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MAKING SUSTAINABLE COMMITMENTS
An Environment Strategy for the World Bank

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In 2001, the World Bank completed the comprehensive two-year process of preparing its Environment Strategy, *Making Sustainable Commitments: An Environment Strategy for the World Bank*. It was endorsed by the Bank's Board of Directors and published in October 2001. It is also available on CD-ROM. This Summary is an abridgment of that report.

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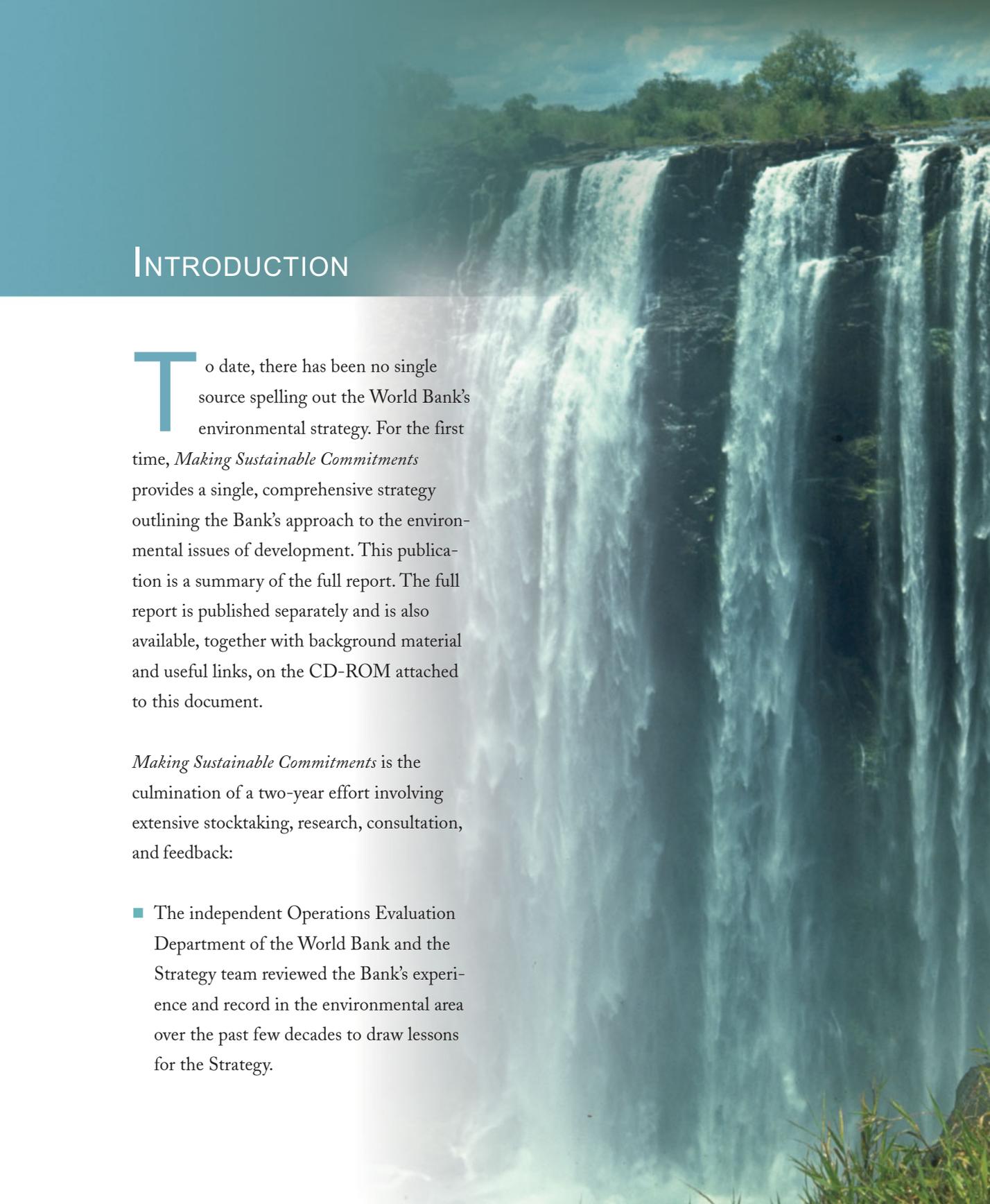
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INTRODUCTION

To date, there has been no single source spelling out the World Bank's environmental strategy. For the first time, *Making Sustainable Commitments* provides a single, comprehensive strategy outlining the Bank's approach to the environmental issues of development. This publication is a summary of the full report. The full report is published separately and is also available, together with background material and useful links, on the CD-ROM attached to this document.

Making Sustainable Commitments is the culmination of a two-year effort involving extensive stocktaking, research, consultation, and feedback:

- The independent Operations Evaluation Department of the World Bank and the Strategy team reviewed the Bank's experience and record in the environmental area over the past few decades to draw lessons for the Strategy.

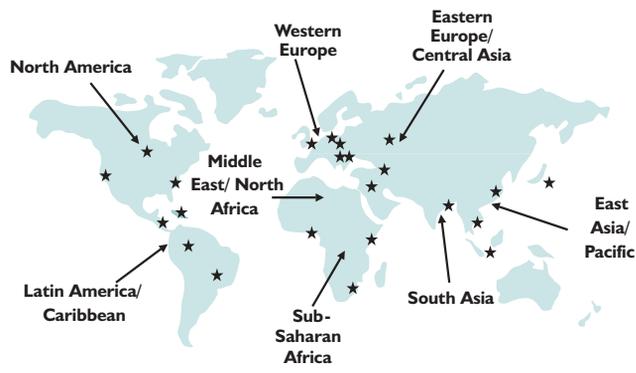
- Following initial discussions, several background papers and a discussion draft were prepared to stimulate broad debate both internally in the Bank and externally with a range of stakeholders.
- Between May 2000 and May 2001, over 30 formal and informal consultation meetings took place in Sub-Saharan Africa, Latin America, the Middle East and North Africa, South Asia, East Asia, Europe, Japan, and North America. (See figure 1.)
- Applying the broad strategy framework, each Bank Region prepared a Regional Environment Strategy. These reports were instrumental in identifying areas of unique concern to each Region, as well as underlying themes that are common to all Regions.
- Background documents and detailed reports on the consultation meetings and outcomes were prepared and posted on the Strategy website. Between August 2000 and the end of January 2001, the Environment Strategy Consultation Website received nearly 35,000 download requests for various papers.
- The draft Environment Strategy went through an intensive review process. The Bank's management and Board of Directors discussed

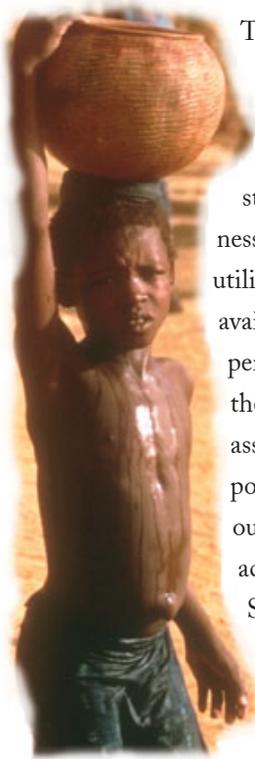
and endorsed the document on July 17, 2001.

The consultations have played an important role in shaping the final document. We are profoundly grateful to all those who have taken the time and trouble to contribute to the process.

Making Sustainable Commitments outlines how the World Bank will work with client countries to address their environmental challenges and ensure that Bank projects and programs integrate principles of environmental sustainability. It sets a vision, objectives, and a course of action for the longer term and suggests specific actions, targets, and institutional measures for the next five years, as described in Tables 2 and 3. Table 2 links proposed measures with key development objectives, while Table 3 sets targets and monitorable indicators for the Bank.

FIGURE 1. Strategy consultations map





The Strategy is intended to be realistic about what has to be done; about our strengths and weaknesses; about how to utilize the resources available to improve our performance; and about the potential for our assistance to have positive development outcomes. To help achieve its goals, the Strategy adopts a threefold approach:

- *Learning and applying lessons.* The

Strategy builds on the achievements and lessons of both our own past efforts and those of others. It does not seek to change the direction set at the Earth Summit in 1992 and articulated in the 1992 *World Development Report*, but to internalize lessons learned in the last decade, bolster commitments, and accelerate progress toward integrating environment and development.

- *Adapting to a changing world.* A number of trends—often referred to under the common label of “globalization”—have been reshaping the world. In response to

these trends and to continued learning from our past efforts, the Bank has also been changing. It has reaffirmed its commitment to poverty reduction and committed to a bottom-up, client-focused development, and it is moving toward new lending approaches. Our work on the environment must also adapt to these changing conditions.

- *Deepening our commitment.* To date, the environment has been the concern of a small, specialized group. This is clearly insufficient. To make a substantial and lasting difference, we must ensure that environmental concerns are fully internalized throughout the Bank.

If we are to help improve people’s lives, development opportunities, and prospects for a sustainable future, it is critical for the Bank to steer this course successfully. The Environment Strategy emphasizes the importance of integrating—or “mainstreaming”—environment into country development programs, sector strategies, and investments.

Within a strategic framework, we recognize that one size does not fit all. The countries served by the World Bank differ enormously in their stage of development and in the nature of their economic, social, and environmental concerns. It would be both presump-

tuous and futile to define a small set of specific problems that we would tackle in all or most of our client countries. A central theme of the Strategy, therefore, is the importance of working in collaboration with our clients and partners to identify the critical environmental issues that should be addressed in specific circumstances. Detailed country environmental diagnostic analysis—based on National Environmental Action Plans (NEAPs) and other strategies, along with other country-specific assessments—is part of the input for the Bank’s Country Assistance Strategies (CASs).

The lessons learned and the operational and institutional details described in this document apply specifically to the WB—that is, the International Bank for Reconstruction and Development (IBRD) and the International Development Association (IDA). Other members of the World Bank Group, including the International Finance Corpora-

tion (IFC) and the Multilateral Investment Guarantee Agency (MIGA), share the overall vision, strategic framework, and objectives of this strategy. They are, however, legally and financially independent and have different sets of owners and clients, structures and mandates, staffs and toolkits. Accordingly, specific operational and institutional implications of the strategy for these institutions differ. Boxes 9 and 10 summarize the approach to supporting sustainable development taken by IFC and MIGA, respectively.

Strategy making does not end with the publication of this document. Continuous communication and collaboration with clients, partners, and World Bank staff in diverse sector and country units, as well as systematic monitoring and assessment of the Strategy’s effectiveness, are essential to its updating, improvement, and successful implementation.

ENVIRONMENT IS AN INTEGRAL PART OF THE DEVELOPMENT CHALLENGE

Economic development has led to dramatic improvements in the quality of life in developing countries, producing striking gains unparalleled in human history. But the picture is far from entirely positive. Gains have been unevenly distributed, and a large part of the world's population remains desperately poor. At the same time, environmental factors such as indoor and outdoor air pollution, waterborne diseases, and exposure to toxic chemicals threaten the health of millions of people, and natural resources—land, water, and forests—are being degraded at alarming rates in many countries. Simultaneously, far-reaching trends—globalization, the increased role of the private sector and of civil society, and rapid technological advances—have been reshaping the world, causing development and environmental challenges to be ever more intertwined. At the end of this document, Maps 1–8 illustrate some of these trends.

As a development institution, the World Bank has been involved in addressing environmental issues for many years. This Environment



Strategy draws on lessons learned on the basis of the Operations Evaluation Department's (OED's) 2001 review of the Bank's performance on environmental issues; adjusts to a changing global context; and reaffirms the Bank's commitment to environmental sustainability. It sets a direction for the World Bank's future actions in the environment area for the longer term, as well as specific actions for the next five years. It emphasizes the need to tailor our assistance according to differences in institutional development and environmental management capacity in client countries. It

is based on an understanding that sustainable development, built on a balance of economic growth, social cohesion, and environmental protection, is fundamental to the Bank's core objective of lasting poverty alleviation—a link that has been recognized by international environmental conventions and in the International Development Goals (IDGs) set forth in the United Nations Millennium Declaration in 2000. (See box 1.)

Many view concern over environmental issues as a rich-country luxury. It is not. Natural and

BOX 1

Goals for international development

The major international development institutions—including the United Nations (UN), Organisation for Economic Co-operation and Development (OECD), International Monetary Fund (IMF), and the Bank—are working to develop a common set of international development goals. The discussions, which are in progress, are focusing on integrating the International Development Goals agreed to by the OECD, UN, IMF, and the Bank with goals set forth in the UN's Millennium Declaration.

The goals focus on key aspects of human well-being: poverty reduction, education, gender equality, health, and sustainable development. For each goal, indicators are specified to track progress toward the goal.

There are seven broadly agreed goals:

- Eradicate poverty and hunger
- Achieve universal primary education
- Reach gender equality and empower women
- Reduce child mortality
- Improve maternal health
- Combat HIV/AIDS, malaria, and other diseases
- Ensure environmental sustainability.

