

# LATIN AMERICA AND THE CARIBBEAN — DISASTER RISK REDUCTION

FISCAL YEAR (FY) 2017 SEPTEMBER 30, 2017

### NUMBERS AT A GLANCE

### \$**95** million

Total USAID/OFDA Funding for LAC in FY 2017

## \$7.3 million

Programs in the Caribbean, Including Haiti, with DRR Components

## \$4.8 million

Programs in Haiti with DRR Components

## \$3.4 million

Programs in Honduras with DRR Components

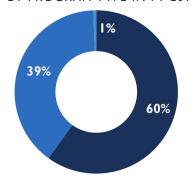
## \$2.4 million

Programs in Guatemala with DRR Components

33

Partners Implementing
FY 2017 Programs with DRR
Components in LAC

### USAID/OFDA1 FUNDING BY PROGRAM TYPE IN FY 2017



- Response Programs (60%)
- Stand-Alone DRR Programs (39%)
- Programs that Integrate DRR with Disaster Response (1%)

### DISASTER RISK REDUCTION (DRR) FUNDING

FOR LAC IN FY 2017

Stand-Alone DRR Programs \$34,378,352

Programs that Integrate DRR with Disaster Response \$506,355

\$34,884,707

#### **OVERVIEW**

- Countries in the Latin America and the Caribbean (LAC) region<sup>2</sup> experience a range of
  natural hazards, including droughts, earthquakes, floods, forest