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**BUREAU FOR DEMOCRACY, CONFLICT, AND HUMANITARIAN ASSISTANCE (DCHA)
OFFICE OF U.S. FOREIGN DISASTER ASSISTANCE (OFDA)**

LATIN AMERICA AND THE CARIBBEAN – Disaster Preparedness and Mitigation Programs

Fact Sheet #1, Fiscal Year (FY) 2008

September 30, 2008

Background

The countries of Latin America and the Caribbean (LAC) are highly vulnerable to a range of natural hazards, including earthquakes, hurricanes, floods, tsunamis, landslides, volcanoes, and drought. In addition, disasters triggered by environmental and industrial incidents, such as forest fires and chemical and oil spills, pose a potential threat. At times, El Niño Southern Oscillation events and poor land use management exacerbate the effects of these hazards. Several countries in the region are also vulnerable to civil unrest and associated humanitarian consequences.

Recognizing these vulnerabilities, USAID/OFDA supports disaster preparedness and mitigation programs aimed at reducing loss of human life, alleviating suffering, and lessening the social and economic impacts of disasters. These programs include risk identification, prioritization, and reduction, as well as post-disaster recovery and short-term rehabilitation projects. In the LAC region, USAID/OFDA promotes local and national self-sufficiency in disaster preparedness and management. USAID/OFDA-supported programs build upon and strengthen the capacity of established national and regional disaster management institutions, many of which already have the ability to meet most emergency needs after an event.

Established in 1989, the Regional Disaster Assistance Program (RDAP) is the primary vehicle for USAID/OFDA's support of disaster risk management in LAC. Over the years, given the increased capacity of disaster management personnel and governments in LAC countries, USAID/OFDA has shifted from a strictly instructional approach to providing more technical assistance for planning, strengthening, and centralizing the role of national organizations in disaster management. USAID/OFDA's technical assistance enhances local and regional abilities to respond to emergency needs by increasing understanding of disaster preparedness and mitigation activities, as well as encouraging intra- and inter-governmental coordination in all risk management initiatives. In many LAC countries, disaster management training is conducted entirely by national trainers, with USAID/OFDA providing only technical assistance.

The RDAP and other preparedness programs are overseen and monitored by USAID/OFDA's team of five regional advisors based in San José, Costa Rica, and a consultant network of 20 disaster management specialists dispersed throughout the region. USAID/OFDA regional advisors and consultants are available for immediate deployment to conduct damage and needs assessments in response to disasters and help coordinate U.S. Government emergency response activities, if required.

In FY 2008, USAID/OFDA provided nearly \$9.2 million for new and ongoing disaster preparedness and mitigation projects in LAC region.

USAID/OFDA/LAC Preparedness and Mitigation Assistance

Regional Programs

- **Regional Disaster Assistance Program (RDAP)**: Through a contract with the International Resources Group (IRG), USAID/OFDA maintains a network of disaster assistance experts throughout the LAC region who are available to deploy to disaster sites, perform damage assessments, and provide guidance on disaster preparedness and mitigation activities. IRG consultants oversee a multi-course program with instruction in disaster management concepts, training methodology, and technical disciplines. The program also provides technical assistance, including guidance for strategic planning and organizational development processes, facilitation in the development and evaluation of national and local risk management training programs, support for inter-institutional coordination mechanisms, and assistance in the preparation of local, departmental, and national emergency action plans. The program began in Latin America in May 1989 and expanded in 1991 to include the Caribbean countries. In FY 2008, the program further expanded to include Chile, the Dominican Republic, and Grenada. Since the

program’s inception, more than 50,000 participants have been trained and 5,150 instructors certified in 32 countries. Many of the USAID/OFDA-trained individuals have assumed leadership roles in national disaster management organizations and presently conduct training in their own countries using local resources. USAID/OFDA contracted IRG to implement the RDAP from 1998 to 2008 and has issued a solicitation for the next five-year phase of the program, which will continue until 2013. Total USAID/OFDA funding for RDAP since 1998 is \$40,347,995 **FY 2008 \$5,153,341**

