Environmental Mainstreaming:

Applications in the Context of Modernization of the State, Social Development, Competitiveness, and Regional Integration

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This working paper is being published with the sole objective of contributing to the debate on a topic of importance to the region, and to elicit comments and suggestions from interested parties. This paper has not gone through the Department's peer review process or undergone consideration by the SDS Management Team. As such, it does not reflect the official position of the Inter-American Development Bank.

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As the Inter-American Development Bank embarks on a renewed mission to support sustainable economic growth and to reduce poverty and inequality, as stated in the Bank’s Institutional Strategy, environmental sustainability needs also to be addressed under a new prism. This new prism is the concept of environmental mainstreaming.

As part of a collaborative effort between the IDB’s Environment Division and the World Resources Institute, this document discusses environmental mainstreaming considerations in the context of the four pillars of the Bank’s Institutional Strategy: Modernization of the State, Social Development, Competitiveness, and Regional Integration. The purpose of the document is to set forth ideas and recommendations that will help identify mainstreaming opportunities to strengthen environmental sustainability across sectors, which in turn should enhance development outcomes.

We hope that this working paper will provide useful guidance and orientation to Bank staff, either in the context of country strategy work, sector level analysis, or program design.

Janine Ferretti
Chief
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Introduction

Why Mainstream the Environment?

The Inter-American Development Bank’s current work and mission is guided by the objectives stated in the recent Bank’s Institutional Strategy, which has two overarching objectives: reducing poverty and inequity, and fostering sustainable economic growth. To achieve these objectives, the Bank has articulated operational strategies to address four identified pillars for development in the region: modernization of the State, social development, competitiveness, and regional integration. In addition, the Bank has defined an environment strategy which seeks to mainstream environment across the four priority pillars. The purpose of this document is to provide a conceptual framework and practical orientation to mainstream environmental sustainability into those four pillars.

Mainstreaming the environment can be defined as the active promotion of environmental sustainability in the identification, planning, design, negotiation, and implementation of strategies, policies and investment programs. In this context, mainstreaming refers to addressing environmental issues strategically as a cross-cutting dimension of development, and implies moving beyond environmental impact mitigation to a more encompassing and strategic approach to achieving sustainability.

Mainstreaming requires consideration of the environment in the earliest stages of the decision-making cycle, when development challenges as well as proposed interventions are framed. Mainstreaming prompts consideration of how interventions targeted at environmental and natural resources management can play an integral part in achieving broader development objectives, as well as how initiatives outside the narrowly-defined “environment sector” can be designed to support environmentally sustainable development.

In this context, environmental sustainability refers to the longer-term ability of natural and environmental resources and ecological functions to support continued human well-being. Environmental sustainability encompasses not just recognition of environmental spillovers today, but also the need to maintain sufficient natural capital to meet future human needs.

This introductory section outlines the principal benefits and challenges of mainstreaming. A second section outlines key questions for mainstreaming, and discusses the relevance of Bank instruments. Sections three through six describe conceptual frameworks and illustrative areas for Bank action under each of the four operational strategies: Modernization of the State, Social Development, Competitiveness, and Regional Integration.

The Benefits of Environmental Mainstreaming

Although a relatively new concept, environmental mainstreaming increases the possibility of identifying interventions that are “win-win” in nature, i.e., programs and operations that produce clear co-benefits for both long-term economic development prospects and environmental sustainability. Although mainstreaming implies going above and beyond mitigation of adverse environmental impacts, it is important to recognize that the two are not dichotomous. In other words, a continuum of activities is possible that combines elements of both environmental mitigation and mainstreaming.
Mainstreaming offers a number of benefits, which are summarized in Box 1.

**Key Considerations to Environmental Mainstreaming**

While the benefits of environmental mainstreaming seem obvious, its practical and effective application requires the understanding of some fundamental considerations.

*Safeguarding and/or Mainstreaming.* In the development community, attention to “environmental” issues is typically understood as an exercise in identifying and mitigating adverse environmental impacts of particular projects. This understanding is based in part on the appropriate emphasis that development agencies give to the implementation of the so-called “safeguard” policies, which focus on averting harm to the environment. The safeguard approach focuses on compliance with a given set of substantive and procedural standards.

By contrast, mainstreaming requires a conceptual shift that identifies environmental sustainability as an objective of the development process, rather than focusing on compliance with environmental standards as a side condition to the achievement of other objectives. It thus requires a focus on proactive investment in policies and projects that promote integration of environmental sustainability into development strategies themselves, rather than as an “add-on” component to policies or projects conceptualized without reference to environmental sustainability.

**Moving Beyond the Sector-level Approach.**

The success of putting environmental issues squarely on the development agenda in the 1990s led to the establishment of environmental ministries in governments. In addition, governments, with the support of development agencies, developed portfolios of “environment sector” projects to strengthen regulatory capacity and to support specific environmental protection efforts. However, an unfortunate side effect is the perception of a separate “environmental sector” de-linked from economic drivers, as well as the perception that addressing environmental issues is the exclusive responsibility of environmental authorities or units. Government ministries dealing with other sectors are not held accountable for the environmental sustainability of the policies and projects that they promote,

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**Box 1. The Benefits of Environmental Mainstreaming**

- *Increases in the positive development impact of IDB interventions* – facilitates design of interventions that leverage or produce opportunities to enhance positive development outcomes.
- *Greater cost effectiveness in program design and operations* – enables analysis of which interventions deliver the greatest benefits at the lowest economic, social and environmental costs or where the biggest return for a development dollar can be obtained.
- *Better sequencing of development interventions and technical assistance* – encourages a broad understanding of the context that influences a particular development problem, which in turn informs decisions about what series and sequence of actions are most critical.
- *Identification and prevention of legacy issues* – supports anticipation and avoidance of recurring problems and long-term consequences associated with inadequately designed or irreversible actions.
- *Reductions in reputational, operational and credit risks at the portfolio, country or sector level* – determines whether the Bank’s portfolio or its activities in particular client countries are concentrated in geographic areas or industries that may suffer significant environmental, social and economic impacts.
and are seldom provided with the mandates, procedures or capacity to meet such accountabilities.

In addition, sectoral approaches to development may work against environmental mainstreaming by obscuring cross-sector synergies and dis-synergies. For example, the benefits of improving urban air quality are most apparent to those working in the health sector, while the necessary sector reforms to reduce noxious emissions must be implemented in the transportation and energy sectors.

**The Importance of Upstreaming.** Normally, mainstreaming must occur “upstream” in the planning process, whether in the context of developing a country strategy, designing a sector reform program, or planning a specific project. Once development interventions have been selected to address objectives other than environmental sustainability, the opportunity to mainstream may have already been lost. Accordingly, mainstreaming requires revisions to planning processes within institutions to ensure that environmental sustainability is integrated early and systematically into standard decision-making procedures.

**Short-term vs. Long-term Planning.** Another important consideration is that short-term planning and geographically circumscribed targets for projects and policies limit the possibilities for mainstreaming. For instance, national election cycles and economic assessment timeframes systematically disregard the long-term costs of the failure to address sustainability, as well as the long-term benefits of mainstreaming. Many policy choices that would not be possible in the context of a five-year project, however, could very well appear highly desirable within a ten-year implementation period.

**The Scale of the Analysis.** Effective environmental sustainability is enhanced if proposed investment programs and policies are assessed taking into account an appropriate ecosystem scale, which seldom corresponds to political jurisdictions or the mandates of development agency units. In this regard, full mainstreaming of environmental sustainability would require the consideration of environmental implications outside the region (such as those associated with greenhouse gas emissions), transboundary environmental impacts within the region (such as those associated with biological corridors), and ecosystem scale impacts within countries (as is the case with watershed management).

**The Need for Flexibility.** A final consideration is that the mainstreaming agenda does not lend itself to prescriptive planning methods and demands flexibility. For example, agricultural or industrial project developers can achieve compliance with environmental safeguard policies by selecting technologies that will result in pollution emissions consistent with relevant standards, or choose a pesticide from an approved list of less harmful agricultural chemicals. By contrast, mainstreaming environmental considerations into industrial or agricultural development can take many forms (such as the use of lower emission fuels or biological pest control methods), with no pre-determined “right” answers. As a result, mainstreaming is best approached by asking the right questions and opening the decision-making process to wide participation in order to generate creative opportunities and alternatives.
Questions to Guide Environmental Mainstreaming

This section outlines a set of key questions to guide efforts to put environmental mainstreaming into practice, and discusses the relevance of Bank instruments that are essential for this purpose.

**Key Questions**

One approach to encourage environmental mainstreaming is to ask a consistent set of questions when new country strategies and operations are developed. The questions posed in this section are intended to capture the identification and integration of positive opportunities to promote environmental sustainability.

**How does environmental analysis at the regional country, sector, or landscape level inform broader project or country-level priorities? Are the economic drivers for development properly identified vis à vis their environmental links?**

The importance of environmental mainstreaming in achieving other objectives can only be explained by a broad and strategic environmental analysis. The objective is to set priorities right, so that trade-offs and/or win-win opportunities are identified. Such analysis may reveal, for instance, the existence of natural constraints on the capacity of natural resources to support certain forms of development and recommend alternative sustainable paths. Similarly, a strategic analysis can elucidate “win-win” opportunities to simultaneously promote environmental sustainability and other Bank objectives, such as increasing competitiveness.