To monitor progress toward the environmental sustainability goal, there are three indicator targets: integrating the principles of sustainable development into country policies and programs and reversing the loss of environmental resources; halving, by 2015, the proportion of people without sustainable access to safe drinking water; and, by 2020, achieving a significant improvement in the lives of at least 100 million slum dwellers.

man-made environmental resources—including freshwater, forest, marine, and agroecosystems—represent an important element of countries’ wealth, and provide a foundation for economic growth and livelihoods.

People in most developing countries are increasingly concerned about their environment. They are particularly worried about the impacts of pollution and natural resource degradation on their health and on prospects for sustainable growth. While industrial countries have successfully addressed many of the environmental problems that directly affect people’s livelihoods, environmental factors continue to impose considerable human, economic, and social costs in many developing countries, threatening the foundation for sustainable development. The economic costs of environmental degradation have been estimated at 4 to 8 percent of gross domestic product (GDP) annually in many developing countries. Yet dealing with environmental problems is often difficult because of their complex characteristics. (See box 2.)

Distorted policies, governance structures, institutional frameworks, incentives, and pressures to export natural resources may favor a short-term focus, making programs

BOX 2

What makes environmental problems different?

Environmental problems have several unique characteristics:

- *Delayed impacts.* Many potential environmental changes have significantly delayed impacts. This argues for long lead times in implementing appropriate prevention or mitigation actions.
 - *Spatial impacts.* Sources and environmental impacts are often separated in space (for example upstream/downstream or hills/valleys), making it necessary to have a framework that can address diverse stakeholder interests.
 - *Cumulative impacts.* Individual actions often have little effect on the environment, but the cumulative effect of many such actions can be substantial.
 - *Irreversible damages.* A significant number of environmental outcomes are fundamentally irreversible, and the implications of such changes are hard to predict.
 - *Need for government intervention.* Environmental problems are often a consequence of market failures. Without government intervention to introduce regulations and create markets where they do not exist, the private sector alone cannot achieve optimal environmental outcomes.
 - *Multisectoral links.* Environmental problems reverberate across a range of sectors through many pathways, calling for coordinated policies and concerted efforts.
 - *Regional and global implications.* Many environmental impacts have broad cross-boundary and global effects that require international frameworks and agreements to deal with them.
-

with a long-term horizon difficult to implement. The “grow now, clean up later” approach to development, however, imposes high costs—costs that could be avoided by

adopting policies and programs that prevent serious environmental damage.

Although there are many “win-win” opportunities to simultaneously achieve economic, environmental, and social objectives, balancing these aspects of development through everyday decisions inevitably involves value judgments and societal choices, which often require difficult tradeoffs. (See box 3.) These tradeoffs—among generations, social groups, and countries—influence what different people see as sustainable development. These tradeoffs may only be *apparent*—that is, when the time dimension is added and the full social cost of the economic activity is considered, they may disappear. Overfishing, for example, may temporarily improve people’s income, making conservation seem costly. But the costs of conservation will pay off if they help avoid the collapse of fisheries, which deprives people of both nutrition and income in the longer term. Similarly, the considerable social costs of pollution can justify the costs of measures that prevent and mitigate it.

While countries and societies may differ in their choices about environmental priorities and other aspects of sustainable development, these choices have to be informed by good analysis and the participation of the key

BOX 3

From protectionism to sustainable ecosystem management

Conservation approaches have slowly evolved from a focus on species and strict protection to a focus on the sustainable use of biological resources and sustainable ecosystem management.

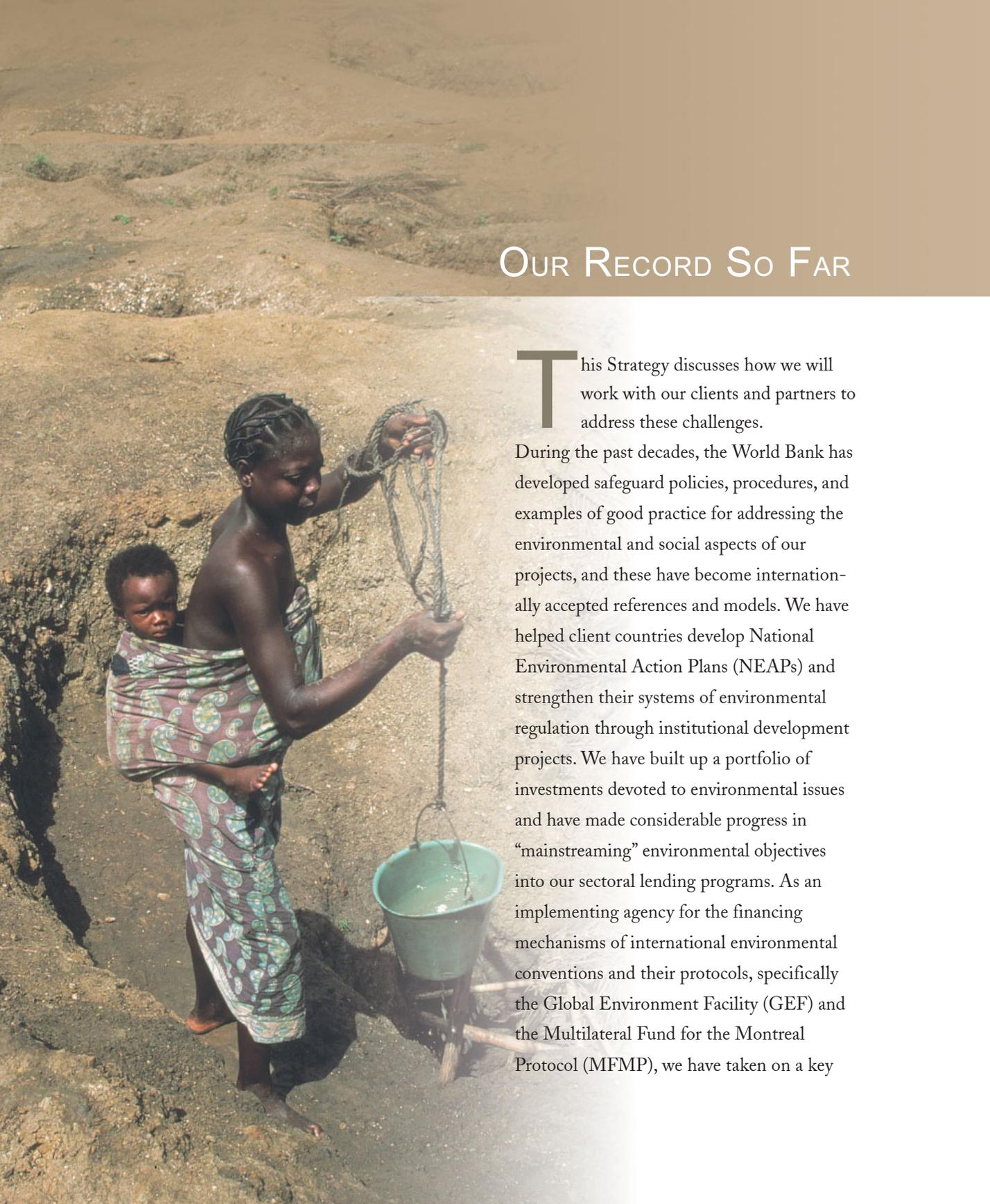
According to the Convention on Biological Diversity, “ecosystem management seeks to meet human requirements to use natural resources, whilst maintaining the biological richness and ecological processes necessary to sustain the composition, structure, and function of the habitats or ecosystems concerned.”

Ecosystem management is the ecological pillar of sustainability, but its application in practical terms requires management approaches with varying degrees of intensity. Modern conservation approaches include protected areas, which have been categorized by the World Conservation Union (IUCN) along a continuum from strict protection to intensive sustainable use. These can include biological corridors, agrobiodiversity and pastoral systems, and heavily modified landscapes—as long as their configuration and impact are compatible with broader ecosystem management goals.

stakeholders affected by them. The challenge for the World Bank and other institutions concerned with development assistance is to work with clients to develop and implement policies, programs, and investments that not only support continued economic development but also:



- Distribute the gains of development in a more equitable manner, with a particular focus on reducing poverty
- Avoid sacrificing the interests of future generations to meet the needs of the current generation
- Build on the emerging global consensus that natural resources and other valuable environmental assets must be managed sustainably.

A woman with braided hair, wearing a patterned wrap, stands on a dirt bank. She is pulling a rope that goes down into a hole in the ground, where a bucket is attached. A young child is strapped to her back. The background shows a dry, eroded landscape.

OUR RECORD SO FAR

This Strategy discusses how we will work with our clients and partners to address these challenges.

During the past decades, the World Bank has developed safeguard policies, procedures, and examples of good practice for addressing the environmental and social aspects of our projects, and these have become internationally accepted references and models. We have helped client countries develop National Environmental Action Plans (NEAPs) and strengthen their systems of environmental regulation through institutional development projects. We have built up a portfolio of investments devoted to environmental issues and have made considerable progress in “mainstreaming” environmental objectives into our sectoral lending programs. As an implementing agency for the financing mechanisms of international environmental conventions and their protocols, specifically the Global Environment Facility (GEF) and the Multilateral Fund for the Montreal Protocol (MFMP), we have taken on a key

role in dealing with threats to the global environmental commons, such as climate change, desertification, biodiversity loss, the depletion of the ozone layer, and the degradation of international waters.

Our clients, often with our help, have made significant progress. They have introduced environmental policies, regulations, and institutions; implemented projects and programs to improve environmental conditions; and heightened the public awareness of environmental issues. Environment is now clearly a significant concern on peoples' minds, and it is on the political agenda in many of our client countries. Nevertheless, as was pointed out in the OED's environment review, the Bank has been only partially successful in supporting environmental sustainability in client countries. (See box 4.) Our achievements overall have fallen short of our own high expectations and those of others, even bearing in mind that by itself, the Bank can never stem the tide of global environmental change. Several broad factors have constrained the Bank's effectiveness in promoting sustainable development:

- Our commitments have sometimes outpaced our and our clients' capacity to deliver. We have been overoptimistic in setting environmental objectives, designing

BOX 4

Evaluation of the Bank's past environmental performance

In 1999-2001, the World Bank's independent Operations Evaluation Department (OED) carried out a comprehensive assessment of the Bank's past environmental performance. The assessment—entitled, *OED Review of the Bank's Performance on the Environment (2001)*—concluded that the Bank had made significant progress in safeguarding investments financed by the Bank and in helping developing countries address their environmental challenges. It pointed out, however, that significant challenges remain on both fronts. The report recommended emphasis on three key areas:

- Demonstrating the critical role of environment in sustainable development and poverty reduction, and incorporating environmental objectives into its core strategy and operations
 - Improving the Bank's environmental safe-guard policies and their implementation
 - Making a shift in the approach to global issues by focusing on local-global overlaps.
-

complex interventions, and targeting tight deadlines, without giving sufficient attention to the complexity and practicalities of implementation and the competing pressures in our client countries.

- The environment has yet to be fully mainstreamed into the Bank's operations. Although Bank professionals in general are aware of the importance of environmental

issues, they often see them as a self-standing agenda and not as an element of their core task of supporting development and poverty reduction. Environmental professionals have an ongoing challenge to make the “business case” for sustainable development.

- Awareness of the importance of environmental issues is still evolving in many of our client countries. While they increasingly recognize that environmental concerns are important for making development sustainable, our clients face difficult choices in allocating scarce resources among pressing development

needs, and environment often has a hard time competing with other goals.

We have learned many lessons about complying with safeguard policies, preparing and implementing environmental projects, and undertaking policy dialogue. We have learned that in order to be effective, we have to demonstrate the benefits of environmental improvements and the links between environmental and development objectives; listen to people and respond to our clients’ aspirations and concerns; and assist with building awareness, commitment, and capacity to help clients face their development and environ-



mental challenges. Our Strategy applies these lessons to our future efforts.

