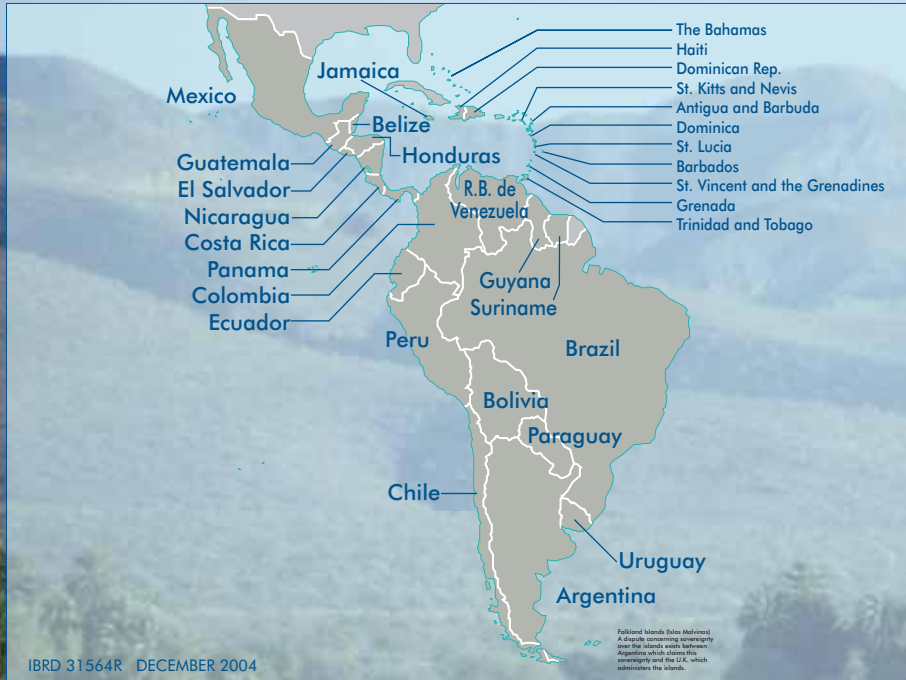


Latin America and Caribbean Region



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Latin America and the Caribbean (LAC) is a region that is extremely rich in natural resources, including vast areas of intact tropical forest and extraordinary biodiversity resources. Yet forests are under pressure from settlement, inappropriate agriculture, logging, and mining; soil depletion threatens food and cash crops; and much of the region's remaining biodiversity is found in isolated patches of habitat that may be too small for the long-term survival of the species they contain.

LAC is also the most urbanized region of the world; 75 percent of the region's 500 million people live in urban areas. Air and water pollution, poor sanitary systems, and a lack of access to potable water all represent critical threats to the health and well-being of urban populations. These issues are exacerbated by poverty and inequality; the poor often live in vulnerable areas and lack access to basic services.

The World Bank—working with national governments, local communities, and civil society organizations—focuses on four strategic areas: improving health, enhancing livelihoods, developing frameworks for sound and equitable management, and facilitating equitable solutions to regional and global challenges. The Bank supports activities as diverse as reducing indoor air pollution from fuelwood; working with indigenous communities to increase environmentally sustainable income; and policy lending that targets mainstreaming environmental issues into sectors such as health, defense, justice, transport, forestry, and urban development.

Fighting deforestation in the Brazilian Amazon

Forest clearing in the Brazilian Amazon—a region of astonishing natural wealth and diversity—has been increasing, with

particularly high rates of deforestation in 2002 and 2003. Cattle ranching and soybean production, rapidly expanding as a result of favorable market conditions, are the main driving forces of deforestation.

The Bank and the Government of Brazil have instituted a long-term dialogue to address deforestation. One of the flagship efforts has been the Pilot Program to Conserve the Brazilian Rain Forest. The program has successfully demonstrated alternative uses of the forest, protected large tracts of indigenous lands, strengthened state institutions, and promoted the concept of sustainable development in rain forest regions in Brazil. The program and its projects have served as models of forest conservation for international donors, NGOs, and governments.

The Amazon Region Protected Areas Project (ARPA)—with funding from the GEF, WWF, and the German Government—promotes the objective of land use planning and management through the creation and consolidation of protected areas. Areas facing extreme pressures, such as the “deforestation belt,” receive special attention. Over 6 million hectares of new protected areas have already been created.

One groundbreaking result of the ongoing dialogue between the Bank and the Brazilian Government has been the Permanent Interministerial Working Group on Amazonian Deforestation, which is composed of 11 government bodies. The initiative represents a unique development in the battle against deforestation. For the first time, deforestation is not treated solely as an environmental problem, but is mainstreamed into all sectors of policy. The far-reaching recommendations of the interministerial group have contributed greatly to Brazil’s comprehensive “Sustainable Amazon” plan.

