



## GLOBAL CLIMATE CHANGE

MAY 2006



*Through USAID's activities in the areas of vulnerability and adaptation, natural resources management, and agriculture, Nicaragua has taken significant steps in addressing climate change and mitigating its effects. This has been vital to preserve the country's mega-diversity, promote economic growth, and confront natural disasters.*

**Background.** Although Nicaragua is prone to natural disasters, including floods, droughts, earthquakes, volcanic eruptions, and hurricanes, it continues to have a limited capacity to respond to and recover from these disasters. Through the Opportunity Alliance for Central America, USAID is working in close collaboration with partners in the region to tackle their key constraints to competitiveness, including disaster preparedness and environmental management. The latter is especially vital in the resource-rich area of Nicaragua. Nicaragua is located in the center of the Meso-American Biological Corridor, classified worldwide as a region of mega-diversity. The factors that benefit Nicaraguan biodiversity are topography, climate, and a complex geomorphological, and biological and cultural history, all embodied in the National Protected Areas System.

USAID/Nicaragua's environmental program is closely linked to USAID's economic growth objective which supports small farmers to diversify production and increase output in a sustainable manner; development of small and micro-enterprises in rural and urban areas; improving the use of natural resources; and improving Nicaragua's international trade competitiveness.

**Sector-Specific Climate Change Activities.** USAID's activities address natural resources management and sustainable forest management.

*Addressing Climate Change through Natural Resources Management.* USAID'S Co-Management of Protected Areas project supports protection of important ecosystems and preserves vital carbon stocks. By strengthening protected area management and involving local communities in the administration of the areas, co-management of biologically important protected areas is an essential element of addressing climate change in Nicaragua. This project supports of alternative livelihoods and income generating activities, consistent with conservation goals, for the rural poor residing in and around the targeted protected areas.

In 2004 and 2005, the Co-Management of Protected Areas Project funded by USAID and implemented by The Nature Conservancy (TNC), provided training and technical assistance to managers of six protected areas (Estero Padre Ramos, Isla Juan Venado, Cosiguina Volcano, Meseta Tisey-Estanzuela, Cerro Musum and Chocoyero-El Brujo) covering 85,931 hectares. Preservation of forest cover will result in significant avoidance of carbon emissions and soil erosion.

**USAID's partners in climate change activities in Nicaragua include\*:**

- The Nature Conservancy (TNC)
- World Wildlife Fund (WWF)
- Ministry of Environment and Water Resources (MARENA)
- IUCN

\* Because partners change as new activities arise, this list of partners is not comprehensive.

For more information on Nicaragua, visit USAID/Nicaragua's Mission Web site at:

<http://nicaragua.usaid.gov/>

In 2005, USAID assistance increased the capabilities of the government and local non-government organizations to co-manage each protected area. Each area includes significant forest and biological resources. The total area under improved management in 2005 was over 773,031 hectares, including the BOSAWAS Biosphere Reserve under Parks in Peril Program (PiP), in which over 50 communities and indigenous groups are participating. With the collaboration of TNC and the World Wildlife Fund (WWF), government officials and NGO staff were trained in the use of tools and instruments for improved protected areas management, environmental education, alliance building, ecotourism, sustainable financing, and other topics.

The WWF also assisted the Government of Nicaragua in completing a forestry strategy of the North Atlantic Autonomous Region, resulting in a consensus document that included the private sector, civil society, and the regional government participation.

During the dry season of 2005, forest fires were reduced by 90% in 23,324 hectares compared to 2004. This data is based on the Ministry of Environmental and Natural Resources' (MARENA) monitoring data.

*Responsible Forestry with Indigenous Communities and Forestry Business:* WWF is assisting the community of Las Crucetas with 11,200 hectares of forest, six indigenous communities (the SIPBAA block) with 12,000 hectares of forest, and Layasiksa with 4,500 hectares for a total of 27,700 hectares under improved management practices. Using their newly gained forestry business practices, the Layasiksa and the SIPBAA block have harvested 1,291 cubic meters and 915 meters of wood respectively. Both communities are preparing for certification of their processes, while the community of Las Crucetas is completing the forest certification process of the Forestry Stewardship Council. Improved management practices are based on reduced impact logging (RIL), and include tree inventorying and mapping, directional felling, long term management plans, and annual plans for allowable cuts. Implementation of RIL will result in reduced carbon emissions from collateral damage and soil erosion during logging operations. Finally, the highly successful "One Tree" educational campaign, an artistic and educational exhibition of 209 articles made from a single tree, also produced a video, a book and a children's book.