Our Strategy also responds to a changing global context—globalization, rapid technological progress, the changing roles of private and public sectors, and civil society—and to evolving new approaches to development assistance—programmatic, as well as bottom-up community-based instruments. The Bank has reaffirmed its commitment to poverty reduction and the International Development Goals. It has adopted the Comprehensive Development Framework (CDF), which emphasizes a long-term, holistic, client-focused, and participatory approach to development assistance. (See box 5.) To respond to these changes, we have been adjusting our lending and nonlending instruments, including those that support community-driven development, poverty reduction strategies, and long-term develop-

BOX 5

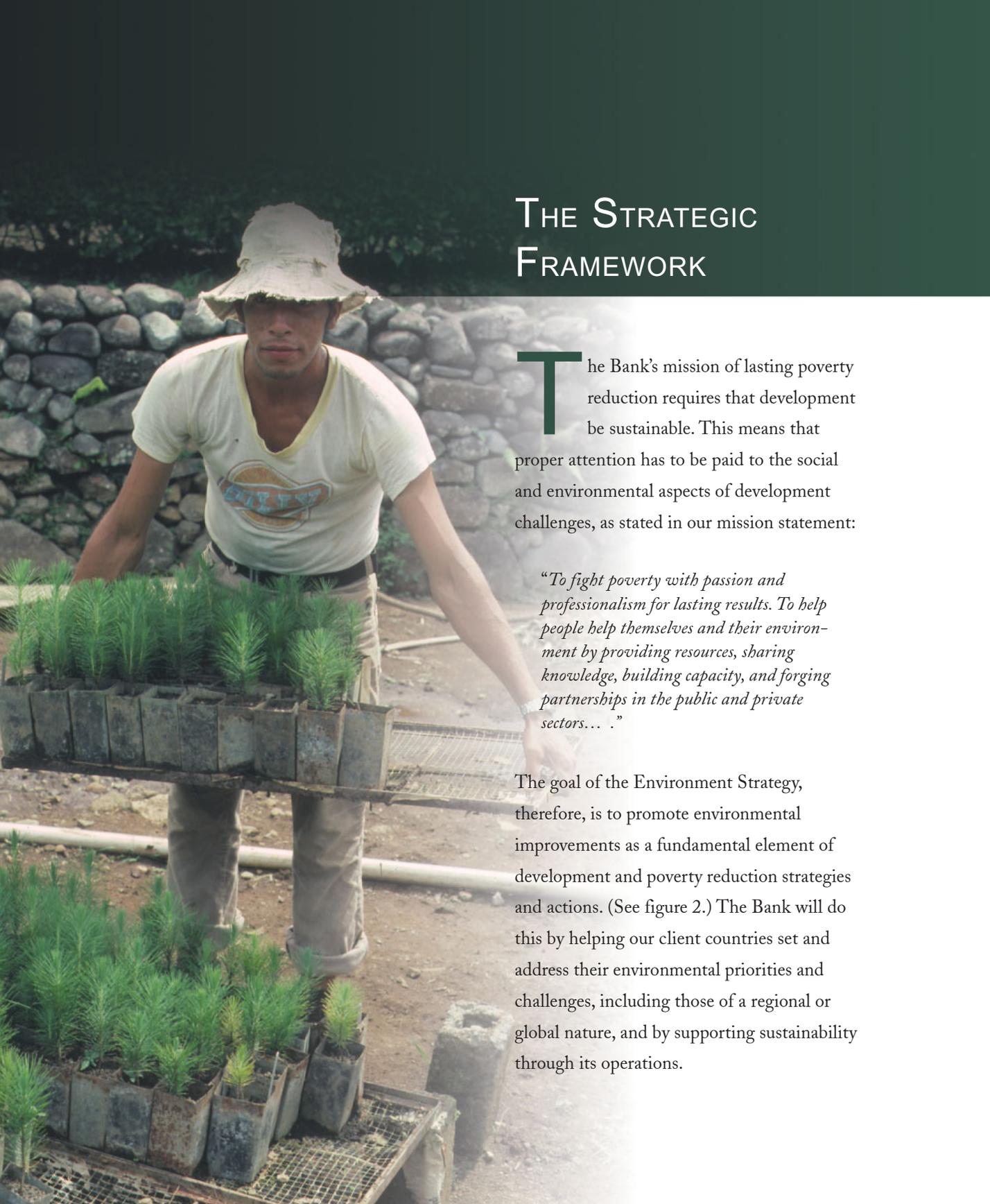
The Comprehensive Development Framework

The CDF favors a holistic approach to development. It seeks a better balance in policymaking and implementation by highlighting the interdependence of all elements of development—social, structural, human, governance, environmental, macroeconomic, and financial. This approach requires a transition from donor-led development assistance strategies to the development of a country strategy led by a country itself, with vigorous participation by civil society and the private sector and with the support of multilateral and bilateral organizations. The key principles of the CDF are:

- A long-term comprehensive vision
- Ownership by the country
- Partnership with internal and external actors
- A focus on development outcomes.

The CDF is meant to provide a compass—not a blueprint. How the principles are put into practice will vary from country to country, depending on economic and social needs and the priorities of the stakeholders involved.

ment programs. Our work on the environment must adapt to these changing conditions.



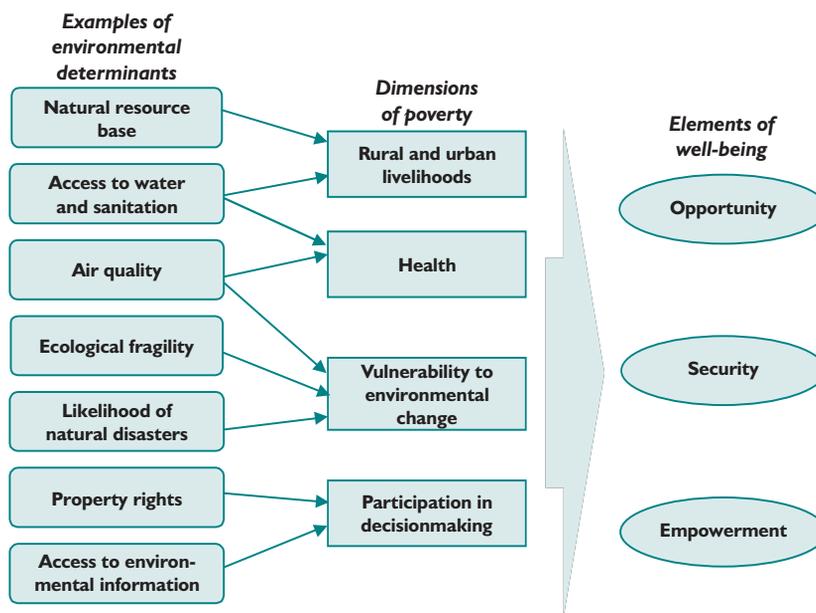
THE STRATEGIC FRAMEWORK

The Bank's mission of lasting poverty reduction requires that development be sustainable. This means that proper attention has to be paid to the social and environmental aspects of development challenges, as stated in our mission statement:

“To fight poverty with passion and professionalism for lasting results. To help people help themselves and their environment by providing resources, sharing knowledge, building capacity, and forging partnerships in the public and private sectors... .”

The goal of the Environment Strategy, therefore, is to promote environmental improvements as a fundamental element of development and poverty reduction strategies and actions. (See figure 2.) The Bank will do this by helping our client countries set and address their environmental priorities and challenges, including those of a regional or global nature, and by supporting sustainability through its operations.

FIGURE 2
Environmental links to the dimensions of poverty



This Environment Strategy outlines the priority actions the World Bank plans to take to help its clients address the environmental challenges of development. In keeping with the World Bank's mission of reducing poverty within a framework of economic development, the Environment Strategy gives priority to issues where the links between poverty and the environment are particularly strong. (See box 6.) Therefore, the Strategy puts the environmental challenge into a local perspective, focusing on people in client countries and on the way environmental conditions and resources affect them. The Strategy's overall framework, its objectives, and the necessary adjustments in Bank

instruments and actions are outlined in matrix form in Table 2 at the end of this summary.

Our objectives

In support of our goal, the Strategy sets three interrelated objectives: improving people's quality of life, improving the prospects for and the quality of growth, and protecting the quality of the regional and global environmental commons.

Improving the quality of life

We will focus on three broad areas where environment, quality of life, and poverty reduction are strongly interlinked:

BOX 6

Integrating environment into poverty reduction strategies

As of September 1999, all low-income countries use participatory processes to prepare their own Poverty Reduction Strategy Papers (PRSPs) in order to obtain debt relief or concessional lending from the International Development Association (IDA) or the Poverty Reduction and Growth Facility (PRGF). Typically, the preparation of PRSPs involves three stages:

1. Developing a comprehensive understanding of poverty and its determinants
2. Choosing the mix of public actions that has the highest impact on poverty reduction
3. Selecting and tracking outcome indicators.

Because of the links between environment and poverty, and because a poverty reduction strategy must be environmentally sustainable over the long term, the Bank and the International Monetary Fund (IMF) have encouraged governments to consider environmental factors in their PRSPs. The Bank is helping to build the analytical base needed to quantify the links and prioritize potential environmental interventions compared with those in other sectors. Guidelines were prepared for the *PRSP Sourcebook*. Because poverty-environment links are location-specific, the Bank has taken a three-pronged approach toward helping integrate environmental issues into the PRSP process in individual countries: (1) analytical work, (2) training, and (3) review.

■ *Enhancing livelihoods.* Because poor people often depend heavily on the productivity and environmental services of ecosystems and natural resources, the World Bank will help improve the sustainable management and protection of these resources. This includes helping communities sustainably manage natural resources such as land, water, and forests; helping clarify and establish property rights; strengthening or reforming incentive systems that influence how resources are used; and building the analytical base and institutional capacity to improve natural resource management. (See box 7.)

■ *Preventing and reducing environmental health risks.* Environmental factors, such as

unsafe water and air pollution, are major contributors to the total burden of disease and impose significant economic costs, particularly for poor people. (See table 1.) These risks are substantially greater in developing countries than in developed countries. (See figure 3.) Our interventions will focus on cost-effective measures to prevent and reduce environmental health risks through reducing people's exposure to indoor and urban air pollution, waterborne diseases, and toxic chemicals. Measures include improved access to cleaner commercial fuels by households; the phaseout of leaded gasoline and the introduction of cleaner transport fuels; and improved design and coverage of safe water and

BOX 7**Community-based natural resource management**

Natural resource management projects increasingly try to incorporate a role for communities in their design and implementation. For example, the Mauritania Rainfed Natural Resource Management Project (fiscal 1997) is financing the first 5 years of a 20-year long-term program to activate a process of natural regeneration of land fertility, rangeland vegetation, and livestock and forest production. It will do this by encouraging the emergence of better-adapted and more sustainable approaches to resource use. This is likely to result in greater biodiversity conservation while generating more income and a better quality of life for the local people. The project, which will provide rural communities with effective empowerment in the management of their natural resources, is active in 47 villages in three regions of the country. A number of micro-projects (dikes, small dams, wells, women's vegetable gardens, nurseries of indigenous tree species) are under way with the active participation of local communities.

sanitation services to increase health benefits.

- *Reducing people's vulnerability to environmental hazards.* Millions of poor people are vulnerable to natural disasters and environmental hazards, a threat that is expected to increase as a result of climate change. Our

interventions will aim to reduce this vulnerability and the cost of natural disasters by supporting upland resource management and payments for environmental services; assessing the impacts of natural disasters; improving weather forecasting and the dissemination of weather-related information; providing

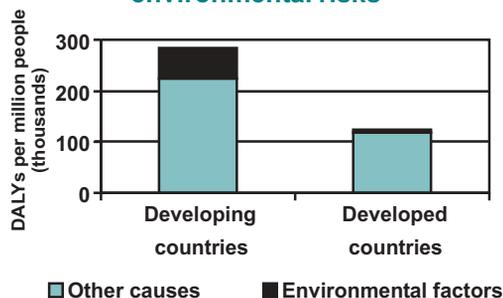
TABLE 1 The burden of disease from major environmental risks

<i>Environmental health group</i>	<i>Percentage of total DALYs in each country group</i>							
	<i>AFR</i>	<i>India</i>	<i>China</i>	<i>Asia and Pacific</i>	<i>LAC</i>	<i>FSE</i>	<i>LDCs</i>	<i>EME</i>
Water supply and sanitation	10	9	3.5	8	5.5	1.5	7	1.0
Malaria	9	0.5	0	1.5	0	0	3	0
Indoor air pollution	5.5	6	9.0	4	0.5	0	5	0
Urban air pollution	1	2	4.5	2	3	3	2	1
Agroindustrial waste	1	1	1.5	1.5	2	2	1	2.5
All causes	26.5	18.5	18.5	17	11	6.5	19	4.5

Note: Regions in the table slightly differ from World Bank Regions (see the definition in World Bank 1992 and in Murray and Lopez 1996). Definitions are as follows: AFR, Sub-Saharan Africa; Asia and Pacific, countries of East and South Asia, except for China, India and Pakistan; LAC, Latin America and Caribbean; FSE, former socialist economies of Europe (does not include Central Asia); LDCs, less developed countries (all regions and countries in the first six columns); EME, established market economies.

Source: Lvovsky and others (1999) based on Murray and Lopez (1996), Smith (1998), and World Bank estimates.

FIGURE 3
Burden of disease and environmental risks



Source: Lvovsky and others 2001. "Health and Environment." World Bank, Environment Department, Washington, DC.

information to communities about the risks they face; and stabilizing hillsides and coastal zones.

Improving the quality of growth

It is not enough to improve the quality of people's lives today; we have to ensure that short-term gains do not come at the expense of constrained opportunities for future development. Sustainable environmental management, therefore, is an essential condition for long-term economic growth and lasting improvements in people's well-being. There is also increasing evidence that attention to the environmental and social aspects of business development increases the international competitiveness of our client countries. Recognizing the important changes in the respective roles of the public and private sectors, our interventions will focus on (a) promoting better policy, regulatory, and

institutional frameworks for sustainable environmental management; and (b) harnessing the role of the private sector to become an engine for sustainable development.

- *Supporting policy, regulatory, and institutional frameworks for sustainable environmental management.* In cooperation with client countries and development partners, we will help client countries (a) strengthen their environmental policy, regulatory, and institutional frameworks with a special focus on local environmental institutions; (b) strengthen environmental assessment systems and practices; (c) reinforce the positive role of markets and the environmental benefits of sectoral and macroeconomic reforms; and (d) support good governance, institutions for collective action, increased transparency, access to environmental information, and public participation in decisionmaking.
- *Supporting sustainable private sector development.* We will assist in harnessing the role of markets and the private sector in promoting sustainable development by (a) helping clients introduce environmental regulations that allow flexible market mechanisms to achieve environmental objectives; and (b) helping to create markets for environmental goods and services. As part of the World Bank Group, IFC and MIGA will promote,

through their investments and guarantees, environmental and social responsibility and good environmental management in the private sector. (See box 8 on the PPAH, box 9 on IFC and box 10 on MIGA.) We will facilitate partnerships among the public and private sectors and civil society to resolve environmentally sensitive issues and to agree on benchmarks for good environmental management.