Responding to climate change

Latin America has much to lose as a result of global warming. Key anticipated impacts range from decreased water availability and lower agricultural productivity to changes in ecological systems, population displacement due to rising sea levels and flooding, and increased exposure to diseases such as malaria, dengue, and cholera.

To face these challenges, the Bank has been supporting country efforts to (a) strengthen institutional capacity, so regional governments and civil society can play an influential role in the international climate agenda; (b) assign top priority to adaptation efforts; and (c) promote a quick increase in the use of the Kyoto Protocol’s Clean Development Mechanism (CDM).

Carbon finance resources are being used to promote the goal of sustainable development in the local social and environmental contexts of each project, thus contributing to the objectives of the country assistance strategies. By linking carbon revenues to local social and environmental indicators, these resources respond to the spirit of the CDM.

In Colombia, for example, the Amoya River Environmental Services Project established a linkage between revenues for carbon emission reductions and the protection of the páramo, an important high mountain habitat. Preserving this critical ecosystem is key to maintaining the water cycle in the long term, which in turn makes the generation of clean energy viable. The clean energy component is designed to have a minimum ecological footprint. The generation of clean energy helps displace greenhouse gas emissions that are sold on the international market, making the project financially viable.

Policy-based lending

Many of the region’s environmental problems result in adverse health consequences, mortality, damage and loss of property, and loss of livelihoods. These costs are significant. In Colombia alone, it is estimated that urban air pollution is associated with approximately 6,000 premature deaths each year. Urban air pollution, natural disasters, waterborne diseases, and indoor air pollution may impose costs equivalent to over 3 percent of Colombia’s GDP.

These problems call for an interdisciplinary and cross-sectoral approach. Such an approach integrates environmental concerns into different sectors through reform processes. In the LAC Region, environmental structural adjustment programs provide such a vehicle, balancing social and economic development with environmental protection and improvement.

LAC has adopted a programmatic approach to structural adjustment loans (SALs). Typically, SALs integrate principles of sustainable development into key sectoral agendas in the client country, and improve the effectiveness and efficiency of national environmental management systems. Furthermore, they provide significant opportunities for social and institutional learning and promote sustainability of reforms and accountability. The Region’s pipeline of future environment adjustment lending is valued at about \$2 billion, distributed among programs in Brazil, Colombia, and Mexico.

In Mexico, initial reforms have resulted in improved management of water resources and marine protected areas, as well as improved public participation and transparency in environmental management. Experience shows that continual coordination among institutions and ex-

tensive dialogue among sectors are necessary to achieve environmental mainstreaming. These issues will be further addressed in the programs currently under preparation in Mexico, Colombia, and Brazil.

The urban environment

While often not as visible as “green” issues, “brown” urban environmental issues have the largest impact on health and vulnerable populations. The World Bank’s Brown Environmental Agenda (BEA), which targets pollution-related issues, is a primary focus of the urban environment portfolio.

LAC has put particular emphasis on solid waste (SWM), hazardous waste, and air quality management, critical issues related to urban pollution control. The region faces serious difficulties in managing urban refuse and solid waste. The main impediments to good practices in SWM are the lack of (a) proper final disposal facilities, (b) proper financial management, and (c) a regional strategic approach.

In order to address these issues, the Bank is preparing a SWM regional strategy, which has preliminarily identified Argentina, Brazil, and Mexico as priority countries for assistance. A main objective is to provide technical and financial assistance to small and medium cities in building final disposal facilities. In Brazil, the strategy has been twofold: mainstreaming SWM into broader urban projects, and raising awareness for future investment operations through focused regional technical capacity workshops.

Additional funding for SWM comes from the Clean Development Mechanism, which supports the reduction of CO₂-equivalent emissions from landfills by

combusting the methane portion of landfill gas. CDM support has taken the form of a revenue stream based on the value of the Carbon Emission Reductions achieved. To date, projects have been developed in Mexico, Uruguay, Brazil, and Argentina. A newly launched regional strategy to develop landfill gas-to-energy projects is expected to pave the way for eight additional projects.

Air pollution is becoming the largest environmental problem in the region’s urban areas. The poor normally are most impacted, since their exposure to pollutants is greater, adding to their relatively higher burden of health problems. Many of the greenhouse gases emitted are also precursors for ground-level ozone formation, which has serious local social costs while contributing to global warming. These emissions are mostly due to the use of gasoline and diesel in transportation, which is spurred by urbanization and GDP growth in the cities.

The Clean Air Initiative (CAI) for Latin America and the Caribbean is aimed at promoting best practice dissemination and capacity building. The CAI brings together the efforts of multiple organizations and sectors to improve the capacity of city leaders to address air quality management. As part of the CAI effort, Air Quality and Sustainable Transport Projects improve the efficiency of transport flows; promote shifts to non-motorized or less energy-intensive modes of transport; coordinate land-use and transport policies; promote transport demand management; and adopt cleaner fuels and vehicles.

