

Environment and Natural Resources

Annual Report 2003



Special focus: WATER

INTER-AMERICAN DEVELOPMENT BANK

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What's New at the IDB

on the Environment?



The most significant development on the environment within the Inter-American Development Bank (IDB) in 2003 was the adoption of the new Environment Strategy in June. Six months in the making, this new strategy is a natural outgrowth of the international community's focus on poverty and the environment at the World Summit on Sustainable Development in September 2002. It is based on the recognition that environmental quality and the natural resource base constitute the natural capital that sustains economic growth and competitiveness in the long run and that helps reduce poverty and improve social well-being. Hence it applies to all Bank financing, not just projects traditionally thought of as "environmental."

The strategy has the fundamental objective of making the Bank more effective in the support it offers countries on environmental issues. It establishes cross-cutting links to all sectors through a focus on governance and on the policy and incentive frameworks that affect natural resources and environmental management. Thus it seeks to insert the environmental dimension into broad development objectives in a balanced and harmonized way across sectors.

Within this overarching context, the Environment Strategy will:

- set an overall framework for Bank action that is in tune with new policy frameworks, challenges, and opportunities;
- put into operation the principles of the Bank's Institutional Strategy and fully internalize environmental sustainability as an underlying goal; and

- identify guiding principles and priority actions to make IDB work and procedures more effective.

The Bank has identified two fundamental areas that on a cross-cutting basis will help address the main causes of environmental problems in this region:

- environmental governance and
- enhanced policy integration and development of an appropriate incentive framework.

Environmental governance, in the broadest sense of the term, is the process that links and harmonizes policies, institutions, procedures, tools, and information to allow a wide array of stakeholders—the public and private sectors, NGOs, local communities—to make decisions, manage conflicts, seek points of consensus, and be accountable for their actions. It is based on clear public and private responsibilities, respect for and compliance with laws, and local empowerment.

Enhanced policy integration and the development of an appropriate incentive

framework for environmental management places environmental actions at the center of all spheres of policy decision making, particularly those that are critical for





advancing the agenda on the four priority areas of the Bank's Institutional Strategy: modernization of the state, competitiveness, social development, and economic integration.

Direct links are established between the Environment Strategy and the Institutional Strategy's two overarching objectives of reducing poverty and promoting social equity and sustainable economic growth. The environmental dimension's contribution to these two goals will be brought into the Bank's four priority areas as follows:

Environmental governance and modernization of the state:

Bank programs will seek to develop and consolidate a framework for environmental management that is transparent and participatory and that leads to the establishment of the right priorities for environmental quality and the sustainable management of natural capital. Key areas of focus are:

- strengthening institutions and civil society participation,
- strengthening regulatory frameworks, and
- developing effective sets of environmental management instruments.

Environment and competitiveness:

Bank programs will work to preserve and improve the quality and size of the natural resource base, given that natural capital must complement human development as well as financial and physical capital in order to achieve competitiveness and sustainable economic growth goals. Key areas of focus are:

- enhancing the productive value of nat-

ural resources and their environmental functions and services,

- facilitating investments and market development and promoting private-sector participation in environment-related activities, and
- tapping global and regional environmental markets.

Environment and social development:

Bank programs will seek to help reduce poverty and improve the overall quality of life, recognizing that investments in environmental improvements as well as natural resources are the source of jobs, sustainable incomes, and better living conditions. Key areas of focus are:

- health and environment,
- rural development and natural resources,
- cultural and traditional uses of natural resources in indigenous communities, and
- physical vulnerability to natural disasters and environmental risks.

Environment and economic integration:

Bank programs will promote regional economic integration under the framework of regional environmental management, for Latin America and the Caribbean need to be well positioned in the global economy and able to capitalize on opportunities offered by trade and the opening of markets. Key areas of focus are:

- regional environmental institutions and regulatory frameworks,
- management of regional environmental public goods and services, and
- the environmental quality of regional infrastructure initiatives.



In setting priorities for Bank support in a particular country, specific consideration is also given to the Millennium Development Goals (MDGs) adopted by 189 members of the United Nations General Assembly in the 2000 Millennium Declaration. Within each country strategy, the Bank will consider how to help governments fulfill their commitments on the three targets in the MDG on environmental conditions:

- reversing the loss, waste, and degradation of natural resources;
- improving access to sources of safe and clean water; and
- improving living conditions in marginal areas.

Implementation of the Environment Strategy involves different actions in various phases of Bank activity. In the programming phase, for instance, a country environmental analysis will be incorporated in the early stages of a country strategy. During the design of operations, studies on best practices will be prepared, along with guidelines for

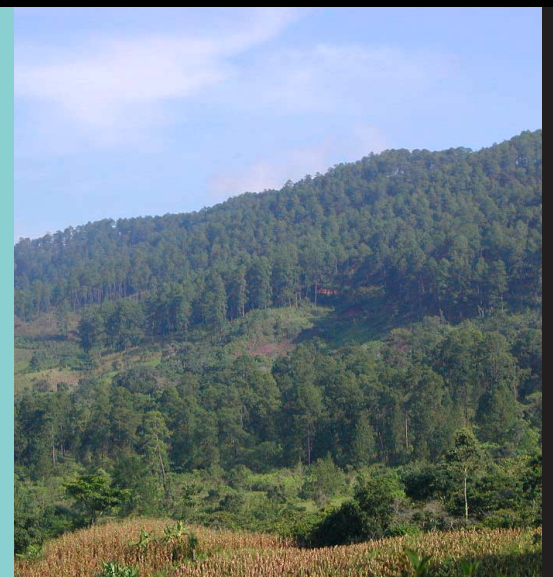
strategic environmental assessments (SEAs) related to large infrastructure projects and sector reforms. At the execution and monitoring phase, baseline and performance indicators on the environment will be developed. And the ability to supervise and monitor performance and environmental impact indicators will be strengthened in the country offices.

As priority actions are being implemented, the Environment Strategy as a whole will be monitored and evaluated. Three indicators of success will be used: product indicators, such as the number of loans or technical assistance grants provided; results indicators, such as the degree to which countries have established and enforced environmental regulations; and impact indicators, such as the contribution of projects to the alleviation of poverty or improvement of conditions for economic growth.

A copy of the Environment Strategy can be found at www.iadb.org/sds/doc/sds%2DEnvironment%2DStrategy.pdf.

Selected Indicators of Environmental Problems in Latin America and the Caribbean

- During the 1990s, the region lost some 4.7 million hectares of forest a year. The greatest losses were in Brazil, but the highest annual rates of loss were found in Nicaragua and El Salvador.
- The transportation sector is mainly responsible for the rapid deterioration in air quality experienced in large cities in the region. More than 100 million people are exposed to levels of urban air pollution that exceed WHO recommended levels.
- Acute respiratory infections are the third leading cause of death in Latin America. More than half of these deaths occur in children under the age of five.
- About 15% of people lack access to a safe water supply, although in rural areas the figure can reach 30%. Fewer than half the people are connected to conventional sewage lines, and a third rely on latrines and septic tanks for waste disposal.



Environmental Operations

and Activities in 2003



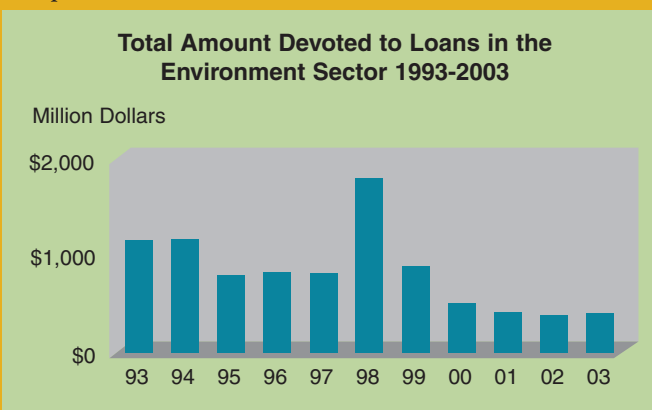
Environmental lending in 2003 remained about the same as during the previous two years—\$402 million (see Graph 1). But this figure must be seen within the context of overall Bank lending, which reached \$6.8 billion. (For the tenth consecutive year, IDB was the largest source

of multilateral financing for the region.) Environmental activities declined as a percentage of total IDB loans from 8.2% to 5.9% (see Graph 2).