Protecting the quality of the regional and global commons

The search for solutions to sustainability needs to go beyond individual countries. The deteriorating quality of the regional and global commons threatens many developing countries. (See box 11.) They face potential conflicts over shared resources, such as scarce water resources and fertile land. They are also expected to suffer most of the worst effects of climate change, despite the fact that over 75 percent of cumulative greenhouse gas (GHG) emissions have been emitted by industrialized countries over the past 150 years, and per capita GHG emissions today are still five times less in developing than in industrialized countries.

A poverty-focused environmental agenda will require an increased emphasis on the local

BOX 8

Promoting good practice in environmental management

The Bank Group's *Pollution Prevention and Abatement Handbook 1998* (1999b) provides a comprehensive set of policy- and industry-specific guidelines for international good practice in pollution management. It emphasizes pollution prevention rather than control and underlines the role of good management rather than sole reliance on technical solutions.

The *Handbook* was prepared jointly by the Bank and the IFC, drawing on technical expertise and inputs from the UNEP and the UNDP. WHO, bilateral governments, industry specialists, private sector organizations, and civil society provided extensive comments.

The Bank Group is making a special effort to disseminate the lessons and guidelines summarized in the *Handbook* and to continue preparing, discussing, and disseminating policy and sector-specific guidance notes on emerging issues.

aspects of global environmental challenges, on reducing the impacts of the degradation of the global environmental commons on developing countries, and on interventions that are carefully targeted to benefit developing countries and local communities. Therefore, in addressing global challenges, we will apply the following key principles:

- Focus on the positive linkages between poverty reduction and environmental protection
- Focus first on local environmental benefits, and build on overlaps with regional and global benefits

BOX 9

IFC's approach to environmental and social issues

The International Finance Corporation's (IFC) environmental and social safeguard policies are closely harmonized with the Bank's safeguard policies, with minor adjustments to adapt them to the private sector context of its operations. (See box 13.) IFC's approach includes the following elements:

- IFC applies the World Bank Group's *Pollution Prevention and Abatement Handbook 1998* to its investments, with high-level management clearance required for any variation. To provide guidance for sectors for which no guideline is available in the *Handbook*, the IFC has developed its own guidelines.
- The Environmental and Social Review Procedure (ESRP), set forth in 1998, guides staff in the application of the policy and guideline framework to the environmental and social analysis and processing of all investments.
- IFC monitors the environmental and social performance of projects as part of its portfolio supervision. This includes (a) review of adherence to agreed environmental or corrective action plans and to other specific loan covenants and reporting requirements; and (b) the development of environmental and social management capacity.
- An independent compliance advisor/ombudsman (CAO) oversees audits of the IFC's and MIGA's environmental and social performance, both on systemic issues and in relation to sensitive projects.
- In 1996, the IFC created the Environmental Projects Unit (EPU) to act as a catalyst and incubator for projects with specific environmental benefits. The EPU has begun to encourage the identification and implementation of ecoefficiency improvements in mainstream IFC projects.

-
- Address the vulnerability and adaptation needs of developing countries
 - Facilitate transfer of financial resources to client countries to help them meet the costs of generating global and environmental benefits not matched by national benefits
 - Stimulate markets for global environmental public goods.

The Global Environment Facility (GEF) has emerged as a facilitator and a funding mechanism for integrating global concerns into the development process.

GEF assistance currently covers four focal areas: biodiversity, climate change, international waters, and the ozone layer. The Bank's GEF program is dominated by projects focused on biodiversity and climate change, which together account for more than 75 percent of World Bank–GEF grants. Since 1991, the Bank has committed more than \$1.5 billion in combined GEF and MFMP funding, with associated funding of \$5 billion for climate change mitigation, biodiversity conservation, the phaseout of ozone-depleting substances, and protection of international waters. (See figure 4.)

BOX 10

MIGA's approach to environmental issues

Since the Multilateral Investment Guarantee Agency (MIGA) issued its first investment insurance contract in 1990, it has been applying World Bank environmental policies and guidelines to MIGA projects.

In fiscal 1998, MIGA began drafting its own specific environmental assessment and disclosure policies, which reflect its business as an insurer of foreign investments. These draft policies, and the procedures for implementing them, were the subject of extensive discussions by MIGA's Board and management. The Board approved MIGA's environmental assessment and disclosure policies and procedures in May 1999.

MIGA's Environmental Assessment Policy is the basic framework for MIGA's evaluation of the environmental and social soundness of a proposed project. The policy requires the project sponsors to carry out an environmental assessment (EA) of the project. As explained in the policy, the level of detail of this assessment varies with every project and depends largely on the nature, magnitude, and significance of the project's impacts on the environment and on local communities. MIGA then uses this assessment as the basis for its review and evaluation.

The World Bank–GEF Program can play an important role in implementing the objectives of the Environment Strategy in four main ways:

- It can provide a powerful extension of other World Bank instruments to help address the quality of the regional and global commons.
- It can generate local environmental benefits in the pursuit of global environ-

mental benefits and through mobilization of associated funding.

- It can offer assistance—small-scale grants, for example—not readily available under conventional World Bank lending for engaging nongovernmental organization (NGOs) and other parts of civil society in the country dialogue on environmental management.
-

BOX 11

Global environmental issues

Global environmental issues fall into one of two categories:

1. *Global commons issues*, which are directly related to the maintenance of major components of Earth's systems, include:

- *Climate change*
- *Ozone depletion*
- *Accumulation of persistent organic pollutants (POPs)*
- *Loss of certain biodiversity elements, such as migratory species that cross national borders and globally important genetic resources.*

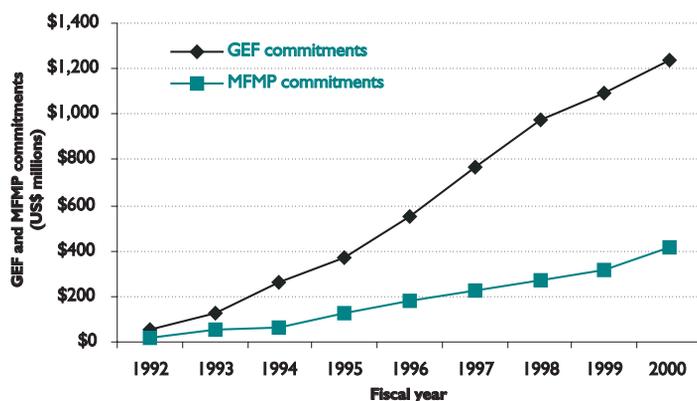
To address these issues effectively, all countries need to take coordinated action.

2. *Natural resource degradation at the global scale*, including:

- *Most biodiversity issues not listed above*
- *Degradation of international waters and marine ecosystems*
- *Land degradation and desertification*
- *Degradation and loss of forest resources.*

Although these issues are largely national or regional in nature, the severity of the problem often requires coordinated international action.

FIGURE 4
GEF and MFMP commitments, fiscal 1992–2000



Note: Commitment amounts are based on World Bank management approvals.

- It can support the piloting of innovative methods of sustainable natural resource management with local-global environmental links.

As implementing agency of the Global Environment Facility and Multilateral Fund for the Montreal Protocol, we remain fully committed to our mandate to help client countries address the objectives of international environmental conventions and associated protocols, including the conventions on climate change, ozone, and biodiversity. We will engage in these and other partnerships that help facilitate technical assistance, the transfer of financial resources and environmentally friendly technologies, and the development of markets for environmental goods and services.

Our toolkit

Environment is not a sector or an add-on. It has been long recognized that environmental issues should be considered in the early stages of decision-making processes. The Environment Strategy emphasizes the importance of continuing our efforts to work with clients to integrate, or main-

stream, environment into investments, programs, sector strategies, and policy dialogue mindful of the institutional requirements and capacity constraints. This translates into actions throughout the Bank. The Strategy stresses improvements in three key areas: (1) strengthening analytical and advisory activities; (2) addressing environmental priorities through project and program design; and (3) improving the safeguard system.

Strengthening analytical and advisory activities

Analytical and advisory activities provide a foundation for defining strategic environmental priorities and informing policy dialogue and decisions on projects and programs. A systematic approach is needed to ensure that environmental considerations enter the development planning process at an early

stage by taking a multisectoral and long-term view of development.

- *Country-level environmental analysis* will build on NEAPs and other country-led environmental work, as well as analyses undertaken by the Bank and development partners to assess environmental trends and priorities, policies, and institutional capacity in managing environmental resources and risks. Country-level environmental analytical work will become part of the diagnostic tools that inform country dialogue, poverty reduction strategies, and country assistance strategies (CASs).
- *Strategic—sectoral, regional, and policy-focused—environmental assessments (SEAs)* will be used more systematically as analytical tools through a structured learning program involving clients and partners for addressing complex cross-sectoral environmental issues and for integrating environment at early stages in sectoral decisionmaking and planning processes.
- In our *advisory activities*, we will respond to client demand, priorities, and capabilities and build on the Bank's comparative advantage in working across sectors and throughout the world to transfer good practices in policy and technical issues. We will help clients set and address their own

environmental priorities and improve their environmental management capacity. We will pay particular attention to poverty-environment linkages, the economic valuation of environmental resources and of their degradation, and environmental policy analysis.

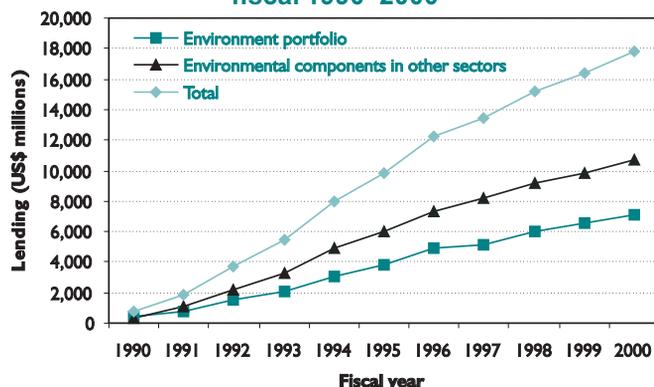
Addressing environmental priorities through project and program design

Since 1992, lending through self-standing environmental projects has gradually shifted toward environmental lending as a component of sectoral projects. Environmental components are increasing in many sectors, such as agriculture, energy, urban development, and water and sanitation. (See figure 5.)

Addressing environmental priorities that affect the long-term sustainability of development requires a proactive approach. Some environmental problems are best addressed by dedicated projects, others by integrating environmental activities into sectoral projects and programs. Depending on client demand and circumstances, we will work on both fronts with attention to the following areas:

- *Improving the design and performance of environmental projects and components.* Our experience has shown that environmental

FIGURE 5
World Bank environmental lending,
fiscal 1990–2000



Note: Excluding GEF and MFMP lending, shown in figure 4. The Environment portfolio consists of projects, the primary objective of which is environmental improvement. Environment components in other sectors include environmental components in the agriculture, energy, urban development, and water and sanitation sectors.

projects or project components work best when they are based on a good understanding of the causes of the problem, are expected to have a major impact, and have the commitment and capacity of local stakeholders, so that project outcomes are sustainable after the project is over. We will continue to ensure that the lessons from our growing experience in environmental projects are disseminated and applied to new projects.

- *Coordinating investments and policy reforms.* Some investment projects are unlikely to bring lasting results in a distorted policy environment. At the same time, individual investment projects may lead to a dialogue on policy reform. We will consider

carefully the proper sequencing of policy reform efforts and specific investments in each case.

- *Applying a location-specific focus.* Because the linkages between natural resource management and poverty are complex and location-specific and because implementation capacity varies, efforts to integrate environmental considerations into investment projects, adjustment lending, and programs will clearly vary from country to country. We will rely on enhanced analytical work and dialogue with clients to assess the best location-specific interventions in priority countries.

- *Supporting capacity development.* Capacity-building efforts will be targeted, based on client demand, and tailored to existing environmental regulatory and institutional frameworks. We will collaborate with other development partners involved in environmental capacity development to improve overall development effectiveness. In a few cases where strong commitment exists in the country to undertake environmental institutional reform, we will apply a programmatic approach.
- *Enhancing the environmental outcome of adjustment lending.* Considering the importance of the policy framework to

environmental sustainability, we will pay special attention to reinforcing positive and minimizing potentially negative environmental outcomes. Strengthened analytical work will inform policy dialogue, help identify environmental trends and threatened resources, assess country institutional capacity to manage resources sustainably, and prepare guidelines for good practice. Systematic upstream reviews and monitoring will help ensure that environmental concerns are appropriately integrated into the changing lending profile. These issues will be further elaborated during the update and conversion of the Operational Directive on adjustment lending.

