## BHR/OFDA Regional Assistance

In addition to the specific BHR/OFDA-provided, country-level assistance noted above, BHR/OFDA also funded \$14.3 million in regional assis-

tance to Honduras, Nicaragua, Guatemala, and El Salvador. This assistance included \$4.3 million to PAHO for health, water, and sanitation activities; \$5 million to DOD support reconstruction activities, including the purchase of materials and supplies; \$4 million to DOD for helicopters to aid in delivery of relief commodities;



A street in Armenia, Colombia following the January earthquake (photo by Miami-Dade Fire and Rescue Team).

\$500,000 to the International Center for Tropical Agriculture for seed multiplication in Honduras and Nicaragua; \$245,849 to BHR/OFDA's Regional Office for Latin America and the Caribbean in San Jose, Costa Rica for USAID/DART administrative costs; and \$100,000 for the activation and staffing of a 1-800 public information center.

#### BHR/OFDA Assistance ...... \$14,328,320

# **Colombia** *Earthquake*

On January 25, 1999, an earthquake measuring 6.0 on the Richter Scale struck central Colombia. The most devastated areas included the cities of Arme-

nia and Calarcá in the Department of Quindío, and the city of Pereira in the Department of Risaralda. The tremor killed 1,171 people, injured 4,765 residents, affected more than 425,000 people, rendered and 150,000 inhabitants homeless. More than 30 aftershocks were recorded, the largest of which registered nearly 5.6 on the Richter

Scale. The Government of Colombia declared 20 municipalities to be disaster zones, with more than 45,000 houses destroyed or damaged. An estimated 65% of all buildings were destroyed or damaged beyond repair in Armenia and Calarcá.

On January 26, U.S. Ambassador Curtis W. Kamman declared a disaster due to the damage caused by the earthquake and aftershocks. BHR/OFDA provided \$125,000 to USAID/Bogotá for the local purchase and transport of emergency relief supplies, including plastic sheeting and blankets. Included in this figure was a grant for \$15,000 provided through USAID/Bogotá to the Colombian Red Cross. BHR/OFDA facilitated the transport of 8,400 HDRs to Pereira to meet emergency food needs. The HDRs were provided by DOD and transported to Pereira at a total cost of \$140,000.

Following the disaster declaration, BHR/OFDA immediately deployed a three-person assessment team, comprised of a senior regional advisor, an information officer, and a health specialist, to con-

duct damage and needs assessments, coordinate the USG response, and report on the disaster situation. The assessment team was augmented with an additional disaster response specialist on January 30. A BHR/OFDA-funded 62-person Miami-Dade, Florida SAR team was deployed to Colombia on January 26, at a cost of \$890,517. Upon arriving

in Colombia, the SAR team established an emergency operations center and integrated itself into international SAR efforts in Armenia. Although SAR team did not rescue survivors, they successfully used technical equipment to retrieve eight bodies from a collapsed structure. On January Colombia's 28, president officially declared the rescue phase over, the SAR team began the

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A Miami-Dade Search and Rescue dog sniffs a void in an attempt to locate earthquake survivors buried under a collapsed building (photo by Miami-Dade Fire and Rescue Team).

demobilization process. Four members of the SAR team remained in Armenia to help the assessment team address remaining relief needs. The final SAR team member departed Colombia on February 8.

BHR/OFDA also funded the deployment of an eight-person Community Technical Support Team, comprised of Miami-Dade and Fairfax County, Virginia SAR personnel, to advise Colombian officials on ongoing rescue and relief efforts. The technical assistance team arrived in Bogota on January 28, but returned to the U.S. the following day given the completion of SAR efforts and the demobilization of the SAR team.

On January 27, BHR/OFDA airlifted 8,000 blankets and 40,000 sq.ft. of plastic sheeting to

Bogotá to help meet the immediate needs of earthquake victims. Total purchase and transport costs for the relief supplies was \$209,750. On February 4, a second airlift of 1,200,000 sq.ft. of plastic sheeting arrived in Colombia; the total cost of the second purchase and airlift was \$174,030. BHR/OFDA plastic sheeting was provided to earthquake victims who

remained unprotected from heavy rains in late January and early February. BHR/ OFDA technical assistance plastic sheeting also was used to construct community kitchens day-care and facilities in Barcelona, Buena Vista, Pijao, and Armenia. Finally, BHR/OFDA plastic sheeting was provided to small coffee producers to repair homes and processing facilities. This allowed coffee production

to resume and, therefore, helped to stabilize the local economy.

Through USAID/Bogotá, BHR/OFDA funded a four-person USACE team to conduct a site assessment of an unstable hillside above a critical aqueduct that supplies water to the city of Pereira. The assessment cost \$51,000. With \$250,000 in assistance provided through BHR/OFDA, PAHO provided medical equipment and emergency repairs to health infrastructure in affected communities.