- Disaster Risk Reduction in the Americas: In FY 2008, USAID/OFDA entered a cooperative agreement with Florida International University (FIU) in Miami to stimulate new disaster risk reduction (DRR) activities and strengthen existing programs in the LAC region. The five-year, \$4.5 million project will provide opportunities for key actors and stakeholders to work together to address vulnerabilities in the region. FIU designed the project to expand upon the underlying concepts of the Paul C. Bell, Jr., Risk Management Initiative, a joint endeavor between USAID/OFDA and FIU that began in 2003 to consolidate and improve risk management programs in the region’s institutions of higher education. Through the new project, FIU plans to create and manage an inventory of DRR initiatives in the LAC region and will identify, promote, and strengthen 12 existing DRR communities of practice (CoPs)—comprising multiple stakeholders, including the public and private sectors, universities, international organizations, non-governmental organizations (NGOs), private voluntary organizations, and civil society groups. In close coordination with USAID/OFDA’s Regional Office for Latin America and the Caribbean, FIU will provide CoPs with strategic scientific, technical, and methodological assistance. The program began in August of 2008 and will continue until August of 2013 **FY 2008 \$800,000**
- Emergency Health Preparedness Program: Since 1998, USAID/OFDA has supported the Pan American Health Organization’s (PAHO) efforts to promote improved disaster preparedness and response in the health sector. In 2003, USAID/OFDA and PAHO entered into a five-year agreement, focused on increasing the capacity of health professionals to respond to disasters in the LAC region. The U.K. Department For International Development, the Canadian International Development Agency (CIDA), and the European Commission’s Humanitarian Aid Office (ECHO) also support the program. PAHO is working to increase and improve advocacy, technical information services, and human resources training in health, environment, and related sectors. Specific PAHO activities include production and dissemination of training materials and health guidelines, support for the development of building codes for health and water facilities, and health surveillance in local communities during the immediate post-disaster period. The five-year agreement will conclude in December 2008. Total USAID/OFDA funding to PAHO for regional technical support in the LAC region since 1998 is \$11,450,870 **FY 2008 \$1,000,000**
- Promoting Private Sector Role in Disaster Assistance: Since July 2004, USAID/OFDA has supported the Pan American Development Foundation (PADF) to promote private sector engagement and contributions to emergency management activities before, during, and after disaster events in the LAC region. PADF has assisted businesses in the development of strategies that encourage quick mobilization of private sector resources for disaster assistance. The program is also bringing emergency management training to private enterprises and creates awareness among businesses regarding disaster preparedness and mitigation. PADF formed partnerships with local and international NGOs and private sector companies to provide 43 disaster risk reduction projects benefiting an estimated 292,000 individuals in more than 149 communities throughout LAC. To support the next phase of the program, active until March 2010, USAID/OFDA provided \$533,648 in FY 2008 to PADF, in addition to \$150,000 contributed by USAID’s Global Development Alliance. Total USAID/OFDA funding to PADF for the implementation of the project since 2004 is \$1,404,202 **FY 2008 \$533,648**
- Assessment of Disaster Management Curricula – Phase III and Phase IV: Implemented by FIU, Phase I and II of the Paul C. Bell, Jr., Risk Management Initiative, were completed in August 2004. During Phase I, FIU assessed the state of disaster, emergency, and risk management instruction in institutions of higher education in the LAC region and selected three institutions in South America to receive small grants. In Phase II, FIU supported the selected institutions of higher education, working to strengthen disaster management learning through creative and innovative approaches. To further the Paul C. Bell, Jr., initiative, USAID/OFDA provided support to FIU in 2006 to begin phases III and IV. In Phase III, FIU conducted an assessment of risk management programs to determine how to provide college credit equivalency for USAID/OFDA risk management courses and training. During Phase IV, from February 2008 to June 2009, FIU is focusing on strengthening successful programs, making each program more sustainable through the provision of scholarships and facilitation of faculty and student exchanges, in addition to public and private sector internships. Total USAID/OFDA funding to FIU for this project since FY 2003 is \$401,187 **FY 2008 \$149,981**