Improving the safeguard system

The Bank's safeguard system is an essential tool for integrating environmental and social concerns into development policies, programs, and projects by providing minimum requirements that all Bank-supported operations must meet. (See box 12.) We will continue improving the quality and consistency of the application of our safeguard policies with increased attention to results on the ground, where many issues are intertwined. Improving the safeguard system is a dynamic process that involves both the Bank and its clients in

BOX 12

Safeguard policies

The following safeguard policies set forth mandatory requirements to be followed by Bank operations:

- OP/BP 4.01 Environmental Assessment
- OP/BP 4.04 Natural Habitats
- OP/BP 4.36 Forestry
- OP/BP 4.09 Pest Management
- OD 4.30 Involuntary Resettlement
- OD 4.20 Indigenous Peoples
- OP/BP 11.03 Cultural Property
- OP/BP 4.37 Safety of Dams
- OP/BP 7.50 Projects in International Waterways
- OP/BP 7.60 Projects in Disputed Areas

These policies are complemented by:

- OP/BP 17.50 Disclosure of Operational Information.

Notes: OP/BP = Operational Policy/Bank Procedures.
OD = Operational Directive.

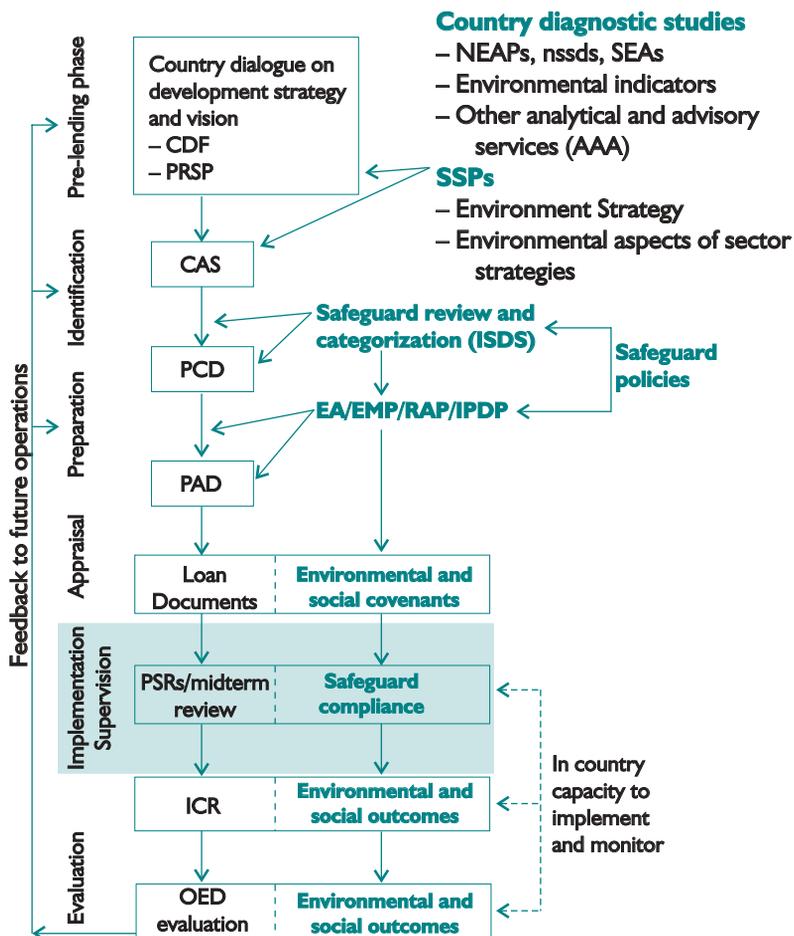
a series of actions designed to create better linkages between policies and their application in projects and programs.

We will follow a two-pronged approach:

- *Addressing short-term priorities.* Our immediate priority is to strengthen compliance with the safeguard policies, establish an integrated safeguard system, and improve results on the ground. To this end, we will (a) continue to strengthen the

Bank’s internal review, monitoring, and tracking system to improve corporate consistency and compliance in applying the policies; (b) integrate environmental, social, and legal policies into an integrated safeguard compliance system, including the use of the Integrated Safeguard Data Sheet (ISDS); and (c) help improve in-country capacity for safeguard implementation through enhanced training and capacity building. (See figure 6 for a description of the way upstream environmental input and safeguard issues are integrated into the Bank’s decisionmaking and project cycles.)

FIGURE 6
Environmental and safeguard input into the Bank’s decisionmaking and project cycle



Note: EA: Environmental Assessment, EMP: Environment Management Plan, ICR: Implementation Completion Report, IPDP: Indigenous Peoples Development Plan, ISDS: Integrated Safeguard Data Sheet, PAD: Project Appraisal Document, PCD: Project Concept Document, PRSP: Poverty Reduction Strategy Paper, PSR: Project Supervision Report, RAP: Resettlement Action Plan, SEA: Strategic Environmental Assessment, SSP: Sector Strategy Paper.

- *Reforming the safeguard system.* In parallel, we will (a) respond to new challenges posed by a greater variety of lending

instruments, including programmatic lending and projects implemented at the grassroots levels; (b) help move safeguard considerations earlier into the decisionmaking process; (c) work with clients and partners to coordinate and harmonize good practice; and (d) focus increasingly on client ownership, capacity, and safeguard systems. We will prepare a medium-term plan for reforming the safeguard system to adapt to a changing lending profile, direct more attention to clients' own capacity for good environmental management, and develop a risk management system that takes into account not only the risk characteristics of projects but also the capacity of countries to comply with safeguards. Over the long term, the Bank seeks to develop a single unified safeguard policy to provide a consistent approach.

Our ultimate objective is to help clients introduce and implement their own safeguards to manage their environmental resources sustainably. To this end, we and our partners need to increase our emphasis on capacity development at the national and sub-national levels. We need to search for ways of assessing and helping develop in-country capacity to adopt and internalize the prin-

ciples of sustainable development, and create incentives and rewards for good performance by delegating responsibilities to borrowers with demonstrated capacity to manage the environmental aspects in their own programs.

The need for selectivity

The action agenda described above is diverse and challenging. In order to be effective, we will have to be selective to guide implementation at three levels:

1. *At the corporate level*, the Strategy defines corporate environmental priorities in detail, and guides their integration into Regional Strategies and country-level programming.
2. *At the regional level*, Regional Strategies show the linkages between the corporate strategic framework and the regional context, reflecting regional and sub-regional differences.
3. *At the country level*, the Strategy provides a framework for setting priorities for environmental assistance. Using the corporate strategic framework, selectivity for environmental assistance at the country level will be based on a diagnosis of environmental priorities and management capacity, country demand, and consistency with the CAS. At the same time, the Bank is committed to ensure the implementation of its safeguard policies to all Bank operations in all countries.



INSTITUTIONAL REALIGNMENT

Sustainable development is a long-term goal. Its achievement requires a concerted pursuit of economic prosperity, environmental quality, and social equity and calls for behavioral changes by individuals and organizations. Throughout the world, this change is occurring.

Within the Bank, too, implementing the Strategy requires institutional change. We need to align our incentives, resource allocation, and skills mix to accelerate the shift from viewing the environment as a separate, freestanding concern to considering it an integral part of our development assistance. We then need to put this understanding into practice in our analytical work, policy dialogue, and project design.

In order to strengthen the Bank staff's ability to manage this shift, those working on environmental issues have to be articulate advisors on the many linkages between poverty alleviation and environment and play

an active, supportive role in the formulation of country and sector programs. Table 3, at the end of this summary, outlines indicators and actions of an institutional nature that would accompany the implementation of the Strategy.

Accountability and incentives

The Bank is reviewing its accountability framework to establish clear lines of responsibility and incentives throughout the institution. This framework has to be client-centered, acknowledging that our core responsibility is to support the sustainable development of our clients. Regional environment strategies and the annual business plans will help operationalize the Strategy. Consistent with its mandate, the Environment Board will be responsible for guiding and overseeing the implementation of the Strategy and will report regularly to senior management and, on request, to the Board.

Training and skills mix

The increasing focus on cross-sectoral work and the shift in emphasis from project-level safeguards toward integrated portfolio-level risk assessment and quality enhancement will require a gradual shift in staff skills. Environmental staff will be trained to enhance their

ability to influence sector and country programs and will be assessed on their effectiveness in this area. In the assessment of the performance of environmental staff, particular attention will be paid to addressing complex environmental challenges and implementing the safeguard policies.

At the same time, a shift toward improved environmental skills among nonenvironmental specialist staff will take place through more systematic training in safeguard policies, poverty-environment linkages, and cross-sectoral issues. Tracking of training delivery will be improved to better target and customize both mandatory safeguards training and training on cutting-edge environmental issues. “Green Awards” will create positive incentives for nonenvironmental staff to mainstream environment into their operations and programs.

Budget

Better integration of environmental concerns into the Bank’s work program is expected to yield strong benefits in relation to all three objectives of this Strategy, anchored as they are in the Bank’s mission of poverty alleviation. Achieving these objectives, however, will require that resources be dedicated to the task.

Such resource allocations are premised on the principle of exercising selectivity at all levels and on the need to guide a transition toward new ways of delivering development assistance, including programmatic lending.

Wherever possible, existing resources will be realigned within existing work programs. For the Bank to meaningfully address the objectives of the proposed Strategy, Bank budget funding would need to increase over the next five years. Key elements of this incremental Bank budget would be for:

- Improving the safeguards and compliance system, including the strengthening of compliance with policies and a comprehensive review of the safeguards policy framework to fit the needs of a changing Bank
- Mainstreaming support, with special emphasis on environmental mainstreaming in IDA countries in accordance with IDA requirements; linking corporate environmental priorities and global public goods with country programs, with an emphasis on upfront work on preparation of Poverty Reduction Strategy Papers (PRSPs) and CASs; facilitating cross-sectoral and cross-institutional approaches and work programs to address environmental issues; and

addressing subregional and regional environmental challenges.

The Bank will work with interested partners to bring about the successful implementation of the Strategy and will avail itself of trust funds from bilateral partners and others. Nevertheless, the comprehensive actions needed to address the environmental challenges of economic development in client countries, as described in the Strategy, justify adequate deployment of Bank resources.

Partnerships

Partnerships with other development institutions, civil society, and the private sector can contribute to our objectives and can effectively leverage scarce Bank resources. Applying the principles of the Comprehensive Development Framework, partnerships at the country level are aimed at increasing development effectiveness and reducing transaction costs through coordination led by the countries and through the harmonization of operational policies and practices of development partners.

At the regional and global levels, we will engage in partnerships where strong international consensus exists for global action with

the aim of contributing to global public goods, where close links can be established with country assistance programs, and where significant resources can be catalyzed. We will continue our constructive partnerships in the framework of the GEF, the Multilateral Fund for the Montreal Protocol, and the Prototype Carbon Fund (PCF) to help implement major international conventions. We are currently engaged in numerous other partnerships in a range of areas. The Strategy provides a set of criteria for managing and evaluating partnerships, and we will apply these to systematically review and align our partnerships with the Strategy. (See figure 7.)

Monitoring progress

To ensure accountability and the capacity to learn from experience, we will introduce a performance monitoring and reporting framework that will track the Bank's performance on the environment, monitor implementation of the Strategy, and report regularly on progress. We will use the Internet and other means of communication with key stakeholders to make available reports and information about the Bank's environmental performance, discuss issues, and receive feedback. The core categories of periodical institutional reporting to senior management and the Board will include (a) environmental

FIGURE 7
Realigning partnerships





projects and programs, (b) mainstreaming and policy integration, (c) safeguard compliance, and (d) training. (See box 13 for some of the

key benchmarks for monitoring Bank performance in implementation.)

BOX 13

Key benchmarks for monitoring Bank performance in Strategy implementation

- Country diagnostic studies carried out to assess environmental priorities and management capacity to inform CASs and PRSPs in 5–15 priority countries annually. Level of environmental mainstreaming in CASs improved.
 - Targeted environmental input (analytical work and training) in 5–15 priority PRSP countries annually.
 - Structured learning on SEAs based on 10–20 SEAs carried out annually to inform sector projects and programs. Level of mainstreaming in key sectors improved.
 - Systematic client training delivering 20,000–25,000 “participant training days” annually.
 - Improved safeguard compliance indicators.
 - Ninety percent of all operational Bank staff and managers trained in environmental safeguards.
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CONCLUSION

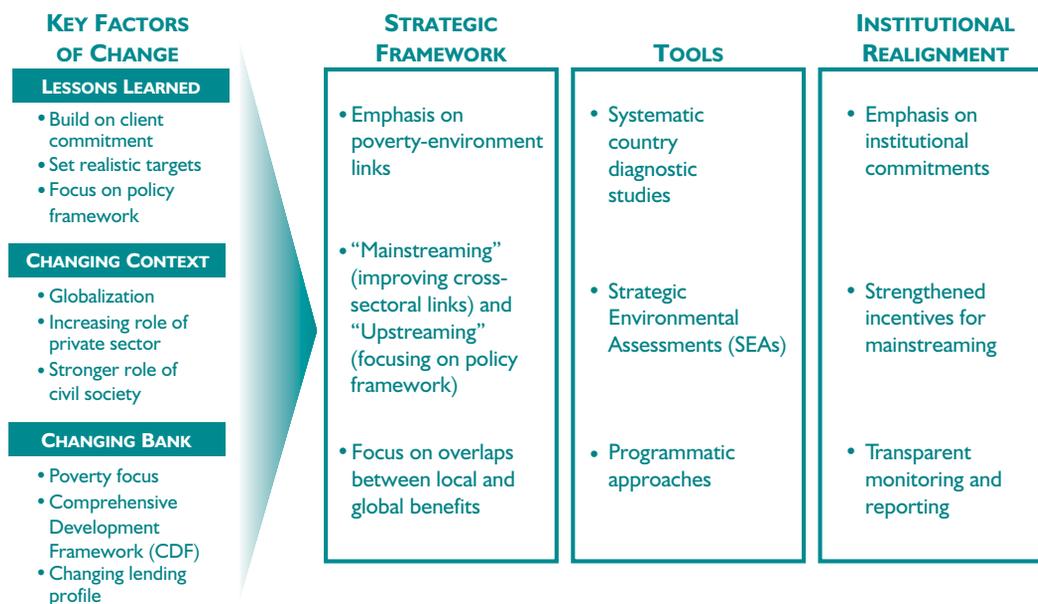
Real progress toward poverty reduction and sustainable development requires changes in a challenging array of policies, tools, and institutional priorities. Figure 8 presents the key adjustments in the World Bank's approaches that are envisioned by the Environment Strategy and that are vital if the Strategy is to achieve its goals.