In addition, BHR/OFDA provided \$1 million through USAID/Bogotá to fund four rehabilitation projects. The projects included local hazard mapping of earthquake risk that provided the basis for Armenia's housing and infrastructure reconstruction plan;



workshops to provide instruction on earthquakeresistant uses of local construction materials; the construction of community centers to serve as facilities for pre-existing day care programs for working parents; and the establishment of a materials bank to provide basic seismically-resistant construction materials for shelter rehabilitation. All project activities were undertaken in coordination with Colombian officials, the Colombian Association of Seismic Engineering, the Colombian Institute of Family Well-Being, the National Federation of Coffee Growers, and the Foundation for Higher Education. BHR/OFDA also funded two USGS seismic and earthquake hazards experts to evaluate the technical aspects and objectives of proposed microzoning work for Colombia.

 USAID/OFDA Assistance
 \$2,843,495

 Other USG Assistance
 \$42,000

 Total USG Assistance
 \$2,885,495

## **–Dominican Republic** – *Hurricane*

During FY 1999, BHR/OFDA continued to provide relief assistance to Dominican victims of Hurricane Georges. On September 23, 1998, the storm crossed the Dominican Republic, killing 208 people and displacing 134,836 residents from their homes. The actual total number of deaths may never be determined because many unregistered migrant workers were swept away by floodwaters and mudslides. (For additional information, please see the "Dominican Republic - Hurricane" case report in the FY 1998 BHR/OFDA Annual Report.)

The areas of the Dominican Republic most affected by Hurricane Georges were the southeast provinces of La Romana and San Pedro de Macoris, the south-central province of Distrito National (which includes Santo Domingo), and the southwest provinces of San Juan, Bahoruco, and Barahona. While the greatest wind damage to housing was in the coastal areas of Santo Domingo and to the east, most flood damage to houses was in the south and west. Critical shortages of food, water, and shelter occurred in

poor urban neighborhoods and rural areas throughout the country in the aftermath of the storm.

Schools, hospitals, clinics, Santo Domingo's international airport, and municipal water systems in the impacted areas also were damaged or closed. In addition, nearly all of the country's road network and 60% of the bridges sustained some damage. Disruptions to the agricultural sector were also significant. The Government of the Dominican Republic's Secretary of Agriculture reported that agricultural damage totaled \$260 million. This total included losses of crops, poultry, small ruminants, pastures, and grain crops for large animals. According to the Dominican Tourism Association, between 5–10% of the country's tourism facilities were adversely affected.

On October 5, 1998, U.S. Chargé d'Affaires Linda Watt redeclared a disaster due to the continued emergency needs that existed in the aftermath of Hurricane Georges. BHR/OFDA contributed nearly \$3 million in assistance in FY 1999, in addition to the more than \$1.9 million that it provided in FY 1998. This assistance included \$254,000 to assist a Government of the Dominican Republic Forestry Department wood salvaging project, \$603,094 for an agricultural rehabilitation project in the Tamayo community, and nearly \$1.7 million for emergency shelter and water/sanitation repairs in Santo Domingo, San Juan, Azva, and the southwest region of the Dominican Republic. An additional \$260,000 was spent on water tanks, generators to power small municipal water pumps, and seeds for replanting in the southwestern part of the country. BHR/OFDA also replenished plastic sheeting dispatched to the Dominican Republic, at a cost of \$91,239.

First Lady Hillary Clinton announced a USG relief and reconstruction package of \$14.2 million during her November 19-21, 1998 visit to the Dominican Republic. In FY 1999, BHR/FFP provided 18,550 MT of P.L. 480 Title II emergency food commodities, valued at \$10.8 million, to WFP and the American Red Cross.

 BHR/OFDA Assistance
 \$2,963,439

 Other USG Assistance
 \$10,844,900

 Total USG Assistance
 \$13,808,339



### • Haiti

#### Hurricane

During FY 1999, BHR/OFDA continued to provide relief assistance to Haitian victims of Hurricane Georges. On September 22-23, 1998, the storm struck Haiti, leaving 147 people dead, 34 injured, and 167,500 affected. The heavy rains also caused extensive crop damage with total losses to the agricultural sector estimated at \$179 million. (For additional information, please see "Haiti - Hurricane" case report in the FY 1998 BHR/OFDA Annual Report.)

On December 23, 1998, U.S. Ambassador Timothy Carney redeclared a disaster due to the emergency needs that existed in the aftermath of the hurricane. A team of BHR/OFDA regional advisors conducted assessments immediately after the hurricane and identified the need to rehabilitate water and irrigation systems.