**Is the development objective correctly specified?**

Many opportunities to mainstream environmental considerations into development interventions are lost when the problem to be solved is too narrowly defined, unnecessarily circumscribing the realm of possible responses. The interests of environmental mainstreaming are often served when the development objective is framed around the services to be delivered rather than investment in a particular solution. In other cases, mainstreaming opportunities are missed when the development objective addresses a symptom rather than a root cause of a problem.

**Are opportunities to advance environmental sustainability through policy reforms or development investments identified?**

Decisions with the most profound impacts on environmental sustainability are usually made in the context of other sectors, such as agriculture, electricity, transport, tourism, and extractive industry. It is thus critical that environmental sustainability be integrated into sector strategies early in the process rather than assuming it can be “added on” later.

**What investment is planned to ensure that the enabling policy and governance conditions necessary to ensure environmental sustainability are in place?**

Governance mechanisms and policy frameworks are critical building blocks for mainstreaming the environment. Without strong and functioning regulations and clear “rules of the game” for public and private sector actors—including standards of transparency and accountability—the social and economic sig-
nals needed for the success of environmental mainstreaming efforts are missing. Transparency and accountability are extremely important for environmental mainstreaming; rewards for “good actors” are undermined if there is no accountability or sanctions for “bad actors.”

Capacity is also a necessary governance condition for environmental mainstreaming: capacity on the part of government agencies for regulation and enforcement as well as for information disclosure and public consultation; capacity on the part of private companies to recognize and exploit opportunities for eco-efficiency and addressing social responsibility; capacity on the part of civil society organizations to monitor the environmental performance of government agencies and private corporations; and capacity on the part of local communities to participate meaningfully in development decision-making that will affect them.

*Are appropriate geographic and time horizons considered in the assessment of development and environment benefits?*

The assessed environmental impacts of individual policy interventions or investment operations can vary radically depending on the time horizons and geographic scales used to assess them. Such variation is particularly relevant to environmental concerns, because environmental change can play out on a global scale and over extremely long time horizons. The interests of mainstreaming are served when the scale of the ecosystem potentially affecting or affected by a proposed policy or project intervention serves as the scale of analysis for assessing environmental costs and benefits.

The four- to six-year terms that are typical for elected governments pose a considerable challenge to the use of longer-term time horizons for investment planning. Political decision-making is driven by the desire for short-term results, and that is unlikely to change; nevertheless, the long-term costs of pursuing short-term gains can still be assessed and presented to decision-makers, public constituencies and private sector actors.

*How has early consultation with interested stakeholders—including constituencies for poverty reduction and environmental protection—affected the design of the country strategy, policy, or project intervention?*

Because environmental mainstreaming does not lend itself to a “checklist” approach, one of the most effective ways to ensure that mainstreaming opportunities are captured is to consult early and often with stakeholders that will be affected by proposed strategies, policies, and projects. Constituencies for environmental protection—including officials in relevant government agencies as well as environmental interest groups and the public at large—are often left out of decision-making that may not be explicitly “environmental” in nature. Because the poor depend on environmental sustainability, it is particularly important that consultation processes include constituencies representing poor communities, and special outreach mechanisms to overcome the inherent barriers to their participation.

**Bank Instruments for Environmental Mainstreaming**

Bank financing in any given country is determined by a well established cycle reflecting country programming and identification processes; design and development of an agreed set of projects and programs; implementation and execution, and, in selected cases, ex-post evaluations. Effective mainstreaming needs to consider this cycle and be particularly proactive and relevant in the programming stage.
Country Programming Instruments. Among the most important instruments of the country programming process is the Country Strategy Paper, which defines the Bank’s medium- to long-term commitment with a country. Country Strategies are complemented by Policy Dialogue Papers, private-sector programming reports, and strategy updates as needed. For the most part, Country Strategies and programming activities have addressed environmental issues and opportunities when there are explicit demands to finance environmental sector operations, often at the request of environmental authorities. There have been limited environmental considerations in nonenvironmental areas such as private-sector lending, sector utility reforms, and social sector reforms.

Country strategy development and the corresponding programming process are the appropriate stages for mainstreaming environment. The challenge in using these programming instruments is to approach environment as a strategic component of social and economic development. To this end, country strategy development can be strengthened by providing support, in an effective and timely manner, to any analytical work conducted with the purpose of setting priorities and environmental mainstreaming, such as Country Environmental Analysis (CEA), Poverty Reduction Strategy Papers (PRSPs), country environmental profiles, and other tools, in an effective and timely manner. It is at this stage that many of the benefits of mainstreaming discussed in this document can be realized.

Instruments for quality control and environmental mainstreaming at project design and execution level. During project design and execution, it is also possible to improve the Bank’s ability to go beyond environmental safeguards so that the value and benefits of projects across sectors are higher. For example, opportunities for private/public sector financing and partnerships can be established and synergies among different projects identified and developed. Technical cooperation operations can support the creation of enabling conditions that facilitate environmental mainstreaming, and help fulfill longer terms objectives. In addition, new flexible Bank financing instruments, such as innovation loans, multiphase loans, policy- and performance-based loans can address environmental issues on a cross-sectoral basis with a longer term development perspective. Logical frameworks or related tools for project monitoring and reporting can incorporate environmental performance indicators that reflect environmental mainstreaming outcomes.

Mainstreaming Environment into the Four Pillars of the Bank’s Institutional Strategy

The four sections that follow describe how mainstreaming the environment can be approached in the context of the Bank’s four pillars, and suggest areas of action within the associated operational strategies:

- Mainstreaming the environment into the strategy for modernization of the State provides a wealth of opportunities to exploit synergies to improve governance of the environment while reforming the relationships between the State and the market and between the State and society;

- Mainstreaming the environment into the social development strategy captures “win-win” opportunities to produce improved environmental and social outcomes resulting from a recognition of poverty-environment linkages;

- Mainstreaming the environment into the competitiveness strategy entails identifying opportunities to take full advantage of the region’s renewable and nonrenewable
resources as a source of long-term com-
parative advantage; and

- Mainstreaming the environment into the
  regional integration strategy requires un-
derstanding the environmental impli-
cations of prospective trade integration, and

supporting regional cooperation to address
them.

The sections demonstrate that environmental
mainstreaming is compatible with the objec-
tives of the Bank’s four strategies, and stimu-
late the consideration of options that enhance
the overall positive impacts of those actions.
Modernization of the State

Conceptual Framework

The Bank’s strategy for modernization of the State focuses on reforming the relationship between the State and the market for greater economic efficiency, and reforming the relationship between the State and citizens for greater accountability. The objectives of the strategy are compatible and even synergistic with environmental sustainability.

However, potential synergies between institutional and policy reforms and environmental objectives are not automatically realized; they must be intentionally built into the design of reform efforts to ensure that benefits for environmental sustainability are fully captured. In addition, changes in the mandates and structure of government institutions can have unintended consequences for natural resources management that need to be analyzed and addressed.

Reforming the Relationship Between the State and the Market

The development of institutions supportive of efficient and competitive markets provides ample opportunity for mainstreaming environmental sustainability. Some interventions to improve governance can increase sustainability by removing ex ante distortions that drive unsustainable economic behavior. For example, the strengthening of property rights over natural resources can mobilize productive assets for economic development, while avoiding the environmental degradation that accompanies “open access” regimes. If perverse subsidies are removed, productive sectors will be more efficient and there will be less waste of energy and materials. Other interventions can more directly change incentives for more environmentally-friendly economic behavior. For example, regulatory frameworks can internalize environmental externalities and reward “greener” production processes. Removing opportunities for rent-seeking behavior can reduce corruption while enabling a more rational use of natural resources and an equitable distribution of benefits.

At the same time, privatization and the creation of new markets can lead to sustainable development paths only if policy and institutional reforms include explicit incentives and accountabilities for mainstreaming environmental concerns on the part of public and private actors. Privatization and market development objectives must be linked to efforts to strengthen the national environmental enforcement and compliance system with environmental standards. Otherwise, unregulated processes and a lack of clear rules and standards will likely distort incentives and work to the detriment of environment sustainability.

Reforming the Relationship Between the State and Society

Increased public access to decision-making through democratic institutions can empower citizens to hold public and private sector entities accountable for their performance in managing the environment. Accountability for environmental performance can be improved through enhanced transparency in government decision-making, regulations requiring higher information disclosure by corporations, and improved access to the courts for judicial redress. Improvements in legislative oversight, public participation, and decentralization can all strengthen the capacity of constituencies
for environmental sustainability to influence economic development policies.

However, capturing the full range of benefits for the environment requires going beyond generic improvements in state laws and institutions to include specific provisions related to environmental and natural resources management. For example, judicial reform efforts need to include capacity building specifically for the enforcement of environmental procedural rights and the prosecution of environment-related crimes. Legal and institutional reform can inadvertently lead to environmental harm if not structured and sequenced with environmental accountability in mind.