- Volcano Disaster Assistance Program (VDAP): USAID/OFDA supports the U.S. Geological Survey (USGS) VDAP program that provides technical assistance to volcano-monitoring organizations throughout the world. VDAP assistance includes crisis response, training for risk assessment, development of early warning plans, and transfer of volcano-monitoring equipment and technology. During FY 2008, when eruptions at Chaiten Volcano in Chile threatened up to 10,000 people, a VDAP team deployed to Chile to provide technical assistance and equipment to the Servicio Nacional de Geología y Minería (SERNAGEOMIN). In Guatemala, VDAP staff supported capacity-building projects through continued assistance with volcano-monitoring equipment and training to Instituto Nacional de Sismología, Vulcanología, Meteorología e Hidrología (INSIVUMEH) and the Coordinadora Nacional para la Reducción de Desastres (CONRED). In Ecuador, VDAP assisted the Instituto Geofísico with training and the installation of equipment around Cotopaxi Volcano. In addition, VDAP provided technical consultation in response to unrest at volcanoes in Ecuador, El Salvador, Nicaragua, Costa Rica, and Colombia. Since 1986, USAID/OFDA's contribution for VDAP in LAC has totaled approximately \$7.5 million.
..... **FY 2008 \$500,000**

Caribbean Programs

- Tsunami and Coastal Hazards Early Warning System: In FY 2007, USAID/OFDA provided \$300,000 to the Caribbean Disaster Emergency Response Agency (CDERA) to help establish a tsunami and coastal hazards warning system at regional and national levels among CDERA-participating states. The two-year program continues to provide public education and conduct awareness campaigns to help coastal communities respond to hazard warnings, reducing communities' vulnerability to tsunamis, storm surges, flash floods, and other hydrometeorological hazards. In collaboration with the Intergovernmental Oceanic Commission's Intergovernmental Coordination Group for Tsunami and other Coastal Hazards Warning System for the Caribbean and Adjacent Regions, the program promotes partnership between technical and specialized agencies, emergency managers, donors, and at-risk communities. The program is expected to conclude in September 2009.
- Caribbean Tsunami Early Warning System: In August 2006, USAID/OFDA entered into an agreement with the University of the West Indies (UWI) Seismic Research Unit (SRU) as part of a multinational, regional project to strengthen the capacity of the SRU to detect, monitor, and provide early warning of tsunamis and related geological hazards. New equipment and software will assist the dissemination of information regarding geological hazards to vulnerable communities in the Eastern Caribbean. The program also benefits disaster management officials, island governments, planning departments, and Caribbean populations, particularly communities located in coastal areas. The program ended in April 2008. To date, USAID/OFDA has provided \$249,680 to support SRU disaster preparedness activities from August 2006 to February 2008.
- Red Cross Training and Risk Reduction: In FY 2008, USAID/OFDA provided support to the American Red Cross (AmRC) to support a 15-month community-based program for increased disaster preparedness capacity in the Caribbean. From February 2008 to June 2009, in coordination with the Guyana Red Cross Society, the International Federation of the Red Cross and Red Crescent Societies, and host governments, the program will provide training benefiting up to 10,000 individuals in 10 highly vulnerable communities in Guyana, St. Lucia, and Tobago. In addition to the three targeted countries and in coordination with local Red Cross Societies, AmRC will develop a regional disaster preparedness toolbox, action plan, and communications strategy to increase the capacity of disaster management professionals, organizations, and communities to respond to disaster-related emergencies. At program completion, the plan and strategy will be disseminated throughout the Caribbean, benefiting an additional 15,000 people **FY2008 \$399,148**
- Hurricane Hazard Maps for the Caribbean: Since FY 2007, USAID/OFDA provided \$126,560 to PAHO to develop wind hazard maps for the Caribbean basin, including all of the islands of the Caribbean and the Caribbean coastlines of South and Central America. In collaboration with the U.N. International Strategy for Disaster Reduction, the Caribbean Division of the Institution of Structural Engineers, the Council of Caribbean Engineering Organizations, the Caribbean Development Bank, and ECHO, PAHO will incorporate more than 20 years of the region's data to improve the quality of the wind hazard information currently available. Twenty new maps, released in May 2008, are enabling wind hazard experts, government authorities, and the engineering and architectural communities to incorporate wind hazard guidance into the structural design of hospitals and other relevant facilities. The program will conclude on December 31, 2008, when PAHO plans to integrate the results of the wind map into a project defining uniform building standards in the Caribbean.
- Caribbean Disaster Management Conference: In cooperation with CIDA, USAID/OFDA provided funds to support CDERA's three-day second annual Disaster Management Conference, held in December 2007 in Barbados.