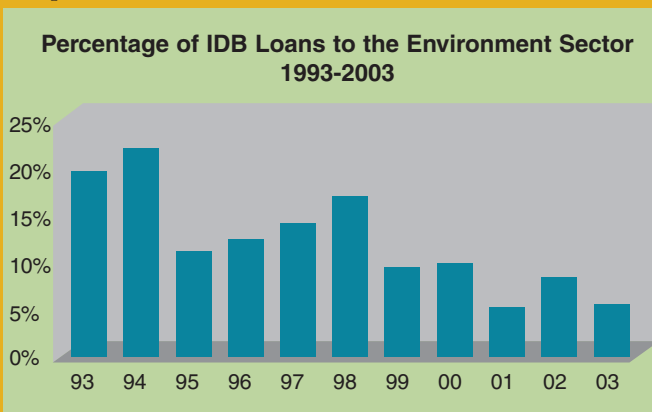
There were, however, two positive signs of a new momentum in the level of activity in the years ahead. First, a high volume of environmental technical cooperation (TC) grants was approved in 2003—\$19.2 million, an increase of 10% over the preceding year (see Graph 3). Much of this funding facilitates the preparation of loans and will most likely boost environmental lending in the next few years.

Second, some \$2.1 billion in environmental loans are in the pipeline—under preparation and scheduled for approval in 2004 and 2005—which shows the high level of need in the region as well as the strong level of effort by the Bank to provide assistance. Large water and sanitation projects account for over 80% of the total value of loans under preparation, indicating the region's priorities in the water sector (see the *Special Focus: Water* section).

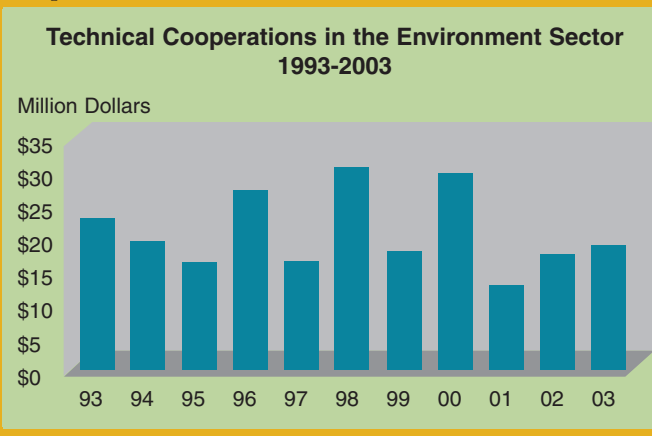
Graph 1



Graph 2



Graph 3



NEW ENVIRONMENTAL OPERATIONS

In 2003, the Bank approved 11 environmental loans for a total of just under \$402.4 million. (This does not include agricultural loans, which accounted for a further \$62.8 million.) These loans fall into four main categories (see Graph 4):

- water and sanitation (\$157 million, 39%);
- sustainable natural resource management (\$114 million, 28%);
- urban environmental management projects (\$100 million, 25%); and
- land management and regularization (\$31 million, 8%).

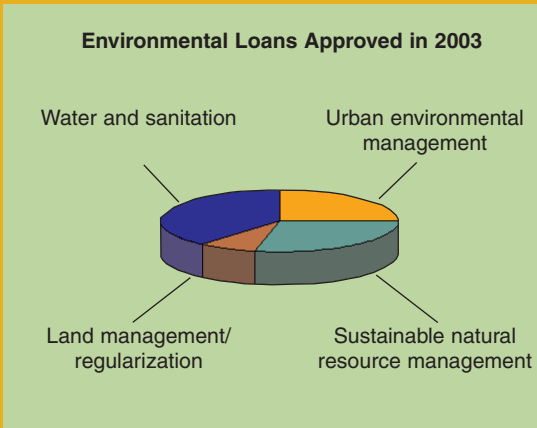
During 2003, 59 grants for environmental technical cooperation were approved, for a total of \$19.2 million. (This does not include TCs for agriculture, which accounted for a further \$5.4 million.) They were given in the following areas (see Graph 5):

- sustainable natural resource management (\$6.10 million, 32%);
- energy efficiency and clean production (\$5.65 million, 29%);
- water and sanitation (\$2.86 million, 15%);
- urban environmental management (\$2.13 million, 11%);
- strategic environmental frameworks and assessments (\$1.93 million, 10%); and
- environmental risk management and vulnerability reduction (\$587,000, 3%).

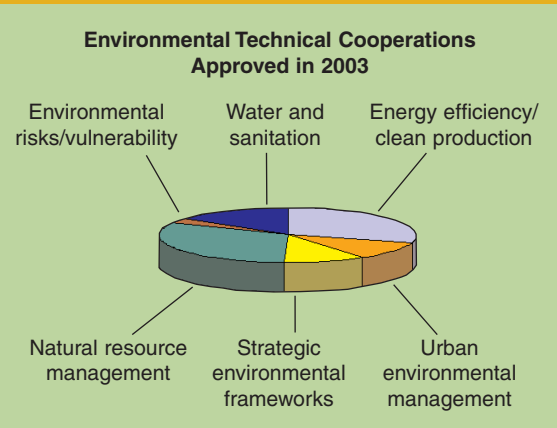
A complete listing of loans and TCs is available at www.iadb.org/eis.

This section describes the activities in most of these areas, including some profiles of specific projects. As water and sanitation are the subject of the *Special Focus: Water* section in this year's Annual Report, only a brief summary of activity in that sector is presented here.

Graph 4



Graph 5





Reducing the Gaps in Water and Sanitation Services

During 2003, the Bank approved three loans in this sector in Brazil, Chile, and Guatemala, for a total of \$157 million. This is the largest single category of environmental loans. The investments are geared toward increasing the availability of drinking water and sanitation in urban and rural areas. The Bank also approved 13 technical cooperation operations in Bolivia, Brazil, Costa Rica, El Salvador, Honduras, Mexico, and Peru, totaling nearly \$2.9 million. Most of the technical cooperation activities are devoted to preparing operations for the next two years and strengthening institutional, legal, and regulatory frameworks.

Protecting the Natural Resource Base to Ensure Economic Prosperity

Protecting the natural resources that support social and economic development has been a constant element of IDB's environmental agenda. Throughout the years the Bank has been involved with numerous activities that rely on economic drivers—forestry and fisheries, industry, tourism, and so on—to achieve regional development objectives and environmental sustainability. The underlying goal in all cases is the enhancement of development potential and the reduction of economic, environmental, and physical vulnerability. In 2003, the Bank approved operations in several areas involving terrestrial and marine ecosystems. New loans were

signed for \$114 million, and close to \$6.1 million was approved for TCs.

In the area of sustainable tourism, the Bank approved two loans, for a total of \$44.6 million—one in Salta, Argentina, on integrated development tourism and another in Chiloe and Palena, Chile, on community-based tourism. These linked the natural resource base to cultural heritage and community development. And more than \$3.4 million was approved for tourism operations in four technical cooperations. Most of that—\$3 million from the Multilateral Investment Fund (MIF)—went to a regional TC to help establish an accreditation and certification system for tourism providers to improve their competitiveness and access to new markets. Three grants also went toward sustainable tourism in Nicaragua, Belize, and the Andean region. In the latter, the project focuses on promoting environmental assets and archeological and cultural heritage along the Ruta Inca, which extends over five countries in South America.

Another area receiving support was forest management, forest protection, and biodiversity. New lending activities in this area were limited to an operation in Central America, a region under tremendous land pressures and with some of the highest deforestation rates in the world. The new operation in Honduras (see Box 1) responds to a need to enhance the productivity and conservation value of a vast expanse of land suitable for forest development. A number of small TCs were also approved to support sustainable forest management efforts in



Honduras. In addition, a regional TC was launched to analyze the direct investment opportunities in sustainable forest-based businesses in the region.