**Areas for Environmental Mainstreaming**

The Bank’s strategy for the modernization of the State declares that sustainable development cannot occur in the absence of a democratic, modern and efficient State. In recent years, Latin America has made great strides toward consolidating democratic governance, but much remains to be done to ensure a secure and predictable legal and political environment. The Bank recognizes the need for a long-term vision and an integrated approach in addressing these issues, and has identified four areas for Bank action: a) achieving greater political democratic stability and political inclusion; b) strengthening the rule of law; c) supporting a dynamic and inclusive macroeconomic and market environment; and d) improving the efficiency of public management.

**Democratic Stability and Political Inclusion**

Efforts to expand the inclusiveness and accountability of political representation can be fully aligned with environmental sustainability objectives. Explicit attention to increasing the voice of constituencies whose interests are most consistent with environmental objectives can reinforce this alignment. For example, efforts to strengthen the capacity of the legislative branch can support mechanisms for balancing short-term economic development needs at the national level with greater attention to the interests of rural resource users whose livelihood depend on maintaining ecosystem services at the local level.

Accordingly, proposed changes in electoral systems should be subject to analysis of their likely impact on the representation of environmental interests. Party list systems, for example, can render parliamentarians more accountable to national parties—who may prioritize short-term economic growth—than to the interests of local constituencies dependent on sustainable management of natural resources over the long term. Structural reforms (such as establishing environmental committees) and procedural reforms (e.g., public hearings on the environmental implications of pending legislation) can empower citizens to monitor and influence the performance of their legislative representatives in elevating environmental concerns in the political arena.

Specific attention to environmental challenges can serve as an effective entry point to leverage broader reforms in public administration related to transparency, public participation, and accountability. For example, environmental impact assessment regulations and procedures often constitute one of the few avenues available for citizens to demand access to information, the opportunity to be consulted, and the right to redress. Investments to strengthen the ability of government agencies to provide meaningful public access to environmental information, decision-making, and justice can serve as a basis for strengthening the integrity of public administration overall. Similarly, investing in the capacity of civil society organizations to make use of expanded opportunities to participate in the formulation and monitoring of public policy in the environmental context is a
first step toward strengthening the overall accountability function of the civil society. Box 2 describes how collaboration between government and civil society in Chile and Mexico improves public access to information and decision-making that affects the environment.

Decentralization provides particular challenges and opportunities for mainstreaming the environment. All else equal, devolving decision-making over natural resources to more local jurisdictions should serve the interests of environmental sustainability: it enables local stakeholders to balance the costs and benefits of alternative natural resource management strategies. Often, centralized decision-making has led to the expropriation of natural resource wealth by national or international elites at the expense of local communities adversely affected by associated environmental degradation and social disruption.

However, decentralization reforms must take into account the fact that local officials may not be downwardly accountable to local stakeholders, and that not all legitimate stakeholders in environmental decision-making are local. Thus, while it is often appropriate to devolve natural resource allocation decisions to local jurisdictions, it is important that such reforms be accompanied by a national framework of minimum environmental standards and efforts to build the capacity of local officials related to environmental management.

Box 2. Collaboration with Civil Society to Improve Public Access to Information and Decision-making

In 2001 and 2002, national-level civil society coalitions in Chile and Mexico took part in the pilot-testing of a new methodology to assess government performance in providing public access to information, participation, and justice in decision-making that affects the environment. The assessment methodology was developed by The Access Initiative, a global coalition of civil society groups seeking to promote accelerated implementation of the so-called “access principles.”

The results of the pilot assessments in Chile and Mexico were consistent with those of assessments conducted in other countries. In general, governments perform better in providing access to information relative to their performance in providing access to participation or justice; the public has greater access to “environmental” decision-making compared to decision-making on other sectors; and actual practice lags far behind law and policy.

At the World Summit on Sustainable Development, civil society groups associated with The Access Initiative joined with governments and international organizations to launch the Partnership for Principle 10. The Partnership — named for the principle in the Rio Declaration in which governments agreed to promote access to information, participation, and justice — is designed to support efforts at the national level to improve access based on the results of independent assessments. The World Resources Institute serves as the secretariat for TAI and the Partnership.

In their joint commitments to the Partnership for Principle 10, government and nongovernmental groups in Chile and Mexico have outlined efforts to address weaknesses identified in the TAI assessments. Civil society groups and government agencies in Chile collaborated in the development of regulations for the country’s new Pollutant Release and Transfer Register. In Mexico, the Access Initiative coalition and the environment ministry’s joint efforts to raise awareness about the implications of new legislation on freedom of information included the publication of a citizens’ guide to access and a training program targeted at both government officials and the public. These actions have resulted in increased demands for government information.

Otherwise, decentralization could result in a “downward harmonization” of environmental control. In addition, decentralization may need to be accompanied by the creation of mechanisms to support coordination across jurisdictions that share ecosystems such as watersheds.

Further, care must be taken to ensure that decentralization of authority over natural resources to user groups or other informal institutions neither effectively privatizes public resources nor undermines the role of local government in representing the interests of broader constituencies. Finally, decentralization of responsibility for providing government services more broadly should take into account the fiscal capacities of local governments.

Rule of Law and Justice Reform

Development of a justice system that is independent, efficient, predictable, and accessible is fully consistent with efforts to promote environmental sustainability. Mainstreaming environment-specific components into judicial reform efforts can further enhance their effectiveness in this regard.

On the “supply side,” environmental mainstreaming objectives should lead to strengthening the law and the capacity of the judicial system to fight environmental crime and enable citizens to pursue environmental justice. In the first instance, this agenda includes the strengthening of substantive environmental legislation, and ensuring that the law is consistent across sectors and codifies international environmental commitments. Of equal importance is the strengthening of procedural legislation regarding such issues as citizen right to know, environmental impact assessment, the establishment of pollutant release and transfer registers, and standing to sue on environmental grounds. Strengthening property rights over natural resources in ways that do not undermine the State’s environmental regulatory authority can also be an important component of a comprehensive reform agenda.

Other “supply-side” interventions include the creation of specific institutional capacity within the justice system to deal with environmental issues. Often, prosecutors and judges remain ignorant of existing substantive and procedural legislation related to the environment, and require training in its interpretation. Further, they may require assistance in the valuation of environmental damages to be able to deal with cases that involve demands for compensation. In some countries, a special prosecutor for the environment has been created as a way of reducing the impunity of those who cause environmental harm. Strengthening the capacity of the justice system to fight corruption in the context of natural resource exploitation—such as in the award of extractive industry concessions—can be an entry point for fighting corruption more generally.

On the “demand side,” there are many reforms that can enhance access to justice on environmental issues. Some, such as reducing the costs of going to court, and increasing the timeliness of adjudication, are equally beneficial to environmental and other interests. However, some improvements in access to justice can be specifically aligned with environmental objectives. These could include the provision of free or low-cost legal aid services offering particular expertise on environmental law, development of alternative dispute resolution mechanisms in rural areas with a particular focus on conflicts over land and natural resources, and outreach efforts designed to raise public awareness of environmental procedural rights. All of these would be particularly salient if provided in advance of proposals for major infrastructure projects or other
development interventions with significant environmental impacts.

Macroeconomic and Market Environment

The Bank’s strategy for sustainable economic growth stresses the need for national-level economic management institutions with the authority, competence, and capacity to maintain stable macroeconomic and financial conditions. Environmental mainstreaming can begin with strengthening the capacity of such institutions to understand and influence the linkages between macroeconomic policies and natural resources management. For example, some countries have set up special environmental units within the finance ministry to capture opportunities to align tax and fiscal policies with incentives for natural resources conservation. Such units can also be responsible for developing “green accounts” and other analytical tools to make the case for policy reforms.

A second key opportunity for mainstreaming is in the design of sector reform and privatization processes, and the establishment of new agencies in charge of regulating privatized industry. The potential environmental implications of restructuring productive sectors of the economy are often ignored early in the reform process as other pressing objectives, such as attracting international investment in new productive capacity or achieving financial solvency for state-owned enterprises, take precedence.

An illustrative example is provided by the experience of many countries with electricity sector reform. Reform is often driven by the need to attract investment in new power generation capacity and to move electric utility companies onto sound financial footing through more efficient operations and cost recovery. Proponents of reform in the electricity sector tend to assume that increased private sector participation in the sector will put a premium on energy as well as economic efficiency, which will in turn also yield environmental benefits. They further assume that environmental regulation of the sector can be dealt with separately from the reform process, as environmental standards are applied to individual facilities.

However, the nature and sequencing of reforms in the electricity sector influence which fuels and technologies are favored for investments in new generation capacity, and the degree to which incentives are provided for investments in renewable energy and demand-side efficiency. For example, “unbundling” generation, transmission, and distribution services in the course of privatization can reduce the incentives for investments in energy efficiency. Reforms can also “lock in” conditions for private investors that effectively limit future strengthening of environmental regulation. Thus, the environmental characteristics of the sector must be considered early in the design of reforms. In addition, if the reform program is narrowly focused on restructuring the existing power grid, opportunities may be lost to extend to off-grid consumers access to electricity from renewable, less polluting, and/or more affordable sources.