The Strategy builds on and internalizes lessons learned in the past decade from our own efforts to support sustainable development, and from those of our clients and others, and it proposes to adjust our tools and institutional priorities to a changing global context and to changing Bank priorities. It places strong emphasis on development-environment links and on the environmental conditions that affect people's livelihoods, health, and vulnerability.

In implementing the Strategy, we will give priority to certain aspects that are particularly



FIGURE 8
What’s new in the Environment Strategy



urgent, such as integrating environmental considerations into Poverty Reduction Strategy Papers (PRSPs). Other elements of the Strategy, such as work toward systematic application of country environmental analysis and the Strategic Environmental Assessments, will be undertaken gradually, focusing first on refining methodologies, coordinating with clients and partners, piloting, and learning.

Our environmental assistance (including non-lending and lending services) to client countries will be tailored to country need and capacity based on demand; on a diagnosis of environmental priorities and environmental

management capacity undertaken by client countries, development partners, and the Bank; and on consistency with Country Assistance Strategies. We will ensure that country assessments and programs consider and reflect regional and global situations and priorities with a view to harmonizing local, regional, and global benefits, facilitating resource transfers for global action, and helping client countries benefit from global public goods generated by international action.

To date, environmental issues have too often been the concern of a small, specialized group.

This is clearly insufficient. To make a substantial and lasting difference, we must ensure that environmental concerns are fully internalized—“mainstreamed”—into all Bank activities. Internally we can strengthen our institutional commitment to the Strategy’s objectives, and we can play a leadership role in more precisely measuring the impact of environmental interventions.

The success of the Strategy, however, depends on more than the Bank’s actions. The Bank can help develop capacity in addressing environmental issues in client countries, and it can become a role model in supporting environmental sustainability in its operations. But in the end, the commitment of countries is needed if they are to take the necessary measures toward making their development sustainable. This is a gradual process that requires time, perseverance, a concerted effort

by different parts of societies, and the support of the development community.

The Environment Strategy is clearly, and deliberately, for the long term. After all, its ultimate goals—sustainable development and lasting poverty reduction—stretch into the future. Short-term gains, as experience has too often shown, can be overwhelmed by larger adverse changes. We are looking to long-lasting achievements. That does not imply a lack of action in the meantime. We are not beginning from a standing start; we have the advantage of a well-established work program and an ever-expanding body of experience in environmental issues. Building on this foundation, we will work with our clients, together with development partners, to move forward toward creating a better and more sustainable world for all.

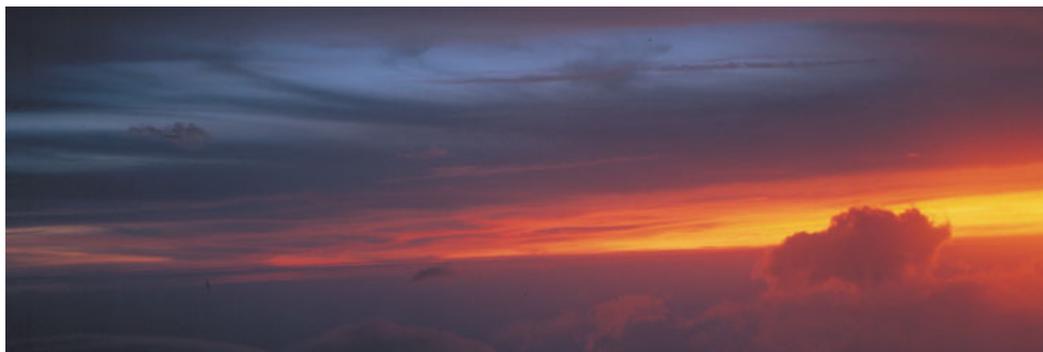


Table 2 Strategic framework matrix

<i>Strategic focus</i>		<i>Adjustments in Bank instruments and actions</i>		
<i>Development objectives</i>	<i>Intermediate goals</i>	<i>Analytical and advisory activities</i>	<i>Policy integration</i>	<i>Project design and lending</i>
<i>Improve the quality of life</i>				
<p>Enhance livelihoods of the poor through improved natural resources management.</p> <ul style="list-style-type: none"> Increase incomes Enhance long-term productivity Improve poor people's access to natural resources 	<p>Reduce land degradation, combat desertification, and restore degraded landscapes</p> <ul style="list-style-type: none"> Promote sustainable forest management Reduce rates of biodiversity loss (genes, species, and ecosystems) Improve land tenure systems and property rights Support communal natural resource management Establish pilot systems of payments for environmental services 	<p>Provide training on sustainability and resource management issues in client countries</p> <ul style="list-style-type: none"> Develop and apply practical tools for measuring the value of environmental services Undertake studies on access and use of natural resources as impacted by macro policy and political frameworks Undertake studies on resource degradation and productivity and their linkages to poverty Help assess the state of ecosystems and their links to livelihoods in client countries Develop good practice in integrating economic and social factors into ecosystem management 	<p>Enhance analytical work and cross-sectoral dialogue and training on poverty-environment issues in priority PRSP countries and CASs</p> <ul style="list-style-type: none"> Integrate environment-related indicators into PRSPs Help establish incentive frameworks that promote sustainable NRM, including (a) removing policy-induced distortions that undermine sound NRM; and (b) using economic instruments to address externality problems Promote institutional reform focused on user organizations and cost recovery 	<p>Reflect economic, social, and ecological benefits in project design</p> <ul style="list-style-type: none"> Adopt a long-term perspective on NRM by using long-term lending instruments, e.g. APLs Integrate sustainable ecosystem management objectives into infrastructure and rural development projects Support participatory tenure and property right reform projects
<p>Protect people's health from environmental risks and pollution to reduce the disease burden.</p> <p>Reduce:</p> <ul style="list-style-type: none"> Child mortality Respiratory diseases Blood lead levels Deaths due to malaria Exposure to toxic substances 	<p>Improve air quality (particularly concentrations of fine particulates and lead) in cities</p> <ul style="list-style-type: none"> Increase the share of cleaner commercial fuels and improved cooking/heating systems in households to reduce indoor air pollution Phase out leaded gasoline Increase the coverage of water supply and sanitation and facilitate hygiene and behavioral change Improve drainage in irrigation projects Reduce the generation and impacts of industrial wastes and toxic materials 	<p>Undertake cross-sectoral assessments of the key sources of environmental health problems</p> <ul style="list-style-type: none"> Identify cost-effective measures to reduce environmental health risks in sectors, e.g. water, energy, transport, agriculture Undertake studies of policies and options to reduce the health impacts of indoor air pollution Support lead phaseout initiatives and actions, clean fuel studies, Clean Air Initiatives and programs, and information dissemination and learning programs 	<p>Integrate environmental health issues into PRSP dialogue, training, and indicators</p> <ul style="list-style-type: none"> Promote market-based solutions to environmental health problems relevant for poverty reduction and growth Integrate health and environmental linkages into the implementation of PRSPs and CASs Facilitate dialogue on policy reforms and investments programs that lead to least cost solutions to air quality problems including the coordination of transport, environment and energy policies Raise awareness among various stakeholders of environmental health issues 	<p>Design projects based on integrated air quality assessment in the urban, transport, and energy sectors</p> <ul style="list-style-type: none"> Support the switch to cleaner fuels (e.g. biomass to LPG conversion in rural households, coal-to-gas in urban households) Support water supply and sanitation, energy, and irrigation projects that have specific environmental health outcomes based on integrated water resource management

<p>Reduce people's vulnerability to environmental risks, including moderate and extreme natural events.</p> <p>Minimize:</p> <ul style="list-style-type: none"> Loss of life and livelihood Injuries and disabilities Temporary and permanent dislocation Destruction of social, physical, and natural capital 	<p>Raise awareness of the potentially high economic and social returns that investments in vulnerability reduction can yield</p> <p>Strengthen regional institutions to improve weather forecasting, dissemination, and verifications systems</p> <p>Enable adoption and encourage enforcement of building codes and land use policies</p> <p>Promote resilience through better management and protection of the natural resource base</p>	<p>Study the social and economic impacts of natural disasters and assess the vulnerability in countries/sub-regions with a history of natural disasters</p> <p>Develop a framework for vulnerability assessments, disaster preparedness, and early warning systems</p> <p>Support the preparation of building codes, siting, and land use guidelines</p> <p>Develop learning programs on planning, predicting, and adapting to climate change</p>	<p>Include disaster prevention and management in policy dialogue</p> <p>Promote the integration of vulnerability reduction measures in sectoral planning and regulatory reforms</p> <p>Support the integration of disaster management into regional, national, and local land use and development plans and water resources management policies, strategies, and planning</p>	<p>Support community-based ecosystem service initiatives to reduce the impacts of flooding (reforestation, conservation, and restoration of wetlands)</p> <p>Build and strengthen early warning systems, including community-based systems for effective dissemination of information</p> <p>Support vulnerability reduction investments, including investments for adaptation to climate change</p>
<p><i>Improve the quality of growth</i></p>				
<p>Promote policy, regulatory and institutional frameworks for environmentally sustainable growth.</p> <p>Improve the effectiveness of environmental regulatory frameworks in client countries</p> <p>Enhance the integration of environmental concerns in sectors that affect the environment, e.g. energy, agriculture, transport</p> <p>Promote sustainable financing of environmental services</p> <p>Promote good environmental practices in private sector development</p> <p>Encourage the private sector's participation in markets for environmental goods and services</p>	<p>Promote the introduction and enforcement of efficient environmental and NRM institutions, policies, and regulations</p> <p>Increase national and local capacity to adopt and implement environmental regulations and EA systems</p> <p>Help integrate environmental concerns in projects and programs</p> <p>Promote the adoption of independently verifiable good environmental management and natural resource use practices in the private sector</p> <p>Increase the flow of private sector investments to environmental projects</p>	<p>Strengthen client capacity through training, advisory services, and technical assistance in environmental assessment, policy, management and enforcement</p> <p>Enhance analytical work to strengthen the application of safeguards in client countries</p> <p>Undertake regional initiatives to strengthen and develop EA capacity</p> <p>Transfer good practices and relevant lessons learned in environmental policy, management, and technical issues across Regions and countries</p> <p>Identify good practices and promote environmentally and socially sound private sector development</p> <p>Develop and apply benchmarks and good practices in environmental management for key areas of Bank operations</p>	<p>Strengthen the integration of environmental aspects into CDFs, PRSPs, and CASs</p> <p>Emphasize the linkages between public expenditure, poverty reduction, and environmental quality</p> <p>Emphasize sectoral reform projects that promote environmentally appropriate policies and instruments (e.g. water and energy sectors)</p> <p>Promote policies that support private sector participation and sustainable natural resource management in service provision (e.g. energy, transport, and water) consistent with sound regulatory frameworks for managing the resource</p> <p>Address environmental issues systematically in privatization and private sector development programs</p>	<p>Increase support to priority countries, identified in Regional Environment Strategies and business plans, to help strengthen environmental management framework</p> <p>Use policy-based lending to address key environmental and NRM issues</p> <p>Promote environmental responsibility and good environmental management practices in the private sector through IFC investments and MIGA guarantees</p> <p>Support the establishment of markets for ecosystem services and the adoption of independent certification of sustainable natural resource use</p>

Table 2 Strategic framework matrix (continued)