The conference provided an opportunity for disaster management professionals to share ideas and experiences to improve disaster risk reduction and response in the region..... **FY 2008 \$30,000**

- Flood Early Warning System in Jamaica: In FY 2007, USAID/OFDA provided \$35,000 to the Government of Jamaica Office of Disaster Preparedness and Emergency Management (OPDEM) to conduct a simulation test of the national flood early warning system. The preparedness exercise served as a practice tool for local disaster coordinators to assess the preparedness and capacity of local authorities and communities to respond to the threat of flooding in several areas, including Fort George and Rio Grande Valley, Portland Parish, Annotto Bay, Saint Mary Parish, and Rio Cobre basin, Saint Catherine Parish. The project is expected to conclude in December 2008.
- Urban Search and Rescue (USAR) Training and Equipment: In December 2007, in coordination with the Government of Panama and International Search and Rescue Advisory Group (INSARAG), USAID/OFDA provided USAR equipment and held a training course entitled Collapsed Structures Rescue – Light Level. At least 20 individuals from multiple countries participated in the course, which served to gauge skill and evaluate capabilities of USAR programs in various countries. **FY 2008 \$15,000**

Central America Programs

- School-Based Risk Reduction in Honduras: From April 2008 to mid-September 2009, NGO World Vision will work to build upon the accomplishments of the USAID/OFDA-supported Honduras School Disaster Preparedness Project, which introduced standard disaster risk management curricula in 42 primary schools throughout Honduras. World Vision plans to extend the use of the Risk Management Methodological Guide (RMM) and conduct related training and community disaster mitigation activities. In coordination with the Inter-Institutional Alliance for Risk Management Education, World Vision will promote changes in behavior and perception regarding disaster risk reduction, specifically among children. World Vision will also work with public and private stakeholders to promote the RMM and expand the guide’s distribution to 51 additional schools in southern and central Honduras. In addition, World Vision will implement a pilot project in four communities to enable participating municipal emergency committees to develop community-driven risk mitigation strategies and initiatives through the provision of small sub-grants and additional disaster mitigation and response training **FY 2008 \$347,126**
- Disaster Preparedness Training for Mexican Officials: In June 2008, USAID/OFDA provided funds to World Vision to train approximately 180 Mexican state and local disaster management officials in Damage Assessment and Needs Analysis (DANA) methodology. In Mexico, disaster and emergency assessment is currently conducted in a number of different ways, varying by state and locality. The goal of the training program is to promote the DANA standard method of disaster evaluation throughout Mexico, targeting Chiapas, Tabasco, Oaxaca, and Michoacán states..... **FY 2008 \$91,080**
- Disaster Preparedness in Western Honduras: In September 2006, USAID/OFDA awarded a \$76,400 grant to Action of Churches Together (ACT) in Honduras to train and organize local emergency committees in 40 highly vulnerable communities in Naranjito and Azacualpa, Santa Bárbara Department; Nueva Arcadia, Copán Department; and La Unión, Lempira Department. The emergency committees created risk maps and contingency plans to facilitate evacuation and rescue, installed an early warning system to alert the population to signs of danger and thresholds for evacuation, and carried out small-scale mitigation projects to reduce risk in the most vulnerable communities. Until program conclusion in December 2007, ACT worked to strengthen coordination at local and municipal levels, utilizing existing governmental structures and civil society groups.
- Central America Mitigation Initiative (CAMI) Assessment: Following Hurricane Mitch in Central America in 1998, USAID/OFDA provided funding to USGS to enhance stream-flow monitoring in El Salvador, Guatemala, and Nicaragua, as well as increase the capabilities of geographic information systems in Honduras. In September 2007, USGS began to assess the projects’ impact and determined that additional training was needed for Central American technicians responsible for operating and maintaining the monitoring stations in each country. Based on this recommendation, USAID/OFDA provided additional funding to support training on the operation and maintenance of hydrometeorological stations in Guatemala City, Guatemala. Since 2007, USAID/OFDA has provided \$164,854 to support the CAMI assessment..... **FY 2008 \$71,849**
- Wildfire Prevention and Preparedness in Mexico: USAID/OFDA partnered with the U.S. Forest Service (USFS), USAID/Mexico, and the Government of Mexico National Forest Commission to develop a management plan to mitigate the risk of wildfire and ensure effective and safe responses at the local, regional, and national levels. Based on the ongoing work of the joint USAID/USFS Fire Management Program, in FY 2007, USAID/OFDA