Finally, as stated in the modernization of State strategy, improvements in the mechanisms of environmental governance per se are an important component of reforming the relationship between the State and the market. The IDB has a strong role to play in assisting governments to strengthen the mandates and capacities of central and decentralized environmental protection agencies, as well as to mainstream environmental mandates and capacities into agencies that govern and support nonenvironment sectors.
Improving Efficiency of Public Management

Actions to improve the quality of policy formulation and public administration can definitely promote environmental sustainability. The environment usually suffers when public administration is “captured” by special interests. As a result, the interests of environmental sustainability will be served when public administration is rendered more professional, transparent, and accountable. Professionalizing the civil service in government agencies responsible for environmental protection and natural resources management may be an essential component of wider reform efforts.

Environmental interests will also be served by increased transparency of State revenue and expenditure management. Bank actions to promote increased transparency of revenues from exploitation of natural resources can reduce opportunities for corruption and empower citizens to demand that those revenues be shared equitably and invested wisely. Further, political support for taxation regimes will likely be enhanced to the extent that the public sees a connection between the taxation of environmental “bads” and investment in environmental “goods.” Subsidy reform is a critical instrument for shifting incentives away from environmentally perverse behaviors and toward environmentally friendly ones, and transparency is a first step toward building constituencies for such reform.

The capacity to provide environmental information and opportunities for participation environmental decision-making is also an important component of the modernization of public services management systems. The creation of units within public agencies with the mandate, staff, and capacity to liaise with the public and civil society groups can facilitate collaboration and accountability in the delivery of environmental management services.

Finally, environmental management also provides an attractive entry point for the deployment of knowledge and information technologies. For example, making spatially referenced emissions data available on the Internet can strengthen constituencies for pollution regulation and provide a mechanism to involve the public in monitoring and compliance.
Conceptual Framework

The Bank’s social development strategy focuses on reducing poverty and inequality in Latin America and the Caribbean through investment in human and social capital. Of particular relevance to environmental sustainability are components of the strategy aimed at reforming the health, education, and housing sectors, and integrated interventions to provide services in specific territorial areas where poverty is concentrated. In both cases, Bank interventions can be designed to reflect poverty-environment linkages, and to capture “win-win” opportunities to produce improved environmental and social outcomes. In addition, attention to environmental considerations can enhance interventions targeted at issues such as occupational health and safety in the workplace, gender equality, and social inclusion of marginalized ethnic groups.

Persistent poverty and inequality are linked to environmental sustainability in at least three ways. First, the livelihoods of the poor are often highly dependent on well-functioning ecosystems. Particularly in rural areas, the incomes of poor households are adversely affected by such environmental problems as soil erosion, forest degradation, and the decline of fisheries. Investments in the productivity of agricultural, forest, freshwater, and coastal ecosystems can enhance the asset base of the poor if their rights to access these resources are protected. Second, the poor are often the first to suffer health problems resulting from air and water pollution. Particularly in urban areas, poor communities are more exposed to dirty air and water; reducing polluting emissions and assuring supplies of clean water and sanitation services are thus pro-poor investment opportunities. Third, the poor are particularly vulnerable to “natural” disasters caused by mismanagement of natural resources, such as informal settlements in areas prone to landslides or floods. As a result, interventions designed to address environmental problems are often automatically targeted to poorer communities and can promote equity as well.

Extending services to poor urban and rural communities often provides an opportunity to shift development paths toward more sustainable trajectories. For example, urban planning can include design of less polluting transport options to extend mobility services to households that cannot afford personal vehicles, and to provide attractive alternatives to those who can. Similarly, rural electrification in areas remote from the national grid can be based on renewable energy technologies where appropriate.

Finally, the imperative of addressing environmental challenges can provide an attractive entry point for building human and social capital that can then apply to other arenas. For example, communities often organize around neighborhood clean-up activities or to oppose environmental threats posed by polluting industry or infrastructure projects. Skills and organizations developed in the course of civic participation on environmental issues can then be mobilized to address other social priorities.

For all these reasons, the interests of constituencies concerned about the poor and those concerned about environmental degradation are often aligned rather than at odds. As a result, efforts to mainstream the environment into social development strategies can enhance the effectiveness of those strategies
Areas for Environmental Mainstreaming

Despite gains in economic growth in Latin America, broad segments of the population continue to live in poverty. While the region’s latest overall score on the UNDP’s Human Development Index was high, marked structural inequality has prevented these gains from being widely shared. The Bank recognizes the need for concerted, cross-sectoral action to address these complex social problems with multiple, interrelated causes. It has identified four areas for Bank action: a) customized implementation of health, education and housing reforms; b) implementation of a human development agenda over the life cycle; c) promotion of social inclusion and prevention of social ills; and d) delivery of integrated services with a territorial focus.

Mainstreaming Environment into Health, Education, and Housing Reforms

As mentioned, the poor are often most at risk from environmental health threats. Dirty air and contaminated water are responsible for significant levels of morbidity and mortality that could be reduced through improved environmental management. A first step in environmental mainstreaming in health-related programs is to support analysis to ensure that public policy-makers in borrower countries understand the degree to which environmental pollution threatens health. Such understanding can reinforce a preference for investment in preventive rather than curative responses to resulting disease, and can assist in targeting of responses to communities most at risk.

Second, environmental mainstreaming should include assistance to governments to ensure that the public is informed of environmental health threats such as those posed by poor air and water quality, improperly-stored hazardous waste, soil contamination, and chemicals used in agriculture. Improved information allows individuals and households to make decisions about how much to expose themselves to risk, and also mobilizes public support for effective environmental regulation. Also, important mainstreaming areas include building the capacity of public health agencies and environmental regulatory authorities to monitor environmental quality and undertake associated pollution control efforts, complemented with significant public education about the risks associated with such activities as breathing dirty air, drinking dirty water, and reuse of chemical containers.

In the context of education programs, there are significant opportunities to mainstream the environment into the formal education system, including assisting countries in the development of environmental education curricula for primary, secondary, and tertiary schooling, and to train teachers in its content. As part of its efforts to revive schools as a locus for local community initiatives, environmental mainstreaming activities can encourage the integration of civic action to improve the environment beyond the schoolyard into such curricula. For example, school children can be mobilized to monitor local environmental trends as part of their science education, and the results of their efforts can be integrated into local and national environmental surveillance systems. Such efforts combine investment in the human capital of students with social capital development in the broader community.

There are also opportunities to mainstream the environment into informal education efforts. As mentioned above, informing the public about the health risks associated with exposure to polluted air and water is an important component of a prevention-oriented strategy to promote public health. In addition,
however, the public needs information on how to take part in decision-making that affects environmental quality. Accordingly, emphasis should be put on supporting civic education efforts to increase public awareness on the availability of information about the environment. In addition, citizens’ groups and the general public need to be informed about the substantive and procedural content of environmental laws and regulations. An informed public can complement the State’s efforts to ensure environmental compliance on the part of private corporations and to improve the performance of State agencies charged with environmental management.

Bank-supported reforms in the housing sector are likely to support environmental objectives automatically to the extent that they increase the security of tenure (thereby promoting long-term investment in environmental quality) and increase the transparency of land markets (thereby reducing the opportunity of private developers to profit at the expense of the public interest by privatizing green space). However, environmental mainstreaming can be enhanced in at least two additional ways: by encouraging the integration of “green” features into new and existing housing stock, and by supporting land-use planning that protects fragile ecosystems. More generally, these mainstreaming activities should promote an approach to housing development that goes beyond providing shelter to creating “livable” communities that include public spaces that are open, green, and safe.

With respect to improving the environmental sustainability of the housing stock, environmental mainstreaming provisions can include support to energy- and water-efficient designs, use of “green” construction materials, and less environmentally damaging construction methods. Analysis showing how increased initial costs are offset by efficient use of energy and water in the long run, and/or how they will decrease the need for expensive public infrastructure (such as electricity generation or wastewater treatment), can increase social and political support for socially responsible “greening” measures.

Equally significant are opportunities to ensure that housing development takes place in the context of an integrated approach to land-use planning that promotes “livable” communities and environmental protection. For example, a participatory budgeting process in the City of Porto Alegre, Brazil, takes an integrated approach to urban planning that has resulted in investments in housing and pavement of roads, but also increased investment in sewer systems, sanitation, and water treatment facilities.

Environment in the Context of a Human Development Agenda over the Life Cycle

The IDB’s social development strategy defines priority actions, including nutritional needs for infants, labor and occupational conditions, and affordable care for the elderly. In this context, opportunities to integrate the environment into the Bank’s human development agenda over the life cycle are mainly relevant in the area of occupational health and safety. Workers are often exposed to environmental hazards in the workplace. For example, workers in manufacturing and processing industries may be exposed to high concentrations of toxic chemicals and face the risk of spills, fires, or explosions. Agricultural workers may be exposed to high levels of pesticides. In many cases, misuse of harmful materials in the workplace also pose a threat to ecological health when released into the environment. As a result, improved practices in the handling of industrial and agricultural chemicals can result in reduction of environmental degradation as well as of work-related injury, death, and disease.
Environmental mainstreaming activities can be designed to strengthen the capacity of labor ministries and other relevant institutions to develop appropriate regulation, enforcement mechanisms, and incentives to detect and control environmental hazards in the workplace. This includes activities to increase awareness among public authorities, unions, and private corporations, including educating workers about how to protect themselves from workplace hazards as well as about their rights to safe working conditions. These activities can additionally support the development of emergency systems to provide rapid response to environmental emergencies in industrial facilities, and may be accompanied by environmental education and practices to promote corporate social and environmental responsibility.