The Bank continues its efforts to support coastal management programs, building on the programs designed and executed in earlier years. In Central America, the Bank approved a new TC in 2003 in Panama to support the development of a national program to manage its marine coastline.

The protection of water resources remains one of the highest priorities for Bank interventions in the region. By the late 1990s, there was a decided shift away from centralized management of sector-oriented water resource development projects and toward water

resources management based on the river basin and the management of watersheds. Thus, as noted in the *Special Focus: Water* section, watershed management and protection have become a cornerstone of the Bank's portfolio, with more than 25 projects approved since 1989 and a large number of new operations being prepared. The main focus of these new investments is to protect the natural resource base while improving the livelihoods of local people. To ensure the activities are sustainable, a large involvement of the community is being sought during the design and implementation stages.

Incorporating environmental management in industrial modernization programs has been another important focus

Box 1. Increasing the Economic, Social, and Environmental Benefits of the Forestry Sector

In Honduras, forestry contributes significantly to the national income, reaching a peak of 10% of GDP late in the 1990s. Yet its potential is constrained by several factors, including uncertainty of land tenure and a legal and institutional framework that has not responded to the sector's needs. More than three-fourths of the land in Honduras is classified as public land, largely occupied by individuals or communities who do not have formal deeds. This prevents people from maintaining control over forest resources, from making investments to protect them or to boost productivity, and from entering into contractual commitments. In fact, it encourages them to cut and sell trees illegally, leading in some regions to civil disorder problems.

Under a \$17.5-million, 40-year loan to Honduras approved in late 2003, the Pro-Bosque multiphase program will attack some of the constraints on commercial forestry and will promote best practices in forest management, with an initial focus on 625,000 hectares in four priority areas—three pine-growing regions and a broadleaf forest region. The program will make use of existing coalitions of municipalities or other local or regional institutions to carry out its activities. Among other things, it will finance land tenure regularization, put forward a proposal to strengthen monitoring and control of illegal logging, and support the reorganization of the National Forestry Administration to help it as a regulating agency.

Through strengthening the productivity of the forest sector and the sustainability of local industry that is based on it, the Pro-Bosque program will have measurable benefits for small and medium-sized forestry companies, producers' associations, local governments, and rural families living in poverty in forest zones. It is expected to create new opportunities for family groups, communities, and associations to develop microenterprises and to establish links to the market through integration. And by helping to prevent illegal logging, the program will reduce deforestation and improve the conditions in watersheds.



for the Bank. Increasing the competitiveness of a sector requires new institutional designs and a strong environmental regulatory framework. This approach has been adopted in a newly approved program on modernization of production in the province of Río Negro in Argentina, where a component to strengthen the Ecology and Environment Council was introduced. This is bringing reform to the agency, new procedures to administer the provincial environmental management fund, new environmental management techniques, improvements in the environmental impact assessment (EIA) methodology and in the evaluation and monitoring system, and a new model for managing protected natural areas.

The Bank continues to support the inclusion of natural resource conservation actions in regional integration programs. Several new technical cooperations were approved this year. One engages the Andean countries in the formulation of a biodiversity strategy for their region. On trade and environment, two technical cooperation grants were approved to improve institutional capacities of national and regional environmental agencies and their responses to trade-environment linkages and the challenges posed by this new agenda. One operation strengthens the Environment and Natural Resources Ministry (MARENA) in Nicaragua, helping the government address emerging environmental opportunities and constraints related to trade and providing technical support for analysis of trade agreements within the CAFTA framework. The other

operation focuses on Central American environmental challenges related to the economic integration and free trade agreements as part of the Central American Sustainable Development Initiative (IMDS). This is linked to the Plan Puebla-Panama (PPP) supported by the Bank.

The PPP initiative has been adopted by Mexico and all the Central American countries as a mainstreamed programmatic framework to ensure that all projects, programs, and initiatives incorporate adequate environmental management and promote the conservation and sustainable management of natural resources. The IMDS will:

- help put in place the conditions for regional sustainable development;
- promote the conservation and sustainable use of natural resources in order to enhance their economic value;
- protect the wealth of biodiversity;
- guarantee participatory management mechanisms, particularly involving local and indigenous communities;
- promote sustainable development in other PPP initiatives; and
- harmonize different environmental management regulations.

A milestone of the IMDS is the Memorandum of Understanding signed by the Ministers of Environment of the Mesoamerican region and the PPP Commissioners on June 2, 2003, in which the Bank played a key facilitating role. By signing this Memorandum, the PPP Executive Commission, the Ministers of the Central American Environment and Development Commission, and



SEMARNAT of Mexico assume responsibility for carrying forward the IMDS and ensuring that these regional priorities are properly followed in their respective countries, taking into account their different financial capacities. The IMDS adopts the concept of sustainable development as expressed in the Central American Alliance for Sustainable Development. The initiative is linked to key environmental management programs in Central America, such as the Regional Program of Environmental Management Systems, and is actively promoting the application of strategic environmental assessments in order to estimate reinforcing, transboundary, and regional impacts of PPP initiatives.

Increasing Competitiveness Through Energy Efficiency, Clean Production, and Corporate Responsibility

During 2003, the Bank approved \$5.65 million in TCs to strengthen competitiveness in Latin America and the Caribbean through improved economic and environmental industrial performance, the adoption of corporate social responsibility (CSR) in business, and the enhancement of local and global environmental benefits.

With MIF funding, the Bank provided targeted assistance for cleaner production and environmental management projects in Costa Rica (see Box 2), Mexico, and Nicaragua, using pollution

Box 2. Making Environmental Management Systems More Accessible to Small Businesses

Small companies are often hard pressed to remain competitive if they try to meet all the standards for environmental management specified in ISO 14001 from the International Organization for Standardization. Several countries in the region have developed a simplified ISO 14001 standard that is adapted to small and medium-sized enterprises (SMEs).

In Costa Rica, under a TC for \$461,000 approved in 2003, the National Center for Cleaner Production, the Ministry of Environment and Energy, and the Costa Rican Chamber of Industry are working to bring environmental management systems to SMEs. (About 70% of the Chamber's members are SMEs.) The cooperation between the regulator and the regulated is one important innovation of this project.

Another significant aspect is that the project will deal with entire production chains rather than a specific industry or company. Ten SMEs with verified client-provider links will be included in each of three production sectors: agricultural product processes, food products, and services. These 30 companies will receive technical assistance from consultants hired for each sector, and by the end of three years they will have developed three manuals on cleaner production. Accomplishing this will involve at least 16 workshops on such topics as water recycling, environmental standards for effluents, and voluntary cleaner production agreements. A project Web site will help raise awareness on the issues and disseminate results as they emerge.

The benefits expected from the project—beyond the training and assistance given to 30 companies, 30 environmental managers, and at least 60 SME employees—include an improved regulatory framework that will help strengthen Costa Rica's National Development Plan within a framework of sustainability. In addition, the private sector will have clear rules that it helped develop, which in turn will let companies plan their investments with more confidence. The cleaner production systems to be introduced are expected to yield on average a 10% reduction in waste, emissions, and effluents, along with savings in energy and materials use.



prevention and other similar concepts as tools to reduce industrial inputs. This has the dual benefit of improving the bottom lines of companies while minimizing industry's environmental impact. Environmental performance is becoming key to many industries across the region, including the small and medium-size companies that are expanding and reaching new markets and consumers nationally and regionally as a result of recent trade negotiations. Many of these projects involve innovations that will have a positive impact on the future development of industry and its relation to the social and natural environment of the region.

Corporate social responsibility is a business approach that views respect for ethics, people, communities, and the environment as an integral corporate strategy to add value to a firm. Its positive impact is twofold: it contributes to increased business competitiveness and it helps alleviate social and environmental problems. This approach has received increasing support in the Bank. While CSR is still at a somewhat early stage in this region, the pressure on companies to incorporate such concepts is growing rapidly, in part in response to the Global Compact project launched by U.N. Secretary-General Kofi Annan in 1999. The Bank approved two CSR-related projects in 2003 with MIF funding: one focuses on promoting the concept of CSR throughout the region and another aims to implement CSR measures among small and medium-sized enterprises in Chile (as described later in this report).