Unsafe handling of hazardous chemicals has also become a priority. The LAC Re-



Argentina.

gion has been involved in the preparation of enabling activities (EA) for the Stockholm Convention on Persistent Organic Pollutants. The EAs will assist client countries in the preparation of National Implementation Plans to comply with convention commitments. Proposals have been approved for Mexico and Colombia, and contaminated soil remediation projects are under preparation in Brazil, Colombia, and Chile.

Another example of the Bank’s BEA is that of slum upgrading projects with a focus on water pollution control. These multisector projects, with significant municipal development components, are important precedents for addressing the challenges of the BEA in developing countries.

A partnership for protection

The Latin America and Caribbean Global Environment Facility (GEF) portfolio is one of the largest and most innovative in the Bank. There are currently 55 projects



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The town of Huaraz, in the Callejón de Huaylas of Peru. In the background is the Cordillera Blanca and Huascarán National Park.

totaling \$338 million. Heavily focused on the biodiversity agenda, it supports 39 biodiversity projects such as the regional Mesoamerican Biodiversity Corridor, and other initiatives such as the sustainable management of indigenous lands. Twelve projects work with climate change, while two jointly address climate change and biodiversity, and two involve international waterways. The new Protected Areas and Sustainable Livelihoods Project, which includes countries within the Organization of Eastern Caribbean States, and the Inter-American Biodiversity Information Network (covering the entire region) illustrate the Bank's focus on multi-country projects addressing trans-boundary issues.

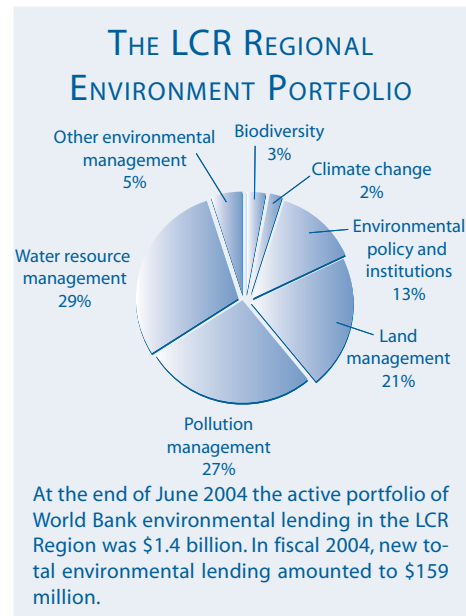
LAC's large and diverse portfolio of medium-size projects (MSPs) reflects the technical strength and competence of the nongovernmental organizations (NGOs) that usually receive these grants. MSPs have allowed NGOs and the Bank to test innovative approaches to biodiversity conservation and sustainable economic

development. Highlights from several MSPs illustrate their innovative nature. The Albarradas in Coastal Ecuador Project combines historical, anthropological, and ecological approaches to rescue traditional knowledge of the sustainable use of biodiversity. Under the Costa Rica Biodiversity Conservation and Sustainable Production Project, cocoa producers, professionals and academics learned improved agroforestry practices, production and marketing of organic artisanal chocolate, and organization of commercially viable micro cacao projects.

Ongoing MSPs such as the Santiago (Chile) Foothills Mountain Ecosystem Conservation Project promise lessons in cutting-edge work on the rural-urban interface. The project works closely with municipal governments to guide urban growth, thereby helping to ensure the conservation of the Santiago Foothills. Innovative projects like these are serving as models for work throughout the region, both for the Bank and for other development institutions.

Challenges ahead

As the projects mentioned here show, it is quite possible to combine the protection of critical ecosystems and species and the sustainable use of natural resources with social, economic, and institutional development. Bank experience indicates that certain lessons are key to this success. Mainstreaming environmental concerns into other sectors, and at all levels of society, is both highly effective and cost-efficient. Cooperation among ministries, donors, and other institutions is crucial to developing and implementing complete, cohesive strategies and producing long-term results. Participation is also critical. Initiatives that are designed, im-



plemented, monitored, and evaluated with the participation of local stakeholders are often the most successful. Finally, new prospects for promoting both conservation and socioeconomic development are emerging every day.

Many challenges remain. Rapid urbanization, continued deforestation, and limited public sector budgets continue to frustrate environmental efforts, while poverty places an enormous burden on scarce natural resources. The specter of global warming presents future uncertainties and highlights the need for multi-country cooperation. Yet lessons learned through experience, the growing recognition of environmental issues, and the wealth of human and natural resources in the region create a strong basis for confronting these challenges.

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