provided \$100,000 to USFS for a project that promoted increased inter-agency coordination and capacity at all levels while mitigating health, environmental, and economic damages. Program activities focused on prevention, preparedness, and planning. By the program's conclusion in December 2007, more than 190 staff from participating agencies in the affected states of Chiapas, Campeche, Yucatán, and Quintana Roo had received training in Incident Command System to enhance agency effectiveness in coordinating disaster management.

- Risk Management in El Salvador: In October 2005, two eruptions of the Ilamatepec Volcano deposited a large amount of material at the volcano's summit. Following the volcanic eruptions, heavy rains resulted in floods, landslides, and volcanic mudflows in surrounding communities. To address the country's vulnerability to these natural hazards, in September 2007, USAID/OFDA provided \$126,560 through USAID/El Salvador to the Centro de Protección de Desastres (CEPRODE) to support activities to strengthen disaster mitigation and management capacities in El Congo and Santa Ana municipalities and other communities on the eastern side of the Ilamatepec Volcano. In coordination with the National Civil Protection System and the Salvadorian Ministry of Education and Ministry of Health, the program builds risk reduction capacity and promotes appropriate emergency response activities, including formation of school, municipal, and community civil protection commissions, development of action plans and risk maps, and identification of secure evacuation routes. CEPRODE has also equipped shelters, operation centers, and emergency brigades, and continues to conduct periodic evacuation simulations and risk management trainings. The program is expected to conclude in March 2009.
- Strengthening Local Emergency Prevention and Response Capacities in Panama: Seasonal heavy rainfall in the highlands of Panama's Chiriquí Province, combined with poor agricultural and waste disposal practices frequently leads to floods and landslides in the area. In FY 2007, USAID/OFDA awarded a \$96,351 grant to the Fundación para el Desarrollo Integral Comunitario y Conservación de los Ecosistemas de Panamá (FUNDICCEP) to strengthen community capacities for prevention and response to emergency and disaster situations. Project activities included documentation of risk and vulnerability in Cerro Punta town, as well as the development and implementation of an action plan for inter-sectoral cooperation on community capacity building for disaster prevention and response. FUNDICCEP will also provide documentation of experience, lessons learned, and perceived limitations of the capacity building plan. The program is expected to conclude in March 2009.
- Risk Reduction in Honduras: With USAID/OFDA funding, in July 2008 GOAL began a five-month project in Gracias a Dios Department to identify and document traditional practices of disaster preparedness and response in 13 Miskito and Garifuna indigenous communities located in areas vulnerable to recurring natural disasters. In coordination with COPECO, USAID/OFDA, and the Honduran Ministry of Education, GOAL plans to use the information acquired during the project to improve educational materials associated with school disaster preparedness programs. **FY 2008 \$30,268**
- Risk Reduction Workshops in Guatemala: In May 2008, USAID/OFDA provided funding to CONRED to support a series of risk reduction workshops during the summer of 2008. The workshops served as a practice tool for local disaster coordinators, allowing the government to assess the preparedness and capacity of local authorities and populations to respond to significant disasters **FY 2008 \$12,500**
- Disaster Simulation Exercise in Honduras: In June 2008, USAID/OFDA provided support to the Comisión Permanente de Contingencias (COPECO) through implementing NGO partner GOAL for a disaster simulation exercise. The preparedness exercise serves a practice tool for local disaster coordinators and enables the Honduran government to assess the preparedness capacity of authorities and the population to respond to disasters. **FY 2008 \$20,000**
- Volcano Preparedness Workshop: In March 2008, USAID/OFDA provided funds to support a seven-day volcano preparedness workshop held at the Costa Rican Volcanic and Seismological Observatory (OVSCORI). The workshop was designed to strengthen and improve the technical skills of participating volcano-monitoring scientists from seven countries in the LAC region. **FY 2008 \$12,000**

