



## GLOBAL CLIMATE CHANGE

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*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 megadiversity, promote economic growth, and confront natural disasters.*

**Background.** Nicaragua is prone to natural disasters, including floods, droughts, earthquakes, volcanic eruptions, and hurricanes, but has a limited capacity to respond to and recover from these disasters. Through a presidential initiative, the Opportunity Alliance, USAID is working in close collaboration with Central American partners to tackle their key constraints to competitiveness by building trade capacity, diversifying the rural economy, and improving 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 Biological Province of Central America, classified worldwide as a region of megadiversity. The factors that benefit Nicaraguan biodiversity are topography, climate, and a complex geomorphological, biological, and cultural history. All of these resources are incorporated into the protected areas that make up the National System for Protected Areas.

USAID/Nicaragua's environmental program is closely related to USAID's economic growth objective in the country. This objective intends to increase incomes and employment opportunities for small agricultural producers by providing technical assistance and training. The program focuses on helping small farmers diversify production and increase output in a sustainable manner; increasing small and microbusinesses in rural and urban areas; improving the use of natural resources; and improving Nicaragua's international trade competitiveness. USAID also promotes improved soil and water conservation to assist producers in their pursuit of environmentally sound agricultural procedures.

From 1990 to 2003, USAID assistance to Nicaragua totaled \$1.1 billion. The current USAID/Nicaragua development program, which began in 1998 and runs through 2003, has a budget of \$177.1 million plus an additional \$55 million in food aid. The program focuses on strengthening democratic institutions and increasing citizen participation; investments in health and basic education; and economic growth through support to small producers and natural resources management.

**Sector-Specific Climate Change Activities.** USAID's activities address vulnerability to climate change, natural resources management, and agriculture.

*Addressing Vulnerability to Climate Change.* Due to Nicaragua's frequent encounters with natural disasters, emergency and disaster preparedness are essential to decreasing vulnerability. An illustration of the extreme effects natural disasters can have in Nicaragua can be seen with Hurricane

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

- Associates in Rural Development (ARD)
- Cooperative for Assistance and Relief Everywhere, Inc. (CARE)
- Instituto Interamericano de Cooperación para la Agricultura (IICA)
- International Federation of Red Cross and Red Crescent Societies (IFRCS)
- Nicaraguan Ministry of Natural Resources
- Save the Children
- Winrock International

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

Mitch. In late October 1998, Hurricane Mitch hit Nicaragua, destroying half of the country's gross domestic product and killing more than 3,000 people. Hurricane Mitch damaged or destroyed roads and bridges, hundreds of schools and health centers, and more than 20,000 homes. An estimated 11,550 hectares of agricultural land were destroyed and another 25% of the country's cropland was damaged and eroded by the flooding. Small farmers, who make up the majority of Nicaragua's population, suffered the most. Overall economic losses as a result of Mitch are estimated at \$1.5 billion. Going beyond emergency relief, USAID continues to work with its partners to help the people of Nicaragua reconstruct and improve their lives. In collaboration with the International Federation of Red Cross and Red Crescent Societies, disaster preparedness workshops have been conducted in 100 at-risk communities. Approximately 3,000 people received disaster response training through the program and are now better informed on protecting themselves. Several USAID-supported projects are helping to repair damage in Hurricane Mitch-affected areas and are providing additional workshops on high-risk sites and evacuation procedures.

*Addressing Climate Change Through Natural Resources Management.* USAID is engaging in a natural resources management program in Nicaragua that protects important ecosystems and preserves vital carbon stocks. This is accomplished through the strengthening of protected area management and involving local communities in the administration of the areas. Comanagement of biologically important protected areas is an essential concept in the USAID program in Nicaragua. In these protected areas, local communities have been given the opportunity to assert local control and influence over resource management. A national system for monitoring these protected areas has been adopted by the government and is being used to verify the quality of protection of each area.

There are seven protected areas (760,000 hectares) where actions have been initiated and are currently underway for ecosystem management and protection. For example, the Volcan Mombacho Natural Reserve has been completed with a monitoring system that includes data on perimeter patrols, evidence of poaching, and deforestation.

*Addressing Climate Change Through Agriculture.* Under a USAID agriculture program in Nicaragua, small-scale farmers have been able to diversify production, adopt environmentally sustainable agricultural practices, and increase production and incomes in a sustainable manner. These activities help to increase the area of managed agricultural production, which reduces the loss of carbon. Since 1998, USAID has improved agricultural production systems for over 87,000 small-scale farmers in Nicaragua.

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

- <http://www.usaid.org.ni/>