The Bank also set in motion during 2003 a new program of technical cooperation activities designed to strengthen connections between greenhouse gas (GHG) mitigation and increased development in the region. An ongoing regional assessment will highlight opportunities to reduce GHGs while increasing energy efficiency, lowering costs, and providing other social benefits. One example of such opportunities involves public transportation, where institutional approaches and transport infrastructure are changing in major cities. Improved management of methane emissions from landfills, increased storage of carbon dioxide in expanded forests, and expanded use of renewable energy are other examples under consideration. Some of these possibilities for cost-effective GHG mitigation may also create new opportunities for participation in the emerging international market for GHG mitigation credits.

The Bank's recently redrafted Energy Policy (to be finalized in early 2004) puts great emphasis on creating enabling conditions for clean energy development as well as on environmental safeguards for conventional energy development. The new policy should provide further support for cost-effective expansion of clean energy options.

Supporting Urban Environmental Management Capacities to Improve Community Livelihoods

A predominant feature underlying this area of intervention is the promotion of shared responsibility initiatives in which



local governments, communities, and the private sector are active in the design and execution of environmental projects. The target areas are urban centers with a high concentration of economic activity, high demands for infrastructure and services, and increasing levels of environmental deterioration. Included as targets are large metropolitan areas as well as medium-sized cities. Also important are the promotion of an adequate package of economic, financial, and technical incentives to attain long-term sustainability of cities and to strengthen municipalities' institutional

capacities.

The Bank approved this year a large loan operation (over \$100 million) in Brazil (see Box 3), targeted on São Paulo's city center. This program addresses a range of environmental issues affecting central city living—from better air quality through improved public and private transport systems to intensive programs to improve environmental services and open spaces.

The TCs approved in 2003 in this area exceeded \$2.1 million—10 operations in seven countries. A number of TCs (in Belize and Ecuador) focus on national

Box 3. Helping Restore a Downtown Urban Area

Environmental quality in the central part of São Paulo, Brazil, has deteriorated seriously under the pressure of people, industry, and commerce. Air quality is poor due to emissions from more than 600,000 private vehicles that carry a million people into the downtown area—and home again—every day. An old drainage system cannot keep up with increases in rainwater runoff that are in part due to the paving over of more land. Street vendors produce excessive amounts of trash, and their stalls block street sweepers who try to deal with it. Overall maintenance suffers from poor management and planning as well as a lack of qualified staff.

In response to these and other concerns, the PROCENTRO project was established, aided by an IDB loan of just over \$100 million. The Bank has not previously financed an integrated urban renewal program of this kind, but its components are familiar ones. In addition to supporting institutional strengthening of the municipality, the program will finance several components in the city's strategy to improve its efficiency and the quality of life of those who live and work downtown. Plans to restore the urban environment include upgrading public spaces, repairing dilapidated monuments and buildings, building storm drains and flood detention ponds, and improving solid waste management. PROCENTRO will also focus on improving urban transport and circulation through, for example, reducing the number of buses driving around in the center city and building the infrastructure for better radial public transport lines. And the government will be doing more than just asking people to return to the old city—it will be doing so itself. Municipal agencies will be relocated downtown, with PROCENTRO's support in financing building rehabilitation and the purchase and installation of equipment.

PROCENTRO's approach is also noteworthy in that its priorities are the outcome of a multistakeholder dialogue. The municipal government held a series of consultations with residents and users of the city core and identified their primary concerns about the downtown area and their main recommendations for projects. The result, it is hoped, will be a center city with an environmental quality that people can live with.





support to local entities in the area of solid waste management. The collection and disposal of solid waste is a critical problem in countries such as Ecuador, where only 56% of city dwellers have access to waste removal services and only 26% of the waste collected is disposed of in sanitary landfills. The Bank has approved a TC granting funds to the national government for the development of an integrated waste management plan for medium-sized and small urban municipalities. Other operations approved this year are packaged as a set of urban environmental management activities to support local planning and management initiatives in key urban centers (San Salvador, Managua, and La Paz), thus covering a larger set of issues and interrelations in the urban setting, including land, infrastructure, and environmental quality issues.

Building Environmental Strategic Frameworks for Long-term Sustainable Development

The Bank continues to support governments in activities related to strengthening the capacities of environmental agencies, developing environmental legislation, applying a range of management instruments, and introducing environmental monitoring and supervision. In 2003, three distinctive TCs were approved in the area of strategic environmental management, representing three important niches of activity: support to national environmental strategies, with innovative approaches to

make the support given to ministries more effective; strategic environmental frameworks and action plans at a sub-national level, which is widely recognized as weak and highly ineffective in the region; and strategic environmental assessments for large infrastructure projects, an area increasingly critical and highly visible in national and regional integration agendas.

At the national level, the Bank approved a TC on the development of a National Environmental Strategy for Costa Rica that involves a highly participatory process to identify priorities and sustainability criteria; to define strategic lines of activity; to propose the right institutional arrangements, management instruments, and performance indicators; and to forge agreements on an Action Plan. The strategy then establishes a "re-engineering scheme" for the environment ministry, including the redefinition of its functions, the creation of a strategic environmental unit, the adoption of an SEA methodology, and the design of a decision-support information management system to improve monitoring and evaluation. A final step in this TC is the development of an Action Plan to put the new ministerial programs into operation and to guide the national environmental agenda.

In support of new sub-national environmental management approaches, the Bank approved a TC on local environmental governance funded by the IDB-Netherlands Partnership Program in Environment. This regional operation establishes a strategic framework for



urban local environmental management, with special emphasis on Central America, and provides targeted support to five municipalities—Juiz de Fora in Brazil, Estelí in Nicaragua, San Pedro Sula in Honduras, and Esmeraldas and Quito in Ecuador. The interventions include strategic frameworks, action plans, and the design of management instruments that will respond to each municipality's needs. Critical to this effort is the adoption of multistakeholder participatory planning and a strong commitment from local authorities.

Finally, at the project level, the Bank is supporting strategic environmental assessments for linear or corridor projects, such as Bolivia's Northern Corridor (see Box 4). Because of their size, complexity, and social and environmental

sensibility, these projects require SEAs to ensure their long-term sustainability. An SEA involves consultations with many stakeholders and is used as an anticipatory tool to both prevent the negative impacts and enhance the positive aspects of large programs.

Reducing Disaster Risk and Improving Land Tenure Security Among the Poor

Since 1990, IDB has provided financial assistance to Latin America and the Caribbean for recovery and reconstruction efforts in the aftermath of natural disasters. In order to improve the immediate response of the Bank to future emergencies, and especially to set up essential basic services (electricity, water and sanitation, housing, and transport),

Box 4. Looking Ahead at the Broad Impacts of a Proposed Highway

Regional highways can bring economic development to a region, but at the same time they can have significant environmental impacts. Thus a highway cannot be thought of as having an effect only locally—the area-wide impacts must be considered before construction work begins.

In Bolivia, the government plans to upgrade and complete the Victor Paz Estenssoro Highway in its Northern Corridor. This road will eventually link Brazil's Mato Grosso and Peru with Argentina. A TC for \$1 million was approved in early 2003 to develop both an SEA for the whole 1,300 kilometers of the Northern Corridor and a detailed environmental impact evaluation for a new stretch of road from Santa Bárbara to Bellavista that will soon be in the pipeline of IDB projects for Bolivia. The project aims to collect background and first-hand information on the area, consider potential social and environmental impacts in the direct impact area and the indirect influence area, identify socio-environmental management programs needed prior to construction, discover sensitive areas that are more prone to damage, and propose alternatives to minimize impacts, such as rerouting of the highway, natural reserve status for sensitive and ecologically important areas, and technological training.

A project this complex and wide-ranging requires a broad knowledge of the area and its communities, the ability to communicate effectively with everyone in the region and with different interest groups, an understanding of the ecological interrelationships of diverse and complex ecosystems, and a knowledge of local authorities. Pulling all this together under the umbrella of an SEA provides a fuller and more useful picture of the impact of what might at first glance seem like a straightforward task: building a highway.



in May 2003 the Board of Directors approved the Immediate Response Facility. An earlier version of the facility was used to finance eight emergency projects since 1999.