Promote Social Inclusion and Prevent Social Ills

Opportunities to integrate the environment in interventions to promote social inclusion relate to the association between disadvantaged communities and their high level of dependence on natural resources. Environmental mainstreaming should begin with an analysis to identify linkages between vulnerability to social exclusion and social ills on the one hand and vulnerability to environmental degradation on the other. The mapping of the incidence of poverty can be overlaid with that of other factors, such as environmental quality, land titling, migration patterns, and infrastructure development plans, to determine the location of populations of special concern. The Bank can then provide support for targeted environmental interventions that will effectively create positive synergies to increase social inclusion. In general, activities designed to empower excluded communities so that they will be able to better represent their own interests should address the need for protecting natural resources and the right to a clean and healthy environment.

Deliver Integrated Services with a Territorial Focus

The provision of integrated services to geographically distinct communities provides particular opportunities to mainstream environmental sensitivity into service delivery. Whether interventions are designed to support the upgrading of urban neighborhoods or the development of rural communities, consideration of the ecosystem scale, integration across sectors, and a focus on sustainable service delivery rather than a particular service delivery vehicle can help uncover opportunities for environmental mainstreaming.

Environmental analysis at the landscape, country, or sector level can often identify “win-win” opportunities to pursue social development and environmental sustainability objectives simultaneously. Disadvantaged communities are often located in areas of environmental concern, for example, indigenous communities that occupy ecologically fragile environments in rural areas; poor urban communities exposed to significant air and water pollution; or low-income communities threatened by “natural” disasters caused by environmental mismanagement. Box 3 describes how transfer payments for ecosystems services can serve the interests of environmental sustainability and social equity.

Geospatial analysis—using GIS and other mapping techniques—can reveal overlaps between human populations and natural environments of special concern. Such analysis, in the context of the Bank’s “territorial approach,” can point to prioritization of social development interventions in areas where improvement in environmental conditions are automatically targeted to benefit disadvantaged social groups.
For example, Hurricane Mitch in 1998 revealed how poor communities in Honduras and Nicaragua were differentially affected by the landslides and flooding that occurred during that disaster: their upland agricultural systems in rural areas and informal settlements in urban areas were vulnerable to the effects of the storm. Targeting investments in improved watershed management and housing reform efforts to ecologically fragile areas can thus simultaneously address environmental and poverty reduction objectives.

In urban communities, the delivery of water and sewerage services must take into account the capacity of upstream hydrological systems to provide a clean and reliable water supply, as well as the capacity for downstream aquatic environments to absorb the quantity and quality of the effluent stream. Accordingly, infrastructure investments must be preceded by environmental analyses at a watershed scale, account for natural variability such as flooding and drought, and be accompanied by investments in watershed protection, drainage, and involvement of communities in integrated water management. Designation and protection of urban green spaces, for example, can provide amenity values and water filtration services.

Another example is provided by efforts to address transportation challenges. A development objective defined as “building new roads to reduce congestion and provide access to informal settlements” automatically selects

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**Box 3. Payments for Ecosystem Services**

Several countries in the region have begun to experiment with payments for ecosystem services as a way of generating revenues for natural resources management and compensating landowners for environmental stewardship.

In Costa Rica, a portion of taxes collected from fossil fuels is allocated to the National Forestry Finance Fund (FONAFIFO). Through the Payment for Environmental Services program, FONAFIFO in turn negotiates voluntary agreements with private landowners to compensate them for land management practices that provide ecosystem services to society, including hydrological regulation, carbon sequestration, and biodiversity conservation.

In Ecuador, several municipalities have developed initiatives to use levies on the price of drinking water to generate revenues to reinvest in watershed management. In some cases, revenues have been allocated to land purchases or conservation activities by nongovernmental organizations; in others, the proceeds have been used for direct payments to landowners.

Such transfer payment mechanisms can serve the interests of both environmental sustainability and social development. If households receiving compensation are relatively worse off than the consumers of fossil fuels or drinking water who are paying the taxes and benefiting from improved environmental stewardship, payments for ecosystem services promote social equity as well as sound natural resource management.

An important mainstreaming objective is to support analysis to estimate the value of ecosystem services, and the opportunity costs faced by landowners to forgo alternative uses of their land. Overlays of environmental analysis and poverty mapping can also reveal the degree to which payments for ecosystem services should figure prominently in poverty reduction strategies. A key consideration may be the need to strengthen the property rights of resource managers who may not have clear title to their land.

a development path favoring private cars, which cause pollution and are not affordable to the poor. By contrast, if the objective is defined as “providing sustainable mobility for people, goods, and services,” a broader range of pro-poor and pro-environment options can be considered. The *Transmilenio* initiative in Bogotá, for example, has utilized a bus rapid transit (BRT) system—integrated with other nontraditional transport modes such as bicycles—to achieve significant reductions in travel time, accidents, and air pollution. Similarly, the provision of electricity services to areas not served by the grid can take advantage of appropriate renewable energy technologies when these technologies are able to reduce long-run energy costs and when initial financing obstacles can be overcome.

Finally, the bundling of services related to the environment with other services can enhance their effectiveness. In remote areas, for example, the integrated delivery of extension services related to reproductive health, agriculture, and environmental protection to women’s groups can improve the efficiency of service delivery on the part of extension agents and group members.
Competitiveness

Conceptual Framework

Attention to the environmental dimension of competitiveness is particularly relevant to the economies of Latin America because many of them depend on the exploitation, development and export of renewable and nonrenewable natural resources. Chief among these are agricultural commodities, mineral ores, fisheries, and oil and gas resources. Improving productivity and promoting economic growth—the central objectives of the competitiveness strategy—will require significant attention to reducing waste, increasing efficiency, and capturing social welfare gains from the exploitation of these natural resources.

The environment also provides many countries in the region with important comparative advantages. Tourism is a case in point: the Caribbean’s natural environment, for example, is the basis for its vibrant tourism industry. Key to maintaining this comparative advantage is ensuring the long-term environmental quality and viability of its coastal resources.

Policies and programs that fail to internalize environmental costs and benefits contribute to environmental degradation. This can impose heavy burdens on national or local economies in the form of declines in human health, increased air or water pollution, or loss of natural habitats and biodiversity. To achieve genuine and sustainable long-term competitiveness, three actions are particularly important:

Evaluate competitiveness at sufficiently broad geographic and time scales to capture environmental and social considerations

Public sector actions to support competitiveness need to be evaluated broadly enough to identify the indirect as well as direct environmental and social costs of private sector development and infrastructure investment. For example, the expansion of nontraditional agro-exports is likely to have impacts on subsistence agriculture and lead to an increase in the use of fungicides, pesticides, and fertilizer as well as changes in land use. Improvements in agricultural productivity have positive and negative spill-over effects on the rest of the economy. The design of competitiveness policies or programs in a broader context will increase the likelihood of identifying such spill-over effects and managing them effectively. It also facilitates a more strategic framing of competitiveness to capture broader economic welfare gains, including environmental protection and quality.

Internalize environmental costs and benefits of private sector development activities

Productive use and development of natural resources requires the creation of policy and market signals that appropriately reflect their scarcity and socio-economic value. In many countries, these values are not captured by market prices. In some cases the value has not been monetized (e.g., biodiversity). In other cases, there is a free rider problem (a few over-consume or exploit a resource to the detriment of the larger population) that is exacerbated by weak enforcement of environmental laws and regulations. In yet other cases, information asymmetries or barriers—with regard to product origin or production process—limit the ability of firms or consumers to distinguish the environmental quality of the goods they purchase or raw materials they use as inputs.

Environmental mainstreaming would serve environmental and competitiveness goals by
further supporting the design of economic instruments, public policies, and market regulations that capture and internalize the costs of maintaining environmental quality and exploiting natural resources, as well as by supporting the reduction of uneconomic and environmentally harmful subsidies. Examples include the creation of commodity exchanges for pollution credits, market indices that rank corporate social and environmental performance, and requirements for corporations to disclose environmental liabilities to the public.

*Develop the capacity of country and regional institutions to integrate environmental analysis into competitiveness planning and policies*

Integrating environmental analysis into the design of competitiveness programs and policies and designing specific policies and instruments to internalize the environmental costs and benefits of economic development cannot occur without the requisite institutional and human resource capacity. This capacity is limited in most of the region’s public and private sector institutions. But without such capacity the region’s governments will be unable to put in place new infrastructure, negotiate major trade accords, gain access to international markets, and attract capital investments that support rather than undermine environmentally sustainable development.