<i>Strategic focus</i>		<i>Adjustments in Bank instruments and actions</i>		
<i>Development objectives</i>	<i>Intermediate goals</i>	<i>Analytical and advisory activities</i>	<i>Policy integration</i>	<i>Project design and lending</i>
<i>Protect the quality of regional and global commons</i>				
<p>Address transboundary, regional and global environmental problems.</p> <p>Reduce the impacts of transboundary and regional environmental problems</p> <p>Promote equitable solutions to global environmental problems</p> <p>Improve countries' capacity to adapt to changing global environments.</p>	<p>Help client countries benefit from global public goods</p> <p>Help countries to address local, national, and regional environmental priorities in a manner that also results in global benefits</p> <p>Enhance countries' capacity to participate in global environmental conventions</p> <p>Enhance capacity in countries to reduce vulnerability to natural disasters and impacts of climate change.</p> <p>Help client countries to access markets for global public goods (e.g. trade in greenhouse gas emissions)</p>	<p>Build capacity among client country institutions to consider the regional and global dimensions of national sustainable development strategies</p> <p>Support the assessment of the vulnerability of client countries' agriculture, forest, water resources, coastal zones, and urban infrastructure to climate change as part of a broader poverty reduction strategy</p> <p>Support efforts by riparians and littoral communities to diagnose, analyze, and plan actions to address the degradation of shared ecosystems</p> <p>Support client capabilities to address Persistent Organic Pollutants (POPs) and other toxic pollutants</p> <p>Support client learning programs on understanding the implications and responsibilities under global environmental conventions</p>	<p>Help understand linkages between global public goods and national development strategies</p> <p>Mobilize external resources to help integrate global environmental concerns into sectoral strategies for forestry, water, energy and rural development</p> <p>Link local and global environmental issues to development and poverty reduction strategies</p> <p>Link conservation and sustainable use of biodiversity with NRM and poverty dialogue</p> <p>Mainstream energy efficiency, renewable energy, vulnerability–reduction, and climate adaptation activities in relevant sectors</p> <p>Facilitate the phaseout of the consumption and production of ODS and POPs through national programs and use of market-based instruments</p>	<p>Focus interventions on improving local environmental quality and management that also provide regional and global benefits</p> <p>Promote lending for biodiversity through NRM projects that address sustainable use of ecosystems and their services</p> <p>Support efforts to build capacity and invest in international waters, and pilot river basin approaches to water resources management</p> <p>Use GEF funds strategically to better blend with and catalyze Bank and other funding to help enhance the livelihood of the poor and reduce vulnerability</p> <p>Support clients' participation in and benefit from trade in environmental goods and services through the Prototype Carbon Fund and to better prepare for the CDM.</p>

Table 3 Strategy implementation and monitoring matrix

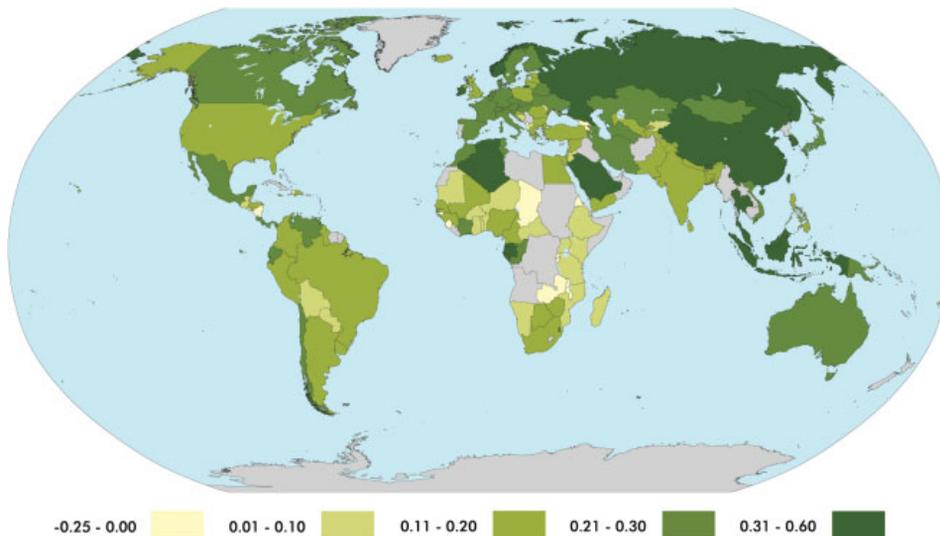
<i>Objectives</i>	<i>Medium-term target (5-year)</i>	<i>Fiscal 2002 target: Realignment with the Strategy</i>
<i>Strengthen analytical and advisory activities</i>		
Strengthen country-level environmental analysis and advisory activities to inform country dialogue	Complete about 5-15 country diagnostic studies annually in connection with CAS processes Improve environmental sustainability indicators and mainstream them into country indicators Refine methodologies and mainstream economic assessment into project analysis including the assessment of climate change impacts Develop and disseminate good practice case studies and guidance notes on environmental policy and regulatory issues Strengthen client training and capacity development activities in environmental management	Review good practice and refine methodology for preparing country diagnostic studies in coordination with client countries and development partners Prepare country diagnostic studies in connection with CASs preparation Prepare good practice and guidance notes for a number of key issues Develop and start implementing a client training and capacity development program
Strengthen analytical work on poverty-environment linkages and inputs to PRSPs	Provide analytical and capacity development support on demand to about 5-15 PRSP processes annually in addressing environmental sustainability Improve the understanding of poverty-health-vulnerability linkages and improve assessment methodologies in countries where household survey data are available Systematically share knowledge with decisionmakers in PRSP countries on poverty-environment issues and effective interventions to address them	Continue analytical work and development of methodology, including enhanced use of household survey data and develop a typology of country-environment links Develop training programs and a system to share knowledge with decisionmakers in PRSP countries on poverty-environment issues and effective interventions to address them Support upstream environmental analytical work in at least 5 countries preparing PRSPs Undertake an ex-post review of environmental aspects of PRSPs
Use Strategic Environmental Assessments (SEAs) more systematically to address environmental concerns early in sectoral decisionmaking and planning processes	Undertake a structured learning program on SEAs including the development and dissemination of good practice based on about 10-20 SEAs annually Use SEAs regularly as a tool for upstreaming environment into policy dialogue and improvement in the quality of sector operations Integrate the findings of Energy-Environment Reviews into project and program design	Develop and disseminate methodologies, procedures, and guidance for SEA application Commence a series of priority SEA studies Undertake Energy-Environment Reviews as part of implementing <i>Fuel for Thought</i>
<i>Improve project and program design</i>		
Mainstream environment into CASs	Achieve satisfactory coverage of environmental issues in CASs where environmental issues are strongly linked to country priorities	Establish a process for identifying priority CASs and supporting CAS preparation Undertake in collaboration with OPCS an assessment of environmental coverage in CASs
Improve the performance and development effectiveness of environment projects and programs	Achieve satisfactory or better QAG ratings for quality at entry and supervision for at least 90 percent of the environment portfolio Improve corporate environmental portfolio tracking, quality assessment, and enhancement system Reduce the number of environment projects at risk Review and improve the alignment of the environment portfolio with strategic priorities Review the development effectiveness of environment projects and programs	Maintain QAG quality at entry and supervision performance ratings for environmental projects and programs Establish a portfolio quality enhancement mechanism

Table 3 Strategy implementation and monitoring matrix (continued)

<i>Objectives</i>	<i>Medium-term target (5-year)</i>	<i>Fiscal 2002 target: Realignment with the Strategy</i>
Mainstream environment into sector programs and portfolios	<p>Increase the extent of measurable mainstreaming over current levels in selected sectors</p> <p>Improve the integration of GEF resources into project and program lending</p> <p>Review environmental activities in other sectors and their alignment with the Strategy</p> <p>Implement joint work-programs with other sectors and networks to address priority environmental objectives</p>	<p>Establish cross-sectoral work programs</p> <p>Establish scorecards and a mechanism for monitoring, review, and feedback on environment mainstreaming in key sectors</p>
<i>Improve the safeguard system</i>		
Strengthen the implementation of safeguard policies, including the use of a tracking system for safeguard compliance by policy	<p>Establish an integrated risk management framework</p> <p>Strengthen corporate consistency and oversight</p> <p>Integrate safeguard tracking and reports on safeguard policy compliance into project management system</p> <p>Adopt and use compliance indicators on a routine basis for the entire portfolio</p> <p>Establish and meet targets for safeguard performance during quality at entry and supervision in QAG reviews</p>	<p>Establish and implement an integrated safeguard system and operationalize the Integrated Safeguard Data Sheet (ISDS)</p> <p>Establish and operationalize a corporate safeguard compliance tracking and monitoring system</p> <p>Strengthen corporate oversight</p> <p>Achieve target ratings for the environmental aspects of quality at entry and supervision for the Bank's portfolio</p> <p>Review all projects at risk and take measures to reduce risk</p> <p>Establish systematic staff safeguard training program</p>
Review the current safeguard policies and evaluate their application to new lending instruments and changing approaches to development assistance	<p>Develop the medium-term workplan for reforming the safeguard system</p> <p>Address safeguard policy issues in a consistent manner by undertaking regular reviews to identify lessons</p>	<p>Develop a medium-term workplan for reforming the safeguards system</p> <p>Identify good practice and guidance for addressing safeguard policy issues in sector adjustment lending and new lending instruments such as CDD projects</p>
Work with clients and other development institutions to review and strengthen client safeguard capacity, and harmonize safeguard procedures	<p>Engage with at least 10 countries in discussions on in-depth EA capacity assessment and strengthening</p> <p>Implement a comprehensive client safeguard training plan</p>	<p>Agree on a methodology for client capacity assessment</p> <p>Engage with at least two countries in discussions on in-depth EA capacity assessment and strengthening</p> <p>Prepare and pilot a comprehensive client safeguard training plan</p>
<i>Support institutional realignment</i>		
Improve incentives for work on cross-sectoral activities and policy issues.	<p>Establish a comprehensive performance evaluation, incentive and reward system for cross-sectoral work</p>	<p>Give specific attention to cross-sectoral work in annual results agreements for all environmental staff</p> <p>Launch Green awards</p>

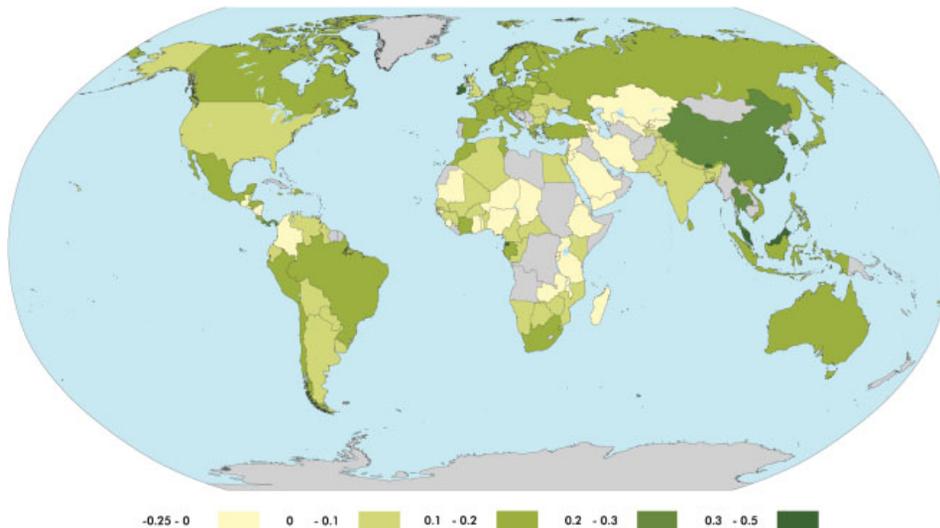
Achieve a shift in skill mix through training, strategic hiring and joint appointments	<p>Implement strategic human resource development</p> <p>Undertake targeted staff training on cross-sectoral issues</p> <p>Provide safeguard training to all managers of A and B rated projects and to others on demand</p> <p>Train 90 percent of all operational staff, including managers, in safeguards policies</p> <p>Provide environmental training for staff in other sectors on demand on development-environment issues</p>	<p>Define the needs in cross-sectoral skills and a plan for strategic human resource development</p> <p>Develop targeted pilot staff training programs for environmental mainstreaming in selected sectors</p> <p>Continue to refine safeguard policies training program and launch safeguard policy training for managers</p> <p>Provide training on demand</p>
Improve the funding mechanism for environmental activities in the Bank	<p>Operationalize the Mainstreaming Fund with regular reporting and feedback</p> <p>Undertake an evaluation of the Mainstreaming Fund to assess its effectiveness</p> <p>Align the use of trust funds with strategic priorities</p>	<p>Set up Mainstreaming Fund and develop procedures</p> <p>Review the use of trust funds and their alignment with the Strategy</p>
Leverage the role of institutional engagements and partnerships to support the implementation of the Strategy	<p>Realign partnerships with strategic objectives</p> <p>Improve governance, management, and reporting on partnerships</p>	<p>Update and evaluate the partnership portfolio</p> <p>Set guidelines for improving governance, management, and reporting on partnerships</p>
Undertake systematic monitoring and reporting on performance	<p>Establish and operationalize an environmental management system</p>	<p>Develop a systematic performance monitoring and reporting framework</p> <p>Establish a performance monitoring and reporting unit in ENV</p> <p>Start regular reporting on the implementation of the Strategy</p>

Map 1 Gross domestic savings (percentage of GDP)



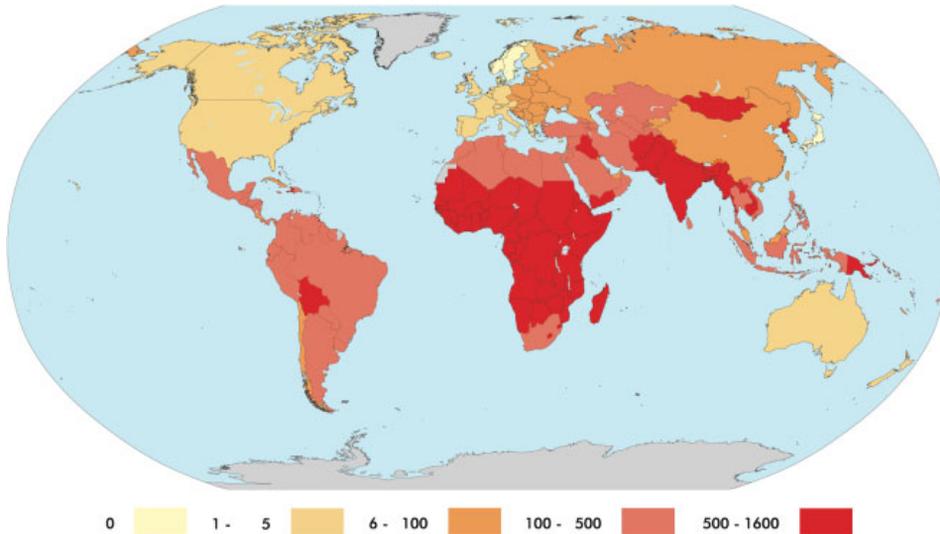
Note: Gross domestic savings are calculated as the difference between GDP and public and private consumption.
Sources: World Bank 2001; World Development Indicators 2001.