Fortunately, no major disasters—hurricanes, earthquakes, or floods and mudslides caused by El Niño and other events—hit the region in 2003. Yet several countries had to deal with medium-impact events. Several TCs were approved for emergency assistance in Bolivia, for example, in the aftermath of heavy rains that affected transport infrastructure and local communities.

Countries are also interested in receiving support for financial protection and for prevention and mitigation investments. In El Salvador, a TC supported the development of a financial risk management strategy linking several national institutions to improve the country's planning and response to catastrophes.

In 2003, an earlier TC on disaster prevention and risk management in municipalities in Central America was awarded honorable mention as a most distinguished team in the Bank. It involved the identification of best practices, the design and production of an information kit (audiovisual and printed), intensive training for municipal authorities (more than 500 city mayors in Central America and their technical staff), and a massive media campaign through television, radio, and newspapers that reached hundreds of communities and millions of people. The program also managed to increase use of the tools by Central American entities, such as associations

of municipalities and disaster prevention organizations, ensuring proper dissemination of a tool kit and a message on the importance of prevention.

Last year was also the second year of a Natural Disaster Action Plan, which includes a set of institutional, technical, and financial programs to reduce vulnerability, including the adoption of disaster prevention and mitigation systems.

One of the key factors affecting vulnerability among the poor is security of land tenure, with clear repercussions on natural resource management and appropriation. Land security usually has a range of positive economic, social, and environmental impacts, including greater access for producers to credit and land markets, a higher level of investments in natural resource conservation programs, and access to incentives given for resource conservation and protection activities upon proof of regularization procedures or property titles. The Bank continues to support land regularization programs as a way to facilitate and guarantee investment opportunities in productive sectors, as in a newly approved \$22-million land regularization loan in Bolivia. This loan is supplemented by funds from a TC approved in 2003 for the elaboration of provincial plans to address land titling and sanitation programs simultaneously, thus linking the country's efforts in land regularization to provision of services to local communities.



WORKING WITH THE PRIVATE SECTOR

IDB recognizes the importance of working in partnership with commercial banks, institutional investors, and other co-lenders to mobilize private finance for infrastructure and capital market development. The Private Sector Department (PRI) was established in 1995 to accomplish this. Its Environmental and Social Unit reviews and assesses the viability of proposed projects for PRI financing and supervises the environmental and social aspects of PRI projects. PRI does not just help companies address and manage environmental, social, and health and safety aspects properly. Its participation yields significant additional benefits for the borrower or sponsor and for other financial investors in the project. And it improves protection of environmental and social resources.

IDB's participation also results in improvements to projects not directly financed by the Bank. This is due to the increased capacity established within the

private sector (in project sponsors, commercial banks, and so on) as well as governmental agencies through the experience gained in IDB-financed projects. PRI approved two significant loans related to the environment in 2003—one in Chile and the other in Peru. The Antofagasta Desalination Plant in Chile (\$7 million in IDB funds, with additional private financing) provides a new source of water to meet future demands in a water-scarce region of Chile (see Box 5).

The Bank's involvement in the Camisea gas pipeline project in Peru has helped reduce the environmental and social risks of a large and complex project that involves a partnership between the public and the private sectors. IDB carried out environmental and social due diligence to address all three components of the project: the gas fields and plants, the pipelines, and the gas distribution in Lima. This approach, which was adopted by the Bank team early on, reflects best practices among multilateral financial institutions with regard to EIAs. The Bank also served as the catalyst for new

Box 5. Desalination as a Means of Increasing Water Supply

The Private Sector Department approved a project in Antofagasta, Chile, to design, construct, and operate a desalination plant, including intake piping and an 11-kilometer delivery line. Antofagasta, in the Atacama Desert, has no measurable rainfall, and water is currently brought in from the Andes via a 400-kilometer pipeline across the desert. The desalination plant will be built in up to four modular stages in accordance with the growth in demand for water in the region. The first stage includes the processing machinery needed for the initial capacity of 13,000 cubic meters a day; upon completion, total capacity will be 52,000 cubic meters a day. IDB is providing financial support to cover the first stage and the first expansion phase of the project. The developmental role of the project is significant in that it will provide the city of Antofagasta and the region with an additional and much-needed source of drinking water to meet the needs of its growing population until 2020. The project will also serve as a demonstration of the application of reverse osmosis desalination technology on a large scale in this arid region.



collaboration between the government of Peru, local authorities, and indigenous organizations, aimed at producing a common and coherent development framework for joint activities. This was articulated through an Institutional Strengthening Program approved in 2002 that enhances the government's ability to address indirect and long-term impacts of the Camisea project, introduces new environmental enforcement and monitoring mechanisms, establishes protected areas in key locales of the project, and gives local communities a chance to supervise environmental and social impact mitigation measures.

In a technical cooperation agreement, PRI approved a project on structuring biomass-fueled cogeneration in Brazil. The goal is to develop the technical and commercial terms and conditions to finance sugar mills via cogeneration facilities, which would produce steam for sugar mill production processes and electricity that can be sold back to the power grid. The project should have positive environmental effects, such as a reduction of carbon dioxide emissions and less use of fossil fuels by the local grid to generate electricity. It is expected that the cogeneration facility will yield economic benefits in the emerging international market for green credits, commonly referred to as "carbon credits." This technical cooperation is being funded by the IDB Hemispheric Sustainable Energy and Transportation Fund.

PRI supported two TCs in 2003 directly related to the environment. A project entitled A Framework for Incorporating

Environmental and Social Risks into Traditional Credit Analysis, with funds from the IDB-Netherlands Partnership Program in Environment, includes a system for identifying, assessing, and mitigating the potential environmental, social, and health and safety risks associated with the implementation of large infrastructure projects in Latin America and the Caribbean. This framework helps not only the Bank but also private companies and financial institutions throughout the region to ensure the development of projects that are environmentally and socially sustainable.

EDE Sur (Southern Distribution Company) and EDE Norte (Northern Distribution Company) in the Dominican Republic are two privatized electric distribution companies that receive financing from IDB. A TC on electricity demand-side management (also with funds from the Hemispheric Sustainable Energy and Transportation Fund) addresses electricity end-use in the concession area of the distribution companies by consumers in the industrial, residential, commercial, and public sectors. The program incorporates the promotion of efficient electricity use by consumers, including improved equipment.

The Bank's contribution to environmental solutions in 2003 included a seminar on harmonizing the requirements among various international financial institutions for monitoring emissions in thermal power plants. PRI's Environmental and Social Unit responded to critical demands for technical support, including an environmental and social risk management



approach for trade finance operations involving on-lending to private companies and innovative social audit procedures to address concerns related to the Caña Brava hydroelectric project in Brazil.

WORKING WITH SMALL AND MEDIUM-SIZED ENTERPRISES

The Bank is actively involved in supporting small and medium-sized enterprises in Latin America and the Caribbean. Within the IDB Group, the Multilateral Investment Fund is responsible for this. MIF was designed as a new type of technical assistance mechanism to stimulate innovation and to extend beyond existing bilateral and international assistance instruments in the region. MIF projects focus on testing new development approaches and working to promote inclusive economic growth. The central goal is to use both grants and investments to demonstrate new ways to develop micro and small enterprise, build worker skills, strengthen environmental management, and improve the functioning of financial and other markets.

In the past few years, MIF has focused on using project clusters for promising development approaches. (A cluster is a group of 6–12 projects in a specific thematic area that will be developed, supported, and reviewed together.) In the environmental field, one cluster is called Achieving Ecoefficiency through Cleaner Production and Environmental Management. Ecoefficiency is defined as “the practice of improving productivity

through more efficient use of inputs such as raw materials and energy, while progressively reducing ecological impacts and resource intensity.” MIF is helping SMEs in the region improve ecoefficiency through promoting the use of cleaner production methods. In 2003, MIF approved cleaner production projects in Nicaragua, in Costa Rica, and in two separate projects in Mexico. As noted earlier, MIF is also supporting an innovative project in Costa Rica to stimulate the adoption of clean production methods across entire production chains.

