforts of different agencies and stakeholders focusing on the priority areas, (ii) created a temporal framework for attaining those objectives, and (iii) provided the financing through the SusDevInv project for actions in those priority areas and helped assure the fiscal space (budgetary allocation) to finance those actions at MAVDT and other implementing agencies. In

²⁰ The participants have included the key staff and technical experts of MAVDT, DNP, IDEAM, DANE, the Health Department of Bogotá, and other agencies. In a series of meetings with the teams in charge of implementing interventions and making the regulatory changes in each area or otherwise engaged in that process, the Bank team asked the participants to (i) describe the most significant achievements of the program, (ii) assess the role of the DPL in attaining those achievements, as well as the role of the underpinning AAA program and the associated SusDevInv technical assistance project, and (iii) respond whether in their view, these achievements would have occurred in the absence of the support by the DPL.

particular, in the area of air quality management, the program owes its success to the ability to establish a clear framework from the prioritization of interventions based on integrated analysis of air quality problems in the CEA, to the establishment of the corresponding policy priorities, and through to the allocation of budgets to carry out priority actions to attain progress in those priority areas.

The strengthening of environmental regulation in other areas

Policy Evaluation and Monitoring at the national and CAR levels. Since the program's start and as an outcome of consultations with the DNP, the DPL and the SusDevInv projects emphasized the need for a mechanism to facilitate the evaluation and monitoring of policy design and implementation—an area of policy formulation and implementation that was thought to be particularly weak. The Decree 1200 of 2004 on Policy Evaluation and Monitoring sought to address this weakness and led to a major shift in the policy evaluation process as this became the first decree directly focusing on monitoring and evaluation of policy impacts.

The GoC and the Bank included the issuance of Decree 1200 as a prior action for the second tranche of the DPL, which has helped strengthen the GoC's commitment and influenced the timing of the passage of this decree. In the opinion of MAVDT officials, it would have been difficult to implement this decree without the support of the SusDevInv Project which provided technical assistance to MAVDT and to CARs to facilitate compliance and financed the strengthening of monitoring networks and quality standards for monitoring, needed to assess whether policies will have the intended impacts. In the opinion of MAVDT officials, the establishment of a systematic policy evaluation and monitoring process will help ensure continuity in the process of policy implementation and strengthen the institutional memory, reducing the vulnerability to changes in personnel. Future efforts in this area will need to focus on improving the quality of the information provided by the CARs.

Setting Priorities in Water Resources Management. Initially, the DPL program sought to support the passage of a new Water Law. As this approach did not turn out to be politically feasible at the time, the government and the Bank negotiated an alternative package of reforms which introduced much of what the Water Law would have achieved. The main results in the area of strengthening the management of water resources up to now are the passage of the National Water Policy (2010) and preparation of the underpinning diagnostic studies to facilitate the setting of priorities.

The Bank program has helped set priorities in the area of water resources management—through the Bank-supported SEA on water quality and the Diagnostic Study on Water Resources—and generate buy-in from key sectors. This eventually enabled the preparation and approval by the National Environmental Council (*Consejo Nacional Ambiental, CNA*) of the benchmark Water Resources Policy in 2010, widely discussed in a series of workshops with key stakeholders.

The DPL has supported the creation of the Water Resources Group at MAVDT, tasked with the preparation of the Diagnostic Study and the National Water Policy. In the view of the staff of the Water Resources Group of MAVDT, the DPL has played an important role by helping strengthen the convening power of the Ministry of Environment, increasing a sense of urgency for the passage of this complex policy by the agreed date and by helping the Ministry staff focus on the key priorities.²¹ The ongoing and planned Bank support will focus on the implementation of the strategic priorities of the National Water Policy.

Can this approach be replicated and what may be the World Bank's role?

The need to act at multiple levels and find customized solutions. The remarkably successful steps in the direction of stronger environmental regulation, with real impacts on the ground and measured air quality improvements, can be replicated in other areas of environmental management in Colombia, and in other countries. The case of air quality regulation in Colombia has clearly shown that success is possible when the process of setting policy priorities directly translates into an action agenda, with earmarked financial resources for the implementation of priority actions.

The World Bank and other donors can play a catalytic role in this process by recognizing the windows of opportunity for policy reform, providing timely analytical support to help the governments establish policy priorities, and by delivering targeted technical and financial assistance. But this case has also shown that the positive outcomes were a result of interplay of several factors, starting with the strong domestic commitment for reform and champions at different levels—in the Ministry of Environment and Ministry of Energy, in the Congress and civil society. This conclusion is in agreement with the findings of the latest research on institutional economics and polycentric governance systems, which emphasize the need to act at multiple levels and find context-specific solutions. This approach calls for flexibility and adaptive management in the design of programs that aim to support policy reforms.

Three elements of a successful program in support of environmental reforms. At a practical level, the experience of the program of environmental reforms in Colombia has shown that a combination of instruments—a DPL program supported by rigorous and timely analytical support and technical assistance either through a parallel investment project or linked trust fund-financed operations—can have remarkable outcomes. However, such a program needs to include all three elements. In the case of air quality reforms in Colombia, it is unlikely that the same outcomes would have been achieved if either of the elements of the program was missing. Due to the technical complexity such as the indirect links between the investments, ambient quality, and health outcomes, it may hold true for the environmental programs more than for any other sector that a DPL program needs to be accompanied by technical assistance loans. This experience also suggests that a TA loan alone would not have achieved the same outcomes as the DPL has been instrumental for mobilizing inter-sectoral coordination. A new lending instrument could be considered which would automatically combine a DPL loan (normally

²¹ Pers. comm., March, 2010.

large) with a relatively small TA loan and earmarked funding for the underpinning analytical studies.