Particular attention should be given to integrating such capacity into public sector line ministries likely to design national competitiveness strategies or programs (economy or finance) as well as those responsible for trade negotiations (commerce), infrastructure investment (energy, transport, commerce), and financial sector regulation and policy (economy or finance). There are also important private sector actors or groups that would benefit significantly from capacity building, including industry associations, public interest environmental organizations, and labor unions. Institutions that support training, whether formal or informal, might be particularly effective in building the capacity of these private sector actors.

**Areas for Environmental Mainstreaming**

Improving competitiveness is a key strategy for the IDB. The low levels of international competitiveness currently found in Latin American and Caribbean economies can be attributed to economic instability (reflected in highly volatile currencies and growth rates), scarce financial resources and lack of access to credit (particularly for small and medium enterprises), lags in human capital formation reflected in the limited access to education, and a lack of access to infrastructure. The Bank’s competitiveness strategy identifies several priority areas in the region, including: a) efficient mobilization of finance and capital resources; b) improvement of human capital; c) efficient delivery of infrastructure services; d) new knowledge and technologies; e) productive and sustainable natural resources management; and f) strengthening and creation of new and more effective institutions to support private productive activities.

Environmental mainstreaming activities across these priority areas can enhance the relative competitiveness of a country. Some key areas for environmental mainstreaming are described below:

*Capacity Building and Transparent and Effective Regulatory Frameworks*

Solid environmental institutions and transparent regulatory frameworks are fundamental conditions for the successful engagement of countries in international trade and economic integration. The institutions responsible for crafting competitiveness policies, eliminating economic barriers, and negotiating free trade accords are usually economic, commerce, or
finance ministries. These institutions have particularly important roles in guiding a country’s development strategy and model, which in turn influences whether that path is more or less environmentally sustainable. How these institutions approach environmental covenants in trade agreements, liberalize trade in environmentally sensitive services (particularly power, drinking water, and transportation), and manage the social and environmental impacts of globalization can determine the long-term sustainability of their economies.

Environmental mainstreaming in this context should therefore focus its attention on promoting cross-sector dialogue on environmental issues, seeking to build bridges between economic growth and environmental sustainability goals. In particular, at the center of the analysis and discussion should be the effectiveness and soundness of environmental standards, regulations, compliance mechanisms, and the incentive framework to ensure fair competition.

Corporate social responsibility (CSR) offers opportunities to manage the environmental dimensions of competitiveness. The principal opportunity offered by CSR is in setting best practice norms among corporate actors and private sector organizations. The potential pitfall is to use CSR as a substitute for effective oversight and regulation over private sector development, which it is not. It is therefore important to promote dialogue that engages the public sector, corporate actors and public interest organizations about how to support CSR while ensuring effective and balanced environmental regulation.

Capital and Financial Resources

Through their credit and risk analysis procedures, financial institutions can play an important role in internalizing environmental and social costs in investment decisions. Due diligence procedures as well as credit and investment choices send strong signals to domestic and foreign investors. In addition, investment screens or credit criteria employed by financial institutions can reward companies that minimize social and environmental risks, and limit access to credit or capital to those firms with weak environmental management or poor environmental track records. The incorporation of a harmonized set of environmental due diligence procedures among major investment banks is already underway, with the adoption by several of them (Citigroup, ABN Amro, Bank of America, Barclays, Credit Suisse Group, Hong Kong Shanghai Bank Corporation, and WestLB among others) of such procedures in the form of the “Equator Principles” (see Box 4).
Financial regulators influence the operation of capital markets through the requirements they impose on financial institutions, oversight of stock market operations, and the reporting requirements they impose on publicly held companies. High profile corporate and accounting scandals in recent years in the United States and Europe have highlighted the importance of financial regulators for the protection of shareholders, employees, and the larger public interest. For example, weak oversight by financial regulators led to limited disclosure from the world’s largest energy company’s deals, and the result has been a dramatic and sustained decline in energy and power sector investments. Weak financial sector regulation also contributed to the Asian financial crisis: financial institutions colluded with investors and made risky investments that led to an economic downturn and produced negative social and environmental consequences.

**Infrastructure Services**

Improvements in infrastructure are identified as a priority in the Bank’s competitiveness and regional integration strategies. Infrastructure services are vitally important for poverty reduction, economic growth and development. Infrastructure is necessary to supply basic services to people (e.g., clean drinking water) and industries (e.g., reliable power and transport systems). Yet infrastructure in many cases has been poorly targeted (benefiting middle and upper income groups), has displaced poor and vulnerable populations, and has produced large- and small-scale environmental damage.

Because of the technical complexity, scale, and significant capital required to build infrastructure, related decisions are often dominated by engineering and financial considerations. The intended beneficiaries—populations that will be required to pay for the service—and those representing affected inter-

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**Box 4. The Equator Principles**

In June 2003 ten international banks announced their adoption of the Equator Principles. This set of nine principles essentially commits these banks to following the International Finance Corporation’s social and environmental assessment procedures for their project financing of more than $50 million. The 21 banks that collectively pledged to follow the Equator Principles supply approximately 70 to 80 percent of all project financing worldwide.

In announcing their commitment, the Equator Banks stated: “In adopting these principles we seek to ensure that the projects we finance are developed in a manner that is socially responsible and reflect sound environmental management practices. . . These principles will foster our ability to document and manage our risk exposure to environmental and social matters associated with the projects we finance, thereby allowing us to proactively engage our stakeholders on environmental and social policy issues.”

The emergence of the Equator Principles indicates that environmental risk is now a mainstream concern of major commercial investment banks. This sets in motion a longer-term process for convergence of environmental performance standards between development banks and private financial institutions. It also increases the likelihood that over time banking institutions’ capacity for risk assessment and the soundness of operations and portfolio holdings will be judged in part on the quality of the environmental risk assessment policies and procedures.

ests have little or no opportunity to influence the whether, what, how, or where questions about infrastructure. Such systematic exclusion has contributed directly to poor design, poor targeting, and poor performance of infrastructure services. Privileging highways over mass transit, failing to adequately resettle and compensate populations affected by large dams, raising electricity prices but failing to improve electricity services, and overlooking the high costs of connecting to water supply systems, thereby limiting access for the poorest households, are cases in point.

To mainstream the environment in decision-making about infrastructure means opening the door for nontechnocratic but legitimate interest groups to exercise voice in strategic decisions. These decisions include: is the proposed infrastructure needed? Who will it benefit? Are the environmental and social costs acceptable? How will it be paid for? An important mainstreaming tool to help frame such questions and integrate wider social and economic interests in decision-making for infrastructure are Strategic Environmental Assessments, or SEAs (see Box 5).

Development and Assimilation of New Technologies

Development, adaptation, and adoption of technologies are central to increases in economic productivity. Technological change and advancement has “soft” and “hard” components. The soft components (human knowl-

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**Box 5. Strategic Environmental Assessment: Trends and Regional Developments**

Strategic Environmental Assessment is widely used to refer to a systematic process to analyze the environmental effects of policy, plans and programs. The motivation for application or use of SEA in developing countries arises in part from a desire to better integrate poverty alleviation and environmental protection with economic development goals.

Over the last 15 years, strategic environmental assessment has evolved from broader applications of traditional Environmental Impact Assessment (EIA) based on impact assessments to upstream considerations of environmental issues. The SEA practice is now shifting toward sustainability appraisal, meaning integrated full cost assessment of economic, environmental and social impact of proposals.

In Latin America and the Caribbean, there has been limited experience with SEA, and it has largely occurred at the initiative of the Inter-American Development Bank and the World Bank. Nevertheless, there are a few interesting examples of SEA in the region. The Brazilian government employed a SEA to identify regional development priorities as part of its Avança Brasil program. In Argentina, SEA was used to inform the design of a regional flood control program for the Paraná-Paraguay-Uruguay river floodplains. Finally, a SEA was used to assess the environment and development impacts of the Chile-EU free trade agreement. These experiences have generated a growing interest in SEA. For example, the Brazilian Ministry of the Environment has developed a SEA manual, and Chile’s Ministry of Public Works, Transport and Telecommunications has studied the potential application of SEA to water management planning.

Yet the potential demonstrated by the above examples must overcome deficiencies in regional and local policy-making processes. Often implicit strategic decisions are made at a project or mega-project level without reference to or conformance with existing strategies or policies. In other words, the hierarchical ideal of policies informing plans, and plans informing investment programs does not operate or is not a reality within the region.

edge and institutional structures) are necessary for the effective adaptation and deployment of the hard components (physical equipment, instruments, or goods). Both hard and soft technical innovations are needed to increase productivity of natural resource exploitation and to address pollution control and environmental mitigation challenges.

The deployment and use of information technology (IT) can make particularly important contributions to monitoring and environmental performance of firms in increasingly liberalized, decentralized, and global economies. The principal benefits of IT are that it diminishes information asymmetries that firms can use to gain unfair competitive advantage, and reduces the costs to civil society and the public sector of gathering and transmitting information about corporate activities within and across international borders. The use of IT directly contributes to promoting competition and corporate social responsibility.

Enhancing Environmental Markets for Goods and Services

The IDB’s competitiveness strategy also recognizes the importance of the region’s natural capital. In this regard it seeks to develop markets for environmental services, improve the productivity of natural resource development and increase the adoption of clean production processes.