Another area of Bank support is corporate social responsibility. As described in the section on New Environmental Operations, the growing popularity of CSR around the world is placing pressure on companies in the region to incorporate these concepts in order to compete effectively. MIF approved a regional grant focused on promoting the concept of CSR throughout the region. It also approved a project in Chile intended to implement CSR measures among small and medium-sized enterprises (see Box 6). As part of the Bank’s efforts in this new arena, a conference was held in September in Panama on CSR as a tool for competitiveness; small and medium-sized businesses were able to share their experiences on how to apply the fundamentals of CSR.

As the number of environment-related projects in MIF’s portfolio increases, more effort is being made to identify the lessons learned and best practices in this relatively new area of cleaner production. This will help strengthen partner-



ships between MIF and the executing agencies as well as the fund's role as a leading source of information on and experience in private-sector development issues in the region.

STRENGTHENING ENVIRONMENTAL CAPACITIES IN THE REGION

The Bank provides knowledge and expertise on numerous environmental issues. It strives to build government capacity to deal with environmental priorities. It works to improve cooperation and dialogue among governments, multilateral development banks (MDBs), and other stakeholders in the region. And it helps governments in their efforts to fulfill their obligations under international environmental treaties.

Developing Knowledge and Innovation

The Bank continues to generate and disseminate information and innovations that have an impact both within the institution and throughout the region. In an effort to improve the monitoring, evaluation, and measurement of environmental performance, for example, the Bank developed new schemes for impact indicators of natural resource management. It also completed design of an electronic system that will give staff efficient access to key environmental information. And to improve environmental performance within IDB, the Bank hosted the third annual meeting of an MDB working group on environmentally responsible procurement and worked to support internal efforts to promote environmental responsibility.

To support work in the region, the Environment Division (SDS/ENV) coordi-

Box 6. Tailoring Corporate Social Responsibility Practices to SMEs

The free trade agreement between Chile and the European Union and the more recent free trade agreement between Chile and the United States both include specific provisions regarding labor conditions and environmental performance. These have increased pressure on Chilean companies to incorporate socially and environmentally responsible measures in order to maintain market access. In December 2003, MIF approved \$1.25 million in grant resources to help small and medium-sized enterprises adopt corporate social responsibility measures.

The implementing agency, the Vincular Center of the Catholic University of Valparaiso, has a track record of working with larger enterprises on defining and implementing CSR strategies. The project expects to take advantage of this experience and transfer it to smaller enterprises. Several sectors in the country are interested in participating, such as the wine industry, manufacturing, and the fruit sector—all of which are concerned about export opportunities. The goal is to implement CSR measures in at least 150 SMEs and to develop the local capacity of service providers specialized in CSR implementation in smaller enterprises as a way to ensure project sustainability.

Since CSR is still somewhat new in the country, MIF's support will have a significant impact on accelerating the use of this tool for business competitiveness. An important and innovative aspect of this project is the development of CSR indicators tailored to smaller enterprises, which will contribute to making the business case for CSR as a useful instrument.



nates and manages two key partnerships that contribute to knowledge about environmental priorities and solutions: the IDB-Netherlands Partnership Program in Environment (NPPE) and the IDB-Netherlands Water Partnership Program (INWAP). The environment partnership was established in November 2000. Its overall goal is to protect and improve the environment in Latin America and the Caribbean regarding environmental management and innovation tools, integrated water resources management (IWRM), climate change (mitigation and adaptation), and biodiversity and forests. Since March 2001, \$2 million a year has been channeled to diverse activities and TCs and has given greater dynamism to the environmental agenda in the operational divisions. Products financed under NPPE in 2003 include local environmental management, country environmental analyses, IWRM mechanisms, assessments of greenhouse gas mitigation opportunities, instruments for regional management of biodiversity, and financially sustainable mechanisms for conservation.

The water partnership was established in August 2002 with the general objective of supporting the implementation of internationally recognized principles in integrated water resources management in Latin America and the Caribbean. Its impact is twofold: it will improve and strengthen the Bank's operational capacity in IWRM and it will bolster the capacity of borrowing countries in this area. The general lines of activity under which

INWAP operates include the promotion of integrated and innovative approaches to water management, the fostering of activities related to institutional strengthening, the promotion of activities that contribute to sustainable economic growth and poverty reduction, and an emphasis on capacity building and training activities for Bank staff and member countries. In 2003, the program supported studies on good practices in river basin organizations, characterizations of drinking water utilities, dialogues on water and poverty and on water and governance, assessments of the application of economic instruments in water management, and training.

Facilitating Regional Cooperation and Dialogue

A number of important steps were taken in 2003 toward better regional cooperation. The Bank established formal coordination mechanisms with MDBs, for instance, on the development of country environmental analyses in order to align methodologies and share efforts to increase efficiencies. In a further effort to harmonize environmental processes, under the auspices of the





International Association for Impact Assessment the Bank pursued contacts with other international organizations to improve the use of environmental impact assessments. It also worked to help governments in Central America identify capacity building needs on economic integration and trade liberalization.

In another important development, the Bank assisted the Forum of Environment Ministers by participating in an inter-agency technical committee that provides support on a range of issues that feed into the regional 2002/05 Action Plan agreed to by governments. SDS/ENV prepared collaborative papers on trade and environment, indicators for environmental information, renewable energy, climate change, water resources, the urban environment, and human settlements. In addition, it coordinated and prepared the environmental sustainability section of a paper on IDB and MDGs for an international meeting in Brasilia in November.

The Regional Policy Dialogue on the Environment is an initiative of the Integration Department, with technical support from SDS/ENV. The objective is to establish a network of Latin American and Caribbean government officials, at the level of vice ministries, responsible for decision making and the design of environmental policies. At the February 2003 meeting of this Environment Network, participants analyzed the application of economic instruments for environmental management. Studies were prepared on economic instruments for solid waste and water management,

along with case studies from Brazil, Chile, Mexico, and Colombia. Two handbooks were published in December on the outcomes of these studies. During the second half of 2003, to get ready for the March 2004 network meeting, studies were done on the economic valuation of sustainable coastal management (the Caribbean) and on air quality management in Brazil, Chile, and Mexico.

The Bank remains engaged in numerous activities in the area of natural disaster management. It contributed to the preparation of a Strategic Plan on Disaster Reduction and Risk Management for the region that was presented to the Permanent Committee of the Organization of American States in May 2003. IDB also produced a book on disaster risk management and financial strategies for reconstruction. In another initiative under the Regional Policy Dialogue, for the Third Meeting of the Natural Disasters Network in March 2003 a detailed analysis of local systems was published addressing organizational structures, institutional strengthening, financing, and local disaster indicators. Several seminars on the subject were held in 2003: on disasters resulting from





social conflicts, terrorism, and industrial accidents; on climate change adaptation and disaster risk management in Asia and the Caribbean; and on incorporating disaster risk analysis in IDB's project cycle. SDS/ENV and the Regional Operations Departments also supported a revision of IDB's Disaster Policy.

Helping Countries Meet Obligations of Global Agreements and Realize Opportunities

As part of its support for climate change activities, the Environment Division hosted a meeting between MDBs and the Secretariat of the Climate Change Treaty and also initiated a regional needs assessment on GHG mitigation. And as the Bank's focal point for the Global Environment Facility (GEF), SDS/ENV provided technical assistance to the Regional Operations Departments in the design of several operations during 2003.

In 2003, for the first time, the Bank was able to make proposals directly to the GEF for support of projects. During the year the IDB obtained GEF approval for its first full-size project (focused on the Bay Islands, Honduras). Other projects developed in 2003 included support for improved ecosystem management by indigenous communities in Central America, additional activities to protect the Gulf of Honduras, and coastal zone protection in Jamaica. To prepare for the growing number of projects in the GEF pipeline, SDS/ENV and other departments worked during 2003 on the nec-

essary internal procedures for project review and financial management.

ENSURING THE ENVIRONMENTAL QUALITY OF PROJECTS

Environmental and Social Reviews

IDB is committed to ensuring that the environmental risks posed by projects it supports are minimized. To that end, one of the tools used is the Committee on Environment and Social Impact (CESI). CESI is an interdepartmental committee that reviews the environmental and social viability of all loans and most TCs in the Bank's pipeline. In 2003, CESI reviewed 307 operations during 46 meetings—an increase of 26% over 2002. Of this total, 47% of the operations were loans and the other 53% were technical cooperation operations, which was a slight increase in the share of loans over the previous year.