Environmental information and public communication of technical findings. This case study also reveals the importance of environmental information and effective communication of the results of technical studies to decision makers and to the public. Strengthening the communication of technical results and integrating the technical professionals more closely with the communications department would significantly increase the impact of the Bank's programs that aim to improve environmental governance, and increase the chances of success of those programs.

Annex 4: Promoting Social Accountability

As part of an effort to enhance accountability, the World Bank has supported efforts to strengthen civil society organizations (CSOs). These efforts have included building their capacity, increasing their access to government or corporate environmental information, as well as including CSOs as key stakeholders in policy discussions.

The Access Initiative (TAI)

The Access Initiative (TAI) is a network of over 150 NGOs in over 45 countries that seeks to strengthen the capacity of CSOs in developing countries to obtain access to environmental information, as well as participate in decision making and access to justice in matters relating to the environment. TAI is led by representatives from eight CSOs (the core team) from different regions of the world (Uganda, Cameroon, Chile, Mexico, Hungary, Thailand, India, and the United States). The World Resources Institute (WRI) serves as the secretariat for the global TAI network.

Bank support to TAI is through a \$2 million DGF grant over 3 years (FY2009–11) through WRI. The Bank's DGF grant aims to scale up the existing program by encouraging an enhanced poverty focus, greater action orientation, and a shift in program implementation and administration to regional and national NGOs and CSOs. The grant has supported a variety of activities, including:

- In Cameroon, the TAI assessment highlighted the urgent need to strengthen the capacities of judges, prosecutors, lawyers, and other actors in the judicial process, so as to sustain effective access to environmental justice and enforcement of access rights and environmental democracy. TAI partners worked with the Ministry of Environment and Nature Protection and the Ministry of Justice to develop two training programs: one for judges and magistrates and the other for lawyers.
- In the Philippines, TAI partners received support to draft the Benchbook—guidelines for judges in the newly established environmental courts—under a new national initiative to establish environmental courts.
- In Sri Lanka, TAI partner PILF was supported to work with the Secretary to the Ministry of Urban Development and Sacred Area Development to prepare a set of ministerial guidelines on information disclosure in relation to the urban sector. Additionally, PILF is negotiating with the Central Environmental Authority for key amendments to the National Environmental Act that would expand public participation in project-level decision making.

Extractive Industries Transparency Initiative (EITI)

In the area of extractive industries, the Bank Group in 2000 started a comprehensive two-year evaluation of the development impacts of its support for oil, mining, and gas projects worldwide. The Extractive Industry Review (EIR) recommended that the WBG adopt significant reforms, including immediately ceasing funding for coal projects worldwide and phasing out its support for oil production by 2008. The review also recommended enhanced human rights protections, prior informed consent for indigenous and project-affected peoples, and an end to support for destructive mining technologies.

One of the outcomes of the EIR was the Bank's decision to endorse and support the then-nascent Extractive Industries Transparency Initiative (EITI). Established in 2002, EITI was designed to promote and support improved governance in resource-rich countries through the full publication and verification of company payments and government revenues from oil, gas, and mining. Since 2004, the WBG has been the primary source of technical and financial assistance for countries implementing EITI. The EITI is the global standard for promoting transparency of payments and revenues in countries rich in oil, gas, and mineral resources.

Among the benefits to participating countries, EITI can (a) provide a systematic framework for collaboration among governments, companies, and CSOs; (b) demonstrate a national commitment to transparency; and (c) help citizens organize themselves to hold agencies accountable for how revenues are used in public expenditure programs.

Companies and civil society groups often contribute to the EITI process by (a) actively encouraging governments to commit to EITI; (b) shaping the EITI scope through their involvement in the EITI steering group; (c) providing data reporting; and (d) communicating and disseminating the EITI results to other civil society groups, companies and the general public.

Ethiopia Productive Safety Net Program

The Ethiopia Productive Safety Net Program (PSNP) serves as an example of how the Bank can facilitate demand-side accountability despite the constraint that the Bank primarily lends to governments. The Ethiopia PSNP provides resources to food-insecure households in Ethiopia through payments to working household members for their participation in public works projects, and direct payments to labor-poor, elderly, or otherwise incapacitated households. Such support allows households to smooth their consumption and avoid the asset depletion during crises. The Bank assisted in organizing a consortium of CSOs to ensure the proper execution of the program's objectives. The Bank mobilized funds to finance the consortium from bilaterals and the European Community. While the Bank could not directly use loan or grant funding to finance the consortium, this example serves to illustrate that the Bank has the ability to organize demand-side accountability by partnering with other donor organizations.

PROFOR and PROFISH

The Bank is also part of multi-donor partnership programs which engage civil society among other stakeholders in promoting accountability and improved governance in the forest sector through the Program on Forests (PROFOR) and the fisheries sector through the Global Program on Fisheries (PROFISH). PROFOR seeks to encourage the transition to a more socially and environmentally sustainable forest sector supported by sound policies and institutions that take a holistic approach to forest conservation and management. PROFISH promotes effective fisheries strategies and policies at the country, regional and global levels. It addresses governance issues in fisheries, builds institutional capacity and encourages countries to adopt fisheries management as a poverty reduction measure. In both programs, governance and demand-side accountability are promoted through engagement with grass-roots organizations.

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