Environmental mainstreaming should include a systematic effort to identify and eliminate (or limit) policies or market conditions that distort scarcity signals, encourage over-consumption of natural resources or speed natural resource depletion. An assessment of the environmental effects of agricultural, energy, water, transport, and other subsidies is a case in point. Alternatively, analyses should be made of natural resource depletion, focusing on important renewable and non-renewable resources, to determine the extent to which efforts to improve competitiveness are accelerating declines in natural resource stocks.

Mainstreaming activities should also support market studies and strategies focused on the development of new markets for environmental goods and services, or the potential to capture a share of existing markets for these goods and services. These studies and strategies should be robust, assessing whether entry into or investment in such markets makes strategic and economic sense, and whether these activities directly build or enhance natural capital.

Examples of mainstreaming include the development of markets such as organic agriculture, natural cosmetics, cultural and ecological tourism, alternative energy, or the recycling of waste products. There are numerous initiatives underway that provide pathways or models for scaling up or mainstreaming private sector activity that builds natural capital. One of these is a program known as New Ventures, featured in Box 6. Although such investments may not enhance competitiveness in the short term, they could position countries to be competitive in environmentally superior products and services in the long term.
### Box 6. New Ventures

New Ventures, a program of the World Resources Institute, supports sustainable enterprises in Latin America and Asia by accelerating the transfer of capital to outstanding investment opportunities that incorporate social and environmental benefits.

New enterprises in emerging markets, especially sustainable enterprises, face even greater difficulties than their counterparts in the developed countries for two main reasons. First, with the high transaction costs associated with investment in small and medium environmental enterprises and the difficulty in accessing credit, entrepreneurs are often unable to raise the necessary capital for new ventures. Second, many of these entrepreneurs also lack the preparation necessary to run and grow a sustainable business.

In many developing economies, SMEs can make up as much as 90 percent of all enterprises, 50 percent of the employment, and 30 percent of the GDP. They are vital for a healthy and dynamic market economy. Their sheer numbers likely mean their cumulative environmental impacts are enormous, particularly at the local level. In emerging markets, many SMEs are characterized by their lack of awareness of environmental impacts and dependency on natural resources, leading to an overall negative impact on local ecosystems and communities.

New Ventures identifies promising businesses in fast-growing sectors such as organic foods and fiber, clean technologies, ecotourism, nontimber forest products and certified wood, renewable energy, and sustainable fisheries management. On a regular basis, the program issues calls for business plans and awards business consulting services to selected finalists to prepare them for interaction with investors, starting at a New Ventures Investor Forum. New Ventures is currently continuing a regional approach to Latin America while also targeting four of the top-five emerging economies with the most entrepreneurial activity: Brazil, Mexico, China, and Indonesia.

Since 2000, New Ventures entrepreneurs have received over $11 million in investment as of October 2005.

Source: [http://www.new-ventures.org](http://www.new-ventures.org)
Regional Integration

Conceptual Framework

Maintenance and improvement of the region’s environmental quality contributes directly to the major goals of the IDB’s regional integration strategy, which prioritizes the creation of enabling conditions for increased trade and the expansion of infrastructure. In both these areas, environment can be considered a critical strategic cross-sectoral issue or priority.

In the trade arena, capturing synergies between environmental protection and trade development objectives is an increasingly prominent and often contentious issue. Governments require the capacity to understand the environmental implications of entering into trade accords in a cross-sectoral perspective. Trade agreements may foreclose certain policy options to meet national environmental goals. For example, by requiring governments to treat all goods equally regardless of their national origin or production process, trade agreements can limit governments’ abilities to privilege cleaner generating technologies or support domestic suppliers of cleaner energy.

Likewise, the development of regional infrastructure promises improvements in basic services, but is also fraught with significant social and environmental risks. These risks are particularly important because the negative impacts of infrastructure have too often fallen disproportionately on vulnerable populations, while the benefits have accrued to middle and upper income populations. Managing these risks requires a critical and strategic approach to infrastructure development. The above discussion suggests that the following environmental principles for implementing a regional integration strategy are necessary to facilitate mainstreaming:

- **Identify broad sustainable development needs or objectives and evaluate alternative infrastructure projects and programs against these needs**

  The need for specific infrastructure projects has often been identified by line ministry officials or project proponents, and the projects are subsequently justified on the basis of the economic and development benefits to be delivered. Rationalization of pre-determined projects often leads to investment in infrastructure that fails to meet the most important development needs, and impairs the flow of benefits to those most in need from infrastructure that is built. A good practice for environmental mainstreaming suggests the need for a critical assessment of development priorities in particular regions and over extended time frameworks, preceding the selection of specific interventions.

- **Exploit the synergies between the environment and regional integration to capture positive outcomes (equitable economic growth) and prevent or minimize negative outcomes (pollution, loss of ecosystem function)**

  As discussed, the environmental quality of economic growth is a critical determinant of its long-term sustainability. In efforts to deepen regional market integration, special attention should be paid to two-way flows and impacts between economic activities and the environment. For example, expansion of a particular export sector could lead to over-exploitation and pollution of surface or groundwater resources. This in turn places limits on other industrial uses of this water, increases treatment costs, and compromises environmental quality and function. Had the
interactions between the economic activity and the environment been considered at the outset, strategies to manage these negative outcomes could have been identified. Positive synergies could have been found that could result in win-win situations where infrastructure development and conservation activities interact together to increase the value of environmental goods and services.

Support development and adoption of best practices and innovations in decision-making, management and analytical tools

Effective mainstreaming will require the development and adoption of analytical and decision-making processes, techniques, and tools that are nascent or not widely adopted, and require the development of new skills as well as behavioral change. Support for such innovation will require the building of institutional and human resource capacity at national levels as well as among regional institutions. Such innovation should help change “business as usual” decision-making.

Areas for Environmental Mainstreaming

The regional integration strategy seeks to take advantage of globalization to promote sustainable economic growth and poverty reduction through regional integration and cooperation. To this end, the Bank has identified the following priority areas for action: a) consolidating regional markets through the enforcement of rules and liberalization of services, and strengthening representation in North-South dialogues; b) promoting regional infrastructure to enable countries to follow through on their market liberalization plans; c) strengthening institutions for integration at the national and regional levels; and d) promoting regional public goods. Environmental mainstreaming opportunities are possible in each of these priority areas, as discussed below.

Consolidation of Regional Markets

Deepening regional market integration in a way that contributes to environmental sustainability requires greater understanding of the long-term effects of market integration upon the environment and poor populations, and of new approaches that better target social and environmental gains.

An important mainstreaming activity should be to support regional governments or multilateral institutions to increase capacity to conduct analysis of the long-term environmental and distributional consequences of trade integration initiatives. Some key sectors and services in which environmental mainstreaming can be fostered include power transmission and generation and transportation networks. These issues will increase in importance as the Doha round advances and expansion of the General Agreement on Trade in Services (GATS) proceed under the World Trade Organization. Box 7 illustrates the potential trade-offs between trade liberalization of important services, in this case electricity, and the policy space governments need to pursue social and environmental objectives.
Also, appropriate mainstreaming activities include support to national and regional dialogues on market integration, taking into account the engagement of stakeholders (indigenous people, labor unions, producers of environmentally sensitive commodities in agriculture, fisheries, mineral ores, oil and natural gas, etc.), relevant sector and environmental regulators, and representatives of business groups or associations from impor-
tant export sectors. Such dialogues should focus on the various challenges (both obstacles and opportunities) that integration and globalization present more broadly, and should identify areas of action to address these challenges.

*Promoting Regional Infrastructure*

Infrastructure services are vitally important for poverty reduction and economic growth. Yet infrastructure has often been poorly targeted (benefiting middle- and upper-income groups), displaced poor and vulnerable populations, and produced large- and small-scale environmental damage.

The actions proposed under the competitiveness strategy are also pertinent to regional integration, including: training for regulators in infrastructure sectors, institutionalization of strategic environmental assessment, inclusion of environmental and social benefits in the economic valuation of infrastructure, and early engagement of stakeholders in strategic decisions.

In addition, new financing models for infrastructure development present an opportunity to explore and prioritize finance innovations that align investment with environmental risks and opportunities. Innovations to be considered might include environmental performance bonds for infrastructure or investment insurance related to climate change risks faced by infrastructure (such as potential damages to infrastructure from sea level rise, sudden temperature increases, or increased frequency of severe weather). Such innovations would require the Bank to partner with other regional public and private lenders.

Another priority area for environmental mainstreaming should be improving the environmental and social impact of the region’s infrastructure. This includes, for instance, demonstrating new approaches or tools in the cross-border infrastructure projects the Bank finances. For example, the Bank can provide technical assistance to enhance or protect ecosystem integrity and function, which could involve innovations in the design of infrastructure (for example, smaller scale dams that mimic seasonal river flows), efforts to deliberately protect ecosystem integrity (by-passing biologically intact landscapes or groundwater recharge zones), or crafting schemes or institutions to manage infrastructure at a landscape or ecosystem level (such as watersheds, airsheds, or biological corridors).