Technical cooperation operations are reviewed at the profile level through a simplified procedure in a virtual dialogue between CESI reviewers and the project team. Plans of operations are not





formally examined unless significant negative impacts are expected.

Loans are also reviewed at the profile level. Depending on potential impacts, they may be examined a second time either through verification by the CESI Secretary or, more formally, during a second meeting of the Committee. Projects requiring an environmental impact assessment will typically be reviewed a second time by CESI. The process of Secretary verification was introduced with updated CESI procedures in 2002, whereby the Secretary verifies that CESI's recommendations have been integrated into project documents. In 2003, just under a third of the operations (30%) received this form of verification.

Nearly four-fifths of the operations reviewed (78%) did not require any specific environmental or social studies. Thirty-eight operations (12%) needed environmental analyses, 19 (6%) needed an EIA, and another 4 (1%) needed a strategic environmental assessment. Six other operations (2%) required another type of study when reviewed (such as environmental and social due diligence).

Providing Environmental Guidance to Project Teams

Last year was also a time of consolidating the support that CESI provides in the preparation of environmental guidance documents and the development of EIA training. SDS/ENV has continued its role of managing CESI and providing guidance for the Bank on environmental assessment matters. An Internet-based

e-training course was close to completion by the end of 2003, designed to provide environmental students in the region with free, interactive EIA training in both English and Spanish.

Also in 2003 the Micro, Small and Medium Enterprise division of the Sustainable Development Department (SDS/MSM) developed specific guidelines for environmental and social due diligence for micro-enterprise operations, with the support and review of CESI members. In parallel, SDS/ENV started developing guidance for strategic environmental assessment for the Bank, again with the support of CESI members. This effort should be completed in 2004.





Fetching water is a time-consuming task for the women and children of Chinameca, a municipality in the Department of San Miguel in El Salvador. Chinameca has a population of approximately 23,000, half of whom live in rural areas. Only 9 of the 19 communities in this municipality have access to drinking water services. The rest have to rely on water of poor quality that needs to be fetched from streams and aquifers that are sometimes miles away. The poor quality of the water and the lack of proper hygiene exacerbate water-borne diseases and contribute to increasing child mortality. This is the reality faced today by thousands of communities throughout Latin America and the Caribbean.

ISSUES AND CHALLENGES IN DRINKING WATER AND SANITATION

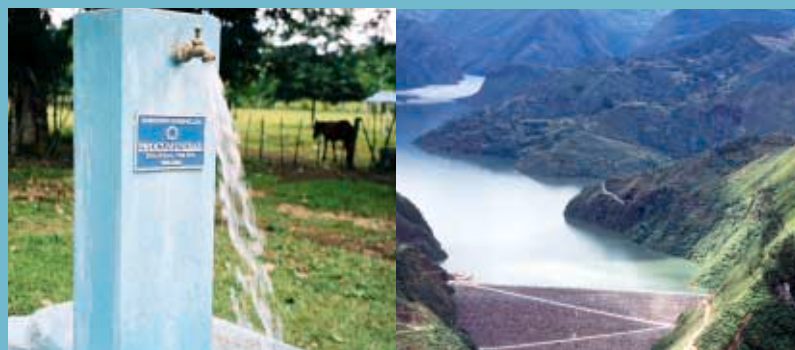
Preserving, conserving, and providing water to 525 million people in Latin America and the Caribbean remains a major challenge for IDB and all governments in the region. Poor water quality has had severe health consequences, causing environmentally induced diseases such as gastrointestinal infections that lead to premature deaths among children and losses in productivity among the adult population, thus having a direct impact on the economy.

Goal 7 of the Millennium Development Goals adopted in September 2000 is on ensuring environmental sustainabili-

ty. Target 10 of that MDG is to "halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation." Preliminary estimates for meeting this target in Latin America and the Caribbean put the bill at \$150 billion. This will require a doubling of investments in the sector in countries experiencing slow economic growth, unsustainable public debt levels, and decreasing participation of the private sector. If countries maintain the current levels of investment, the MDGs will not be achieved. The coverage by drinking water services must increase 33% between now and 2015 in order to achieve the target. For sanitation services, a 35% increase in coverage is needed by 2015.

Lending to the water supply and sanitation sector has been constrained by a number of factors, including:

- high urbanization rates,
- weak and financially unsustainable institutions compounded by weak decentralization processes,
- weak or non-existent water policies and regulatory frameworks,
- social and political resistance to reform and a lack of commitment on the part of relevant stakeholders, and
- fiscal constraints.





Water availability and water quality are among the main concerns from a social and environmental perspective, which makes it necessary to search for integrated approaches to water resources management. A paradigm shift in this direction has been taking place recently in Latin America and the Caribbean. There is a move away from sector-oriented water resource development projects with centralized management and toward water resources management based on the river basin and the management of watersheds, using water as the integrating element.

In the early 1990s, regional multilateral institutions began financing watershed management projects that concentrated on protecting large hydropower investments whose economic life was being jeopardized by accelerated erosion and sedimentation from the surrounding watersheds. Interventions were geared toward soil conservation measures to remedy land degradation problems.

By the late 1990s, there was increased recognition that human activities can be

as significant a factor as natural erosion. The socioeconomic aspects of interventions became more relevant. Efforts focused on the relationship between soil losses and crop yields and on the farmer's use of soil conservation practices. Issues such as natural resources management, crop diversification, soil conservation, and forest management became integral parts of watershed management programs. The protection of hydropower investments is still considered, but on-farm activities have become prominent. These actions are designed to improve the livelihoods of the rural population, with an expectation that measures implemented at the farm level will contribute to the protection of reservoirs.

This new approach brought with it a series of challenges:

- A vast array of different activities and actors is involved, so conflict resolution activities need to be incorporated at the core of project design.
- Complex institutional arrangements are needed, and focusing on improving

Selected Indicators on Water and Sanitation in Latin America and the Caribbean

- Less than 10% of the fresh water withdrawn in the region is for domestic use.
- While 86% of the people in Latin America and the Caribbean have access to drinking water, only 49% have sewage services.
- An estimated 76 million people (50 million of them in rural areas) have no access to safe water and 116 million (66 million in rural areas) do not have safe collection of their sewage.
- One-third of the people rely on pit latrines and septic tanks.
- Of the households with water connections, 60% do not have continuous service.
- Only 14% of collected sewage effluents receive any kind of treatment.



livelihoods in rural areas requires interventions designed with local populations.

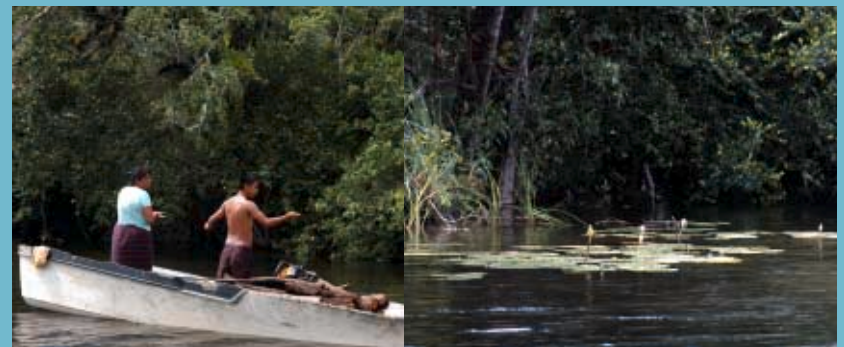
- The size of the watershed area must be defined carefully, and the level of development and economic activity there must be understood.
- The relationships between upstream and downstream activities pose technical challenges and require sophisticated instruments that can promote behavioral changes in upstream populations.
- Activities that are financially sustainable in the long run must be formulated, such as crop diversification, forestry activities, and the promotion of off-farm job creation activities.

