Environment: FY'97 Trends within the LAC Region

Poverty, inequitable access to land, population growth, increased urbanization, and expanded unsustainable investments and trade in natural resources and industrial products pose enormous environmental challenges for the LAC region. The above pressures are resulting in significant biodiversity loss, and degradation of natural resources, especially soil, forests, water, and coastal marine ecosystems. Biodiversity conservation and natural resource management are emphasized in USAID's LAC programs given their global importance, the region's wealth of biodiversity and natural resources, and their contribution to the region's food security, poverty reduction and economic development. Increased though modest new investments in urban and industrial pollution prevention and sustainable energy are already having significant catalytic results in the region.

Biodiversity

The LAC region contains 40% of the globe's species, roughly 50% of the world's remaining tropical forests, and globally important coral reefs and marine ecosystems. Of the world's 25 most biodiverse countries, nine are in the LAC Region, including USAID-supported countries such as Bolivia, Brazil, Colombia, Ecuador, Mexico, and Peru.

As a result of USAID/LAC programs in 1997, over 22 million hectares of park lands were better managed. For example, the LAC Regional Parks in Peril (PIP) program has greatly improved protection at 28 parks, covering 8.9 million hectares. To date, 13 sites have graduated from USAID funding.

Key biodiversity related legislation was passed in FY'97, including: the Galapagos special law; the Tulum Agreement and Action plan to protect the Great Maya Reef of Mexico, Honduras, Guatemala, and Belize. Legislation helped establish new national protected areas in Jamaica, Brazil's Amazon, and Guatemala.

Creating sustainable sources of financing is an important part of LAC's biodiversity programs. For example, the Mexico Nature Conservation Fund, endowed with $19.5 million by USAID in FY'96, now serves as the model National Environmental Fund for the LAC Region. It has funded 76 competitive grants to Mexican conservation NGOs, and has attracted $16.5 million from the Global Environment Facility.

Mission programs have encouraged private, for-profit sector participation in environmental activities. In perhaps the most innovative of these, Jamaica's government provided a lease to two private sector companies to manage the Royal Palm Reserve within the newly-designated Negril Environmental Protection Area. In Bolivia, a local indigenous group signed a ground-breaking agreement with the owners of the 3,000 kilometer Bolivia-Brazil Gas Pipeline, the largest infrastructure project underway in South America. This agreement allows for economic development of

the region, while providing funds to conserve a 2.2 million hectare park in the Bolivian Chaco dry forest.

Natural Resource Management

The region, especially Central America, has among the highest rates of deforestation in developing countries (CA = 2.1%/yr equivalent to approx. 387,000 has/yr). Within LAC countries receiving USAID support, total forested area is 838 million hectares, including the 551 million hectares in Brazil. Approximately 5.2 million hectares of LAC's forests were lost annually (from 1990 to 1995), most of which came from Brazil (2.8 million has lost), and Bolivia (580 thousand has lost).

A key theme of the LAC Bureau's environmental programs is promoting sustainable practices that provide a medium and long-term incentive to preserve natural resources. Thanks to USAID programs, LAC people are using improved forestry and agricultural practices on 1.6 million hectares of land, thereby conserving forests, topsoil, and water. For example:

-- In Honduras, the area under sustainable management practices increased an impressive 46% during the past year, to 847,791 hectares, and an additional 1,611 hillside farm families adopted improved natural resource management practices on 10,800 hectares, bringing the life of project total to 37,500 families, and 55,500 hectares.

-- In Haiti, almost 168,000 hectares of hillside farm land benefitted from the adoption of environmentally sound production practices, and 4.8 million trees were planted.

-- In Guatemala's Peten, USAID-assistance has reduced the deforestation rate in protected areas to 0.3% per year, compared to 10% per year in areas where USAID isn't present.

-- In Bolivia, eight technical standards for the new forestry law were developed and approved by the government. Bolivia is now a leader in certified forests due to USAID's support, with almost $200,000 in eco-certified forest products marketed in 1997.

Climate Change

Total industrial carbon dioxide (CO_2) emissions totalled 1.2 billion metric tons in 1995, representing around 5% of world's total. Both Mexico and Brazil are among the world's top 25 emitters of CO_2 from industrial sources, and thus are key climate change countries for the Agency. Destructive land use practices (e.g., deforestation) may be LAC's primary source of atmospheric CO_2 emissions, especially from Brazil. From 1990 to 1995, Brazil lost over 12 million hectares of forest.

USAID's climate change programs reduce carbon dioxide emissions by providing alternatives to tropical deforestation, and by promoting the use of clean energy technologies (e.g., renewable energy, energy efficiency). Some of the forestry/climate change

successes have been included above. Key FY'97 energy/climate change successes include:

-- In Brazil, 607 KW of renewable energy was installed and 1,760,000 MWhours were saved by industries using energy efficiency technologies. Key climate change policy improvements included (a) Brazil's power agency establishing provisions in every new utility licensing contract that target 1% of gross annual utility revenues ($198 million) to energy efficiency programs; and (b) the Government of Brazil exempting renewable energy equipment from the 17% value-added tax.

-- In Mexico, 90 new renewable energy systems were installed and 57 firms adopted energy efficiency measures.

Urban and Industrial Pollution

Industrialization often takes its toll on the region's environmental resources. LAC industrial output has quadrupled in constant dollars in the last two decades. The percent of population living in urban areas is increasing rapidly; by the year 2000, it will be as high as 80 percent in Brazil), and in Honduras it will be approaching 50 percent. The share of the populace with access to safe drinking water has fallen six percentage points since 1988 to 73 percent in the region. The provision of other municipal environmental services is also stressed.

LAC programs emphasize demonstrating the economic value gained by utilizing clean production practices, for example, by showing industries how to meet international standards so they can export their products. In addition, urban activities emphasize cost-effective, low technology means to reduce and manage waste affecting the health of the urban poor. Successes in FY'97 include:

-- In Peru, a landmark environmental framework regulation that incorporates a "pollution prevention" ethos, the use of economic instruments for natural resources management, and transparent public participation mechanisms. Another success from Peru was the creation of Lima's first manually-operated sanitary landfill. This landfill is operated profitably by three microenterprises, composed of economically disadvantaged women.

-- In Jamaica, audits demonstrating the environmental and financial benefits from corporate environmental management systems were completed for 11 hotels. These hotels have begun to implement audit recommendations, such as water and energy use efficiency, and waste minimization, thereby enhancing their economic competitiveness.

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