Map 2 Genuine savings (percentage of GDP)



Notes: Genuine domestic savings are indicators of economic and environmental sustainability. They measure the true rate of savings in an economy after taking into account the cost of depleting natural resources and the damage caused by pollution. They are calculated as the sum of gross domestic savings and investments in human capital less depreciation of produced assets and the depletion and degradation of the environment. By this measure, some countries (shown in yellow) appear to be unsustainable as their savings rates are less than the combined sum of conventional capital depreciation and natural resource depletion.
Sources: World Bank 2001; World Development Indicators 2001.

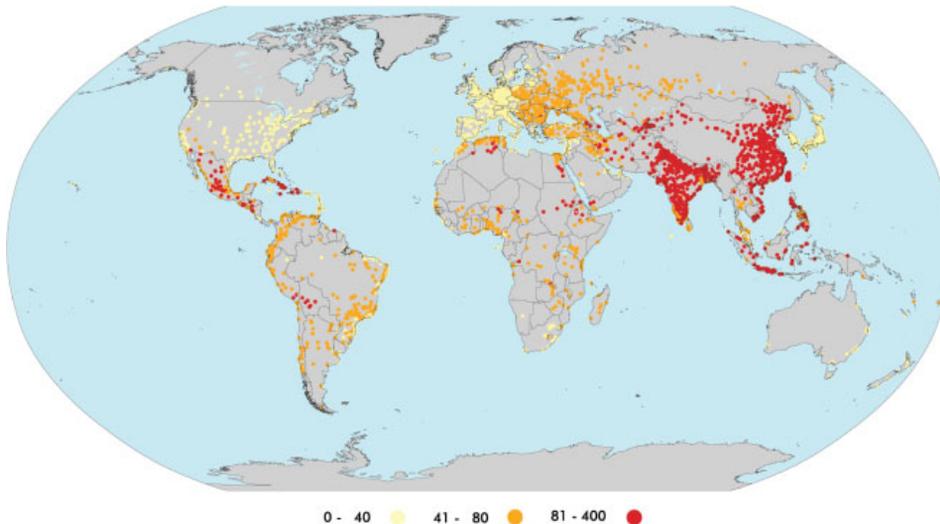
Map 3 Health burden associated with waterborne diseases (DALYs per 1,000 people)



Notes: The main causes of waterborne diseases are lack of access to safe water and sanitation and inadequate hygiene. DALYs (disability-adjusted life years) are a standard measure of the burden of disease. The concept combines life years lost due to premature death and fractions of years healthy life lost as a result of illness or disability. Years of life lost at each age are valued differently reflecting different social weights usually placed on illness and premature mortality at different ages.

Sources: Murray and Lopez 1996; World Bank estimates.

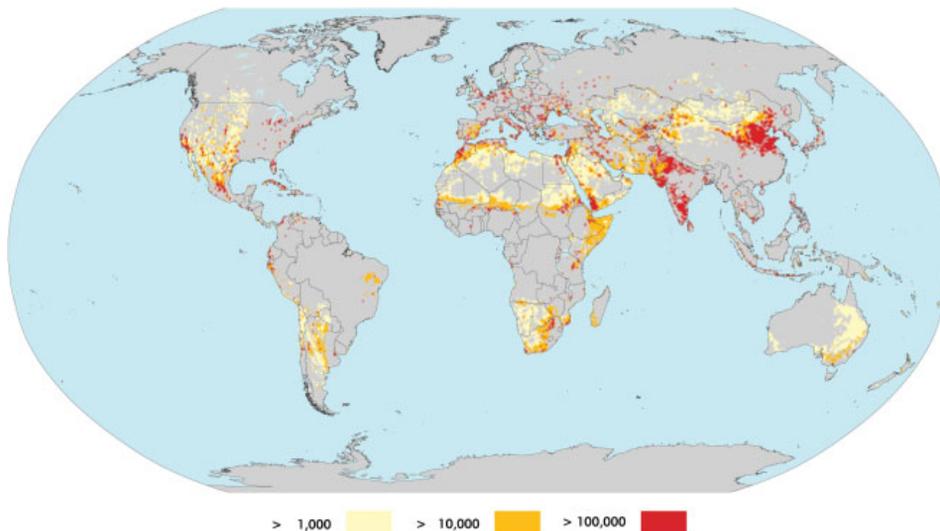
Map 4 Estimated ambient concentration of particulates (PM_{10}) in urban areas ($\mu g/m^3$)



Note: Most of the adverse health effects of exposure to air pollution are attributable to particulate matter smaller than 10 microns in diameter (PM_{10}).

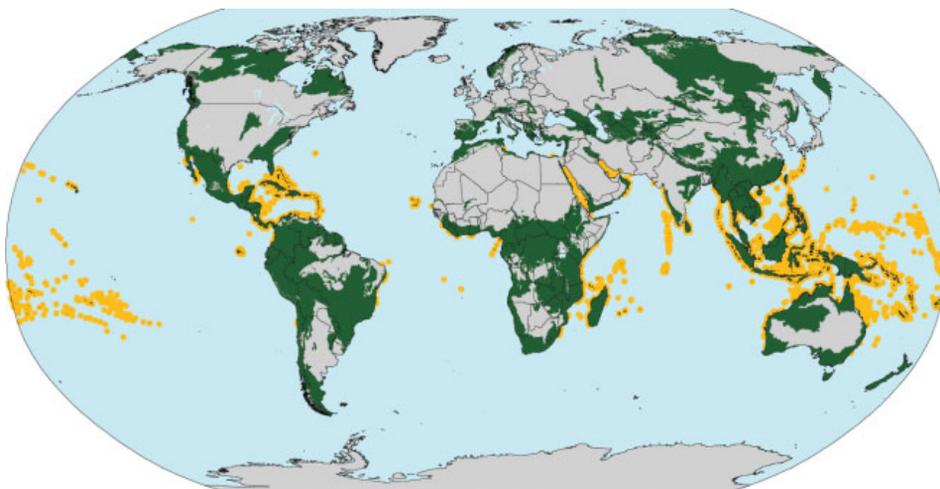
Sources: WDI 2001; World Bank estimates.

Map 5 Population in areas of relative water scarcity



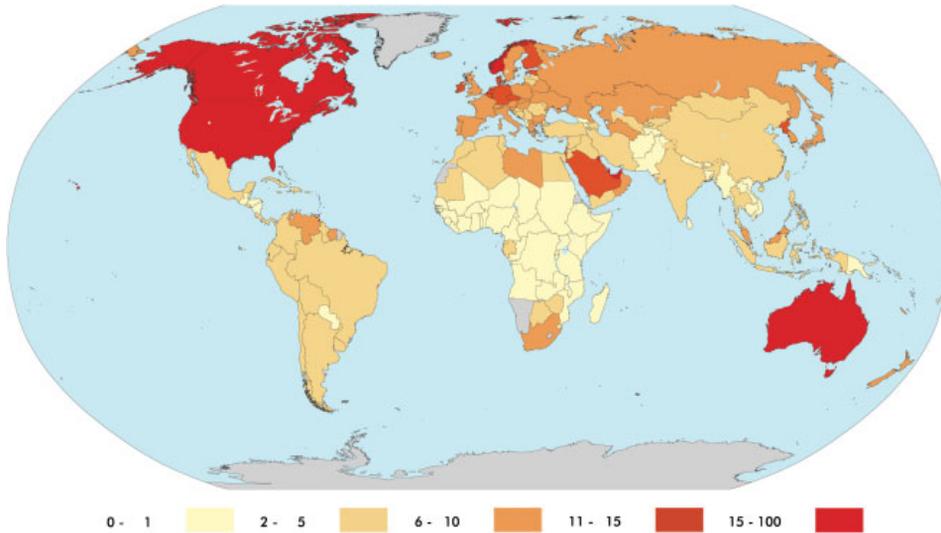
Notes: An area faces relative water scarcity if the mean annual demand for domestic, industrial and irrigated agricultural uses is greater than 40 percent of the mean annual surface and subsurface runoff for the area. The colors indicate the population in each area of relative water scarcity.
Source: Vorosmarty and others 2000.

Map 6 Areas of high biodiversity importance



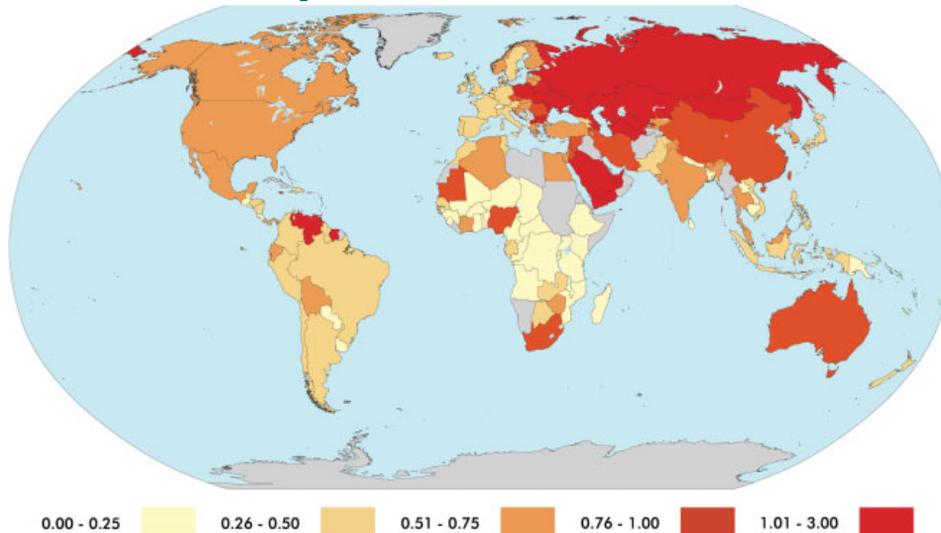
Notes: Areas in green have been identified either as "hotspots" by Conservation International, as "biologically-important ecoregions" by World Wildlife Fund, or "endemic bird areas" by Birdlife International. Areas in yellow contain "reefs at risk" as identified by World Resources Institute.
Sources: Bryant and others 1998; Mittmeier and others 2000; Olson and others 2000; Stattersfield and others 1998.

Map 7 Per capita CO₂ emissions (metric tons)



Notes: CO₂ accounts for the largest share of greenhouse gases, which are associated with global warming. Variations in per capita emissions across countries reflect differences in the level of economic activity, energy efficiency, and pollution intensity.
Sources: World Bank 2001; World Development Indicators 2001.

Map 8 CO₂ emissions per PPP-adjusted GDP (kg)



Notes: PPP-adjusted GDP is GDP converted to international dollars using purchasing power parity rates. An international dollar has the same purchasing power over GDP as the U.S. dollar has in the United States. Variations in emissions per PPP-adjusted GDP across countries reflect differences in energy efficiency and pollution intensity.
Sources: World Bank 2001; World Development Indicators 2001.

CONTRIBUTORS

The preparation of the Environment Strategy was overseen by the Environment Board, chaired by Environment Director Kristalina Georgieva, and co-chaired by Robert Watson, Chief Scientist and Director of the Environmentally and Socially Sustainable Development Network (ESSD). Kristalina Georgieva guided the Strategy preparation process.

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General guidance was provided by the Operations Policy Committee, which is chaired by Shengman Zhang, and the ESSD Council, which is chaired by ESSD Vice President Ian Johnson. The preparation of the six Regional Environment Strategies was overseen by Regional Sector Directors and Managers: Richard Ackermann (South Asia), Hans Binswanger and Roger Sullivan (Africa), Kevin Cleaver and Jane Holt (Europe and Central Asia), Zafer Ecevit (East Asia and Pacific), Doris Koehn and Salah Dargouth (Middle East and North Africa), and John Redwood and Teresa Serra (Latin America and the Caribbean).

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