Environmental mainstreaming efforts should seek to influence planning and management to ensure that infrastructure choices are designed to serve—rather than drive—development. One set of potentially transformative planning tools is the use of country and sector level strategic environmental assessments, but a number of other such tools could be developed. For example, the development of environmental best practice benchmarks for infrastructure design and operation, and evaluating specific projects against these benchmarks could be very useful. Governments or project developers should also conduct periodic independent evaluations of the actual environmental and developmental benefits of infrastructure projects against those projected at the outset, with public disclosure of the results. The goal should be to create incentives to align infrastructure with environmental sustainability objectives.

Finally, environmental mainstreaming efforts should support upward harmonization of environmental, social, and economic performance standards, regulation, and norms of operation for infrastructure. An effort to benchmark best practices in infrastructure operation and regulation not only supports better infrastructure design but can also drive progressive har-
monization within and across major sub-regions. Such harmonization is particularly important in areas where significant transboundary infrastructure and development projects are under development or consideration, such as the South American regional infrastructure investment plan (known by its Spanish acronym as IIRSA), the Plan Puebla Panamá, the Bolivia-Brazil gas pipeline, etc.

**Institutional Strengthening**

Weak public sector capacity to capture the benefits or manage the negative impacts of market integration will limit the scope for mainstreaming the environment in regional integration. If the public sector is unaware of the environmental interests at stake in trade negotiations, it is unlikely that the final accords will support an environmentally sensitive or sustainable development.

Box 8 illustrates the value of evaluating the impacts of trade liberalization on particular sectors. A priority for environmental mainstreaming under institutional strengthening should therefore be to build environmental analytical capacity in the context of on-going trade negotiations.

There is also a need to create new or strengthen the governance of existing regional institutions with the mandate and capacity to guide development and coordinate regional action. Important examples include the Central American Commission for Environment

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<th>Box 8. Integrated Assessment of Trade Liberalization and Trade-related Policies</th>
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<td>UNEP worked closely with national institutions in Argentina, China, Ecuador, Nigeria, Senegal, and Tanzania to identify environmental, social and economic effects of trade liberalization, over a two-year period. The most recent six country projects, undertaken between 1999 and 2001, were: fisheries in Argentina; cotton in China; banana production in Ecuador; cocoa and rubber in Nigeria; fisheries in Senegal; and forestry in Tanzania. These cases included both ex-post and ex-ante assessments of trade liberalization.</td>
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<td>Highlights from the Latin American cases, both ex-post studies, demonstrated a clear linkage between trade expansion and environmental impacts. In the case of the Argentine fisheries sector, a cost-benefit analysis revealed that degradation of hake biomass, the chief fish export, increased costs of regulation and control, and resulted in economic losses of $500 million in the 1990s. These losses were compounded by the near biological collapse of the harvested species.</td>
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<td>The ex-post study of the Ecuadorian banana sector, which accounts for 21 percent of domestic export revenues, found that the impact of banana production on the environment included the loss of biodiversity; reduction of soil, water, and air quality; and accumulation of toxic waste and nondegradable material. Yet it also found that these impacts were reduced over time by the introduction of regulation, the implementation of the Convention on Biological Diversity, FAO’s International Undertaking on Plant Genetic Resources, and the creation of appropriate market mechanisms.</td>
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<td>The results from the country projects showed that the relationship between trade liberalization and the environment was complex, often indirect, and mediated through effects on levels and patterns of production and consumption. The assessments undertaken in these country projects were a first step towards defining and quantifying those different effects. By deepening the appreciation and analysis of the nexus between trade, environment, and economic development, these projects empower governments and other institutions to design and implement integrated policies which minimize associated environmental damage.</td>
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and Development (Comisión Centroamericana de Ambiente y Desarrollo), the Amazon Cooperation Treaty (Tratado de Cooperación Amazónica), the Andean Pact (Pacto Andino), and the Meso-American Biological Corridor (Corredor Biológico Meso-Americano). Because of their regional character these institutions, if strengthened and given decision-making authority, have the potential to advance regional integration consistent with social and environmental sustainability. There is a particular need to reinforce their authority in strategic decisions such as long-term planning, cross-sectoral programming and trans-boundary development projects.

One of the Bank’s priorities under regional integration is the minimization of environmentally destructive competition within the region. Particular focus should be paid to the environmental capacity and mandates of institutions responsible for attracting investment and facilitating national exports to other countries, as these activities may have significant environmental implications. The Bank could provide technical assistance to national governments to introduce credible environmental due diligence practices among these agencies, and could support efforts to facilitate exports or investments with the potential to deliver economic, social, and environmental benefits (such as wastewater treatment, energy-efficiency, and organic agriculture projects).

Other Regional Public Goods

The Bank’s priorities for enhancing regional public goods include the harmonization of health and environmental codes, effective stewardship of biodiversity resources, stronger oversight of the financial sector, and coordinated regional action on issues of technology, disease control, disaster prevention, and migration and borders. Three priorities for environmental mainstreaming emerge from the above: sustainable use and development of biological resources; upward harmonization of environmental, health, and financial codes; and management of common border regions.

The region’s biological resources are exceedingly important on a global level, and there is a general recognition that markets currently fail to capture their economic value. The protection and sustainable use of these biological resources is a regional public good. The mainstreaming challenge facing the Bank is the integration of biodiversity protection with poverty alleviation and economic development programs. The Bank should explore integration of biodiversity protection in rural development programs and encourage governments to develop policies designed to maintain ecological goods and services such as carbon storage, erosion control, groundwater recharge, and the maintenance of stable rainfall regimes.

A second regional public good of high priority is upward harmonization of environmental, health, and financial codes. Formal and informal dialogue to identify the range of best practices and policies in the health and environment sectors should be promoted. Of particular value for mainstreaming is the identification of environmental best practices that also yield significant public health benefits (prevention of infectious diseases, improvements in child health and survival) and public health interventions that enhance environmental quality (including the protection of water quality and reductions of particulate air pollution).

Strong environmental management systems and protocols along border regions make important contributions to limiting the negative effects of globalization. Trade goods are often warehoused or produced in border regions, and therefore the transfer of illegal and dangerous substances poses particular risks. Ac-
Accordingly, relevant mainstreaming activities should support bilateral and regional cooperation to incorporate and strengthen environmental management programs specifically for border regions. This could include common protocols for controlling trade in illegal environmental goods and exotic species, and entry or transfer of hazardous materials. It could also include minimum investments in basic environmental services such as solid waste collection, sewage disposal, managing land use and development, and integrated land-use planning.
Conclusions

The preceding analysis demonstrates that environmental mainstreaming enhances the IDB’s ability to achieve the major goals articulated under each of the four major institutional pillars. Yet this analysis also demonstrates that mainstreaming is no easy task. A number of critical mainstreaming themes cut across all four institutional strategies, and it is worth noting the most important of them.

One theme is the importance of creating the necessary governance conditions for effective regulation and enforcement in environmental and nonenvironmental sectors. Without clear rules of the game, transparency, and the capacity to ensure compliance, there are few incentives to internalize or to consider the environmental dimensions of economic development.

Another cross-cutting theme closely related to the creation of effective governance conditions is the capacity of public and private sector actors to evaluate and understand the environmental dimensions, opportunities, or consequences of activities specific to their sector or responsibilities. For example, judges need the capacity to interpret environmental laws and assess damages, trade negotiators need to understand the social and environmental trade-offs of entering into particular agreements, and entrepreneurs or industry actors need the capacity to assess significant environmental risks and liabilities associated with their operations. Creating broad-based understanding about the environment as well as specific institutional and human capacity is an important condition for effective mainstreaming.

Framing development objectives as a first step in any decision-making process and evaluating specific development activities or projects against how well they meet these objectives has also emerged as an important theme across all four strategies. An upstream assessment and definition of what kind and quality of development outcomes are sought permits the public sector, affected parties, and interested stakeholders to more effectively evaluate whether specific development proposals or project activities are the most effective ways to meet or achieve development objectives.

Early and effective consultation with interested and potentially affected stakeholders is another necessary element of effective mainstreaming. Too often public sector reforms, economic development, economic integration and other technically complex decision-making arenas are dominated by experts or an elite public sector bureaucracy. Such closed decision-making means that legitimate, although nonexpert, constituencies cannot voice their concerns, ground-truth proposed interventions, or have a chance to present viable alternatives to decision-makers. Decisions taken behind closed doors are less likely to withstand political change or pressure since they will not have the consent of the governed, nor will they account for potentially significant environmental and social consequences.

Finally, analysis and development interventions that deliberately leverage cross-sector synergies while minimizing dis-synergies are crucial to the mainstreaming discussion for all four strategies. Failure to take into account the environmental consequences of non-environmental development activities undermines mainstreaming efforts. Such a failure results in lost opportunities (e.g., using envi-
ronmental interventions to maximize improvements in public health) and negative consequences (e.g., subsidies or tax holidays that drive the over-consumption of renewable and nonrenewable natural resources).

These common themes illustrate the obstacles to environmental mainstreaming as well as the potential for systemic gains. The next and most challenging step before Bank staff is to put them into practice.


Hofstede, Robert and Montserrat Alban. “Payment for hydrological services in the Ecuadorian Andes: Water taxes and water funds at municipal level”