The problems of the water sector are complex and go well beyond the lack of financial investment or water scarcity. Latin America is comparatively rich in freshwater resources and has vast and diverse freshwater ecosystems. But the efficient management of physical, biological, social, environmental, economic, financial, and institutional factors is essential for effective management of these resources and for conflict resolution that arises from the needs, goals, and aspirations of diverse stakeholders.

The institutional framework for water governance in the region varies substantially from country to country. With the exception of Argentina, Brazil, and Mexico, most countries still rely entirely on national-level institutions to manage water resources. Most of the institutions responsible for water

resources are located in other line agencies. It is not uncommon to find water agencies or units in ministries of environment and natural resources, and some are in ministries of public works. In terms of legislation, Brazil, Colombia, Costa Rica, El Salvador, and Mexico have all proposed legislation or water laws that promote river basins as water resources management units.

The region has a wide variety of service providers, usually local authorities and small and micro-enterprises, and it is experiencing an increase in public-private partnerships in the provision of drinking water and sanitation. Community-based organizations are also playing a prominent role. Water user groups and associations are being created to provide services in drinking water and irrigation. As noted, however, the large number of actors and stakeholders has made coordination efforts difficult. Thus it is important to encourage institutional strengthening and capacity building activities and to foster the formulation of policies that address economic, environmental, and social issues in an integrated manner. Governments must support and sponsor the participation of civil society to ensure acceptance of policies they formulate. For water gover-





nance mechanisms to be effective, they must be realistically devised, taking into full account the political, environmental, social, economic, and financial surroundings.

To address these challenges, the need for a new and comprehensive approach by water resources managers and policy makers was recognized and embraced in the region in line with several recent international agreements on integrated water resources management. Balanced policies and institutional reforms that both harness the efficiency of market forces and strengthen the capacity of governments to carry out their essential roles must be implemented. Ideally, this institutional framework should facilitate the consideration of relationships between the ecosystem and socioeconomic activities in a river basin and should provide the underpinnings for formulating public policies on regulations, incentives, public investment plans, water conservation and reuse, environmental protection, and the linkages among all these programs.

BANK ACTIONS ON WATER RESOURCES

IDB has been actively involved in the water sector since it began, especially in water supply and sanitation, irrigation, hydropower, and flood control projects. Approximately 20% of the Bank's portfolio has been invested in this sector. In the drinking water and sanitation sector, the Bank has invested approximately \$3.8 billion since 1994 and is handling

some \$2.7 million in technical assistance grants to support institutional strengthening of service providers and to foster legal and regulatory reforms. In 2003, the Bank approved projects for \$157 million in Brazil, Chile, and Guatemala (see Box 7) and several technical cooperation operations in Bolivia, Brazil, Costa Rica, El Salvador, Honduras, Mexico, and Peru, totaling nearly \$2.9 million. It also approved its first project in the expansion of water supply via desalination, as described earlier. For the next two years, the Bank's pipeline in the sector amounts to \$1.7 billion for projects in Barbados, Brazil, Colombia, Mexico, Panama, Peru, and Trinidad and Tobago to support expansion in coverage of sanitation serv-





ices and the provision of adequate treatment of municipal and domestic effluents.

The Bank has prepared operational guidelines to support and improve the design of projects in this sector. And the Regional Operations Departments have prepared sub-regional strategies with the objectives of increasing coverage of drinking water and sanitation services, supporting countries in the preparation of national action plans to achieve the MDGs, improving the quality of the services through the institutional strengthening of service providers and the development and strengthening of regulatory frameworks, and promoting long-term efficiency and sustainability of the systems.

In 1998, IDB approved a Strategy for Integrated Water Resources Management, which calls for a river basin or watershed approach to water resource management problems. The strategy states that "priority must be given to institutional analysis and change...over or at par with building physical infrastructure" and calls on the Bank to "favor the initiation of sub-regional and/or national assessments in those areas and countries where the sense of need for institutional change is most evident." Therefore "the Bank will assist the nations of Latin America and the Caribbean in building or improving their IWRM capabilities at all levels where action and decision making occur."

Box 7. Financing Pro-Poor Investments in Drinking Water and Sanitation in Rural Areas

Approximately 60% of the population in Guatemala lives in rural areas. The drinking water and sanitation sector in the country is characterized by low coverage, poor quality, and deteriorating physical assets. An estimated 10,000 communities have no access to water services, and the rural population without access to drinking water increases by 100,000 per year. To satisfy this growing demand, a radical change in the way projects in rural areas are designed is needed. The current system for providing services to rural areas faces two major institutional constraints: centralized project implementation, which limits government capacity to respond quickly to the needs of rural populations, and a lack of community participation during the design and implementation phases of projects, which makes it hard to design water systems compatible with financial and technical capacities.

To help the government meet its goal of increasing coverage of water services in rural areas to 60%, the Bank approved a \$50-million loan in 2003. These funds will support a program to benefit at least 500,000 new rural consumers whose average annual income per capita is well below the national figure. The program differs substantially from earlier approaches to rural water programs in Guatemala in that it promotes community participation from the early stages of the implementation phase. It supports autonomous, legally constituted community-based associations that are created exclusively to provide water and sanitation services. These groups will receive technical assistance to establish their legal status and to design financially and technically sustainable drinking water projects. The program will fund the capital costs of water and sanitation projects with a combination of reimbursable and non-reimbursable funds. Communities will repay the reimbursable funds and meet the operation and maintenance costs of the systems by levying tariffs on the users. A revolving fund established as a trust fund in a commercial bank will be established to hold reimbursed financial resources, which will be used to finance new projects. This innovative financial mechanism will help the country meet its Millennium Development Goals.

Box 8. Watershed Management and Water Governance

The integrated water resources approach followed in Latin America and the Caribbean has created a need to manage water resources at the river basin and watershed levels. River basin organizations are part of the institutional and organizational structures used for water governance at the watershed level, and they play a central role in this process.

Several countries in the region have organized and established RBOs, but these experiences have not been shared or documented. Borrowing member countries have asked for a set of guidelines on such groups, given the increasing demand for projects to support integrated management of water resources. The Bank is therefore helping countries in their efforts to improve water governance by supporting preparation of a study on RBOs. It will begin with an analysis and evaluation of the existing management structures of river basin organizations in selected countries. The RBOs will be assessed to determine the degree of development, the legal and institutional basis, the underlying motives that triggered their creation, their organizational structures, the degree of stakeholder participation, the benchmarking systems in place to evaluate their performance, their financial sources and mechanisms, and their financial recovery instruments. A set of guidelines will then be prepared to orient the creation, improvement, and sustainable operation of river basin organizations.

This includes support for the creation of river basin organizations (RBOs) (see Box 8).

Since 1989, the Bank has financed more than 25 projects at the basin management level, and it plans to continue this in the years ahead. These projects support institutional arrangements and legal and regulatory frameworks that promote an integrated approach to water resources management, emphasizing the participation of communities in the design and implementation stages in order to establish environmental, economic, social, and financially sustainable activities that will foster poverty

reduction and sustainable economic growth. In 2003, the Bank approved technical cooperation grants on the design of watershed management projects in Costa Rica, the Dominican Republic, Guatemala, and Panama.

Following the recommendations of the World Summit on Sustainable Development and the Third World Water Forum, the Bank will also continue helping member countries prepare national IWRM strategies, master plans, and legal, institutional, and regulatory frameworks to promote integrated water management. In 2003, the first operation of this kind was approved for Costa Rica.



The 2003 Annual Report was prepared by the Environment Division of the Sustainable Development Department under the direction of Janine Ferretti, with coordination and contributions by David Wilk. Contributors include Virginia Alzina, Kari Keipi, Helena Landazuri, Michele Lemay, Joseph Milewski, Robert Montgomery, Ricardo Quiroga, Diego Rodriguez, Daniel Shepherd, and Michael Toman. Technical assistance was provided by Ligia Espinosa and Rosario Ramirez in SDS/ENV and by Luis Galván and Arlette Pedraglio in the IDB Photo Library.

Editor: Linda Starke

Design: Sushmita Mazumdar, Cardea Communications



INTER-AMERICAN DEVELOPMENT BANK

1300 New York Avenue, N.W.

Washington, D.C. 20577

www.iadb.org