BHR/OFDA-funded rehabilitation projects included \$14,500 for a CRS training program for farmer associations; \$20,303 to CARE to rehabilitate an existing irrigation system for 350 families; \$153,256 to the Pan American Development Foundation (PADF) to repair the municipal water system in the city of Desvarieux; and \$35,500 to the Winrock International Institute for Agricultural Development for road rehabilitation that benefitted 25,718 residents in the Bel Fontaine Region.

To increase food security in the most adversely affected regions of Haiti, BHR/OFDA provided more than \$1.2 million to CARE to distribute bean seeds and plantain cuttings to farmers in the northwest and southern regions for the December 1998 planting season. PADF received \$168,510 from BHR/OFDA to support a tool bank for 10,000 farm families. To restore salt production facilities, BHR/OFDA provided \$28,821 to CARE and UMCOR for a joint project that supported the livelihoods of 200 people. In addition, \$42,890 was provided to replenish a BHR/OFDA stockpile with plastic sheeting and blankets that were distributed immediately after Hurricane Georges struck Haiti.

BHR/OFDA Assistance ......\$1,732,440

## ---Honduras=

#### **Fire**

On February 11, 1999, a fire occurred at the El Cajón Dam hydroelectric power station in northern Honduras. The power station generates 60% of the electricity consumed by Honduras. The fire caused extensive damage to one transformer, while three others sustained minor damage. In addition, the fire created toxic fumes, which made approaching the hydroelectric facility hazardous. There were no reported deaths or injuries as a result of the fire.

At the request of the President of Honduras, U.S. Ambassador James Creagan declared a disaster on February 12 and requested technical assistance to assess the extent of the damage. BHR/OFDA responded by providing \$200,000 to fund the deployment of two USG teams to the site. A sixperson environmental safety assessment team from the USCG Gulf Strike Team was dispatched to the scene on February 13. The USCG team evaluated the environmental hazards caused by the transformer fire and cleared the way for the safe entry of other technical experts from the Government of Honduras and the USACE. On February 14, a two-person USACE engineering team arrived in Honduras to assess the extent of structural damage to the power station.

Upon arrival, the USCG team determined that carbon monoxide levels at the dam remained high. Protective equipment was provided to permit access for local response personnel to cool down the transformer and ventilate the power station and transformer room. By February 17, the USCG's monitoring of the power station's air quality indicated that contaminant levels were no longer critical. Thereafter, engineers from the national electric company and USACE were allowed to enter the site without protective equipment. Following its assessment, the USACE team provided recommendations to Honduran officials on more effective technical error data analysis, fire suppression systems, ventilation systems, and transformer and cable replacement procedures. On February 19, the USCG and USACE teams departed Honduras.

BHR/OFDA Assistance ......\$200,000



## ·Honduras**·** Floods

From September - November 1999, heavy rains triggered a national state of alert along the Ulua, Humaya, and Sulaco rivers. Flooding and landslides occurred throughout Honduras, adversely affecting communities in many departments, including Santa Barbara, Santa Rosa de Copan, Choluteca, Valle, and Morazan In addition, sections of Tegucigalpa, Honduras' capital, were flooded several times. The Honduran National Disaster Agency reported that 39 people were killed, 30,022 residents were evacuated, and more than 3,000 houses were damaged or destroyed.

On September 24, U.S. Ambassador Frank Almaguer declared a disaster due to the effects of the flooding. BHR/OFDA provided \$25,000 to the IOM for the local purchase of emergency relief supplies, including stoves, shelter materials, and construction tools for flood victims. On September 27, BHR/OFDA airlifted 391,680 sq. ft. of plastic sheeting to Honduras to provide temporary shelter for 1,600 flood-affected families. The total cost of the BHR/OFDA plastic sheeting and airlift was \$50,000.

BHR/OFDA Assistance ...... \$75,000

## Paraguay = Cold Wave/Fire

Poor rainfall, fires to clear agricultural lands, and periods of frost combined to cause significant crop losses and to damage grazing areas in northern Paraguay during the fall of 1999. The fires burned dry agricultural fields, rangelands, pastures, and forests, affecting more than 13,000 people living in rural communities near the cities of Concepción and San Pedro. On September 22, U.S. Chargé d'Affaires Stephen G. McFarland declared a disaster due to damage caused by the fires and unusual weather conditions. BHR/OFDA responded by providing \$25,000 through USAID in Asuncion to the Para-

guayan Red Cross for the local purchase of emergency food supplies. The Paraguayan Red Cross focused its emergency food distribution on approximately 1,340 affected families in 17 localities in the Belen District, 20 km east of the city of Concepción.

BHR/OFDA Assistance ...... \$25,000