South America Programs

- Volcano Preparedness in Ecuador: In FY 2008, as Tungurahua Volcano became increasingly active, USAID/OFDA provided support to the Ecuadorian Red Cross (ERC) for disaster preparedness activities, including the purchase of basic relief commodities for distribution in the event of an eruption..... **FY 2008 \$25,000**

- Earthquake Monitoring in Bolivia: In FY 2007, USAID/OFDA provided a total of \$71,673 to USGS and the Observatorio San Calixto (OSC), a small private observatory in Bolivia, to monitor earthquake activity. With USAID/OFDA funds, OSC continues to use portable seismic equipment to monitor micro-earthquakes occurring near the capital city of La Paz. In determining where small earthquakes occur, OSC is able to identify the areas most vulnerable to larger earthquakes, allowing OSC to prioritize future mitigation activities.

Total USAID/OFDA FY 2008 LAC Preparedness and Mitigation Assistance.....\$9,190,941

USAID/OFDA DISASTER PREPAREDNESS AND MITIGATION ASSISTANCE IN LAC REGION

<i>Implementing Partner</i>	<i>Project</i>	<i>Location</i>	<i>FY 2008 Funding</i>	<i>Cumulative Funding for Ongoing Projects</i>
ACT	Disaster Preparedness in Western Honduras	Honduras	—	\$76,400
AmRC	Red Cross Training and Risk Reduction	Caribbean	\$399,148	\$399,148
CDERA	Tsunami and Coastal Hazards Early Warning System	Caribbean	—	\$300,000
CDERA	Caribbean Disaster Management Conference	Caribbean	\$30,000	\$30,000
CEPRODE	Risk Management in El Salvador	El Salvador	—	\$185,600
COPECO	Disaster Simulation Exercise in Honduras	Honduras	\$20,000	\$20,000
CONRED	Risk Reduction Workshop in Guatemala	Guatemala	\$12,500	\$12,500
ERC	Volcano Preparedness in Ecuador	Ecuador	\$25,000	\$25,000
FIU	Disaster Risk Reduction in the Americas	LAC Region	\$800,000	\$800,000
FIU	Assessment of Disaster Management Curricula	LAC Region	\$149,981	\$401,187
GOAL	Risk Reduction in Honduras	Honduras	\$30,268	\$30,268
FUNDICCEP	Strengthening Local Emergency Prevention and Response Capacities	Panama	—	\$96,351
INSARAG	USAR Training and Equipment	Caribbean	\$15,000	\$15,000
IRG	Regional Disaster Assistance Program	LAC Region	\$5,153,341	\$40,347,995
OPDEM	Flood Early Warning System	Jamaica	—	\$35,000
OSC	Earthquake Monitoring and Surveillance	Bolivia	—	\$67,796
OVSCORI	Volcano Preparedness Workshop	Costa Rica	\$12,000	\$12,000
PADF	Promoting Private Sector Role in Disaster Assistance	LAC Region	\$533,648	\$1,404,202
PAHO	Hurricane Hazard Maps for the Caribbean	Caribbean	—	\$126,560
PAHO	Emergency Health Preparedness Program	LAC Region	\$1,000,000	\$11,450,870
USFS	Wildfire Prevention and Preparedness	Mexico	—	\$100,000
USGS	Earthquake Monitoring (in coordination with OSC)	Bolivia	—	\$3,877
USGS	Central America Mitigation Initiative Assessment	Central America	\$71,849	\$164,854
UWI	SRU Caribbean Tsunami Early Warning System	Caribbean	—	\$249,680
VDAP	Volcano Disaster Assistance Program	LAC Region	\$500,000	\$7,545,000
World Vision	School-Based Risk Reduction in Honduras	Honduras	\$347,126	\$347,126
World Vision	Disaster Preparedness Training for Mexican Officials	Mexico	\$91,080	\$91,080
USAID/OFDA PREPAREDNESS AND MITIGATION ASSISTANCE IN LAC			\$9,190,941	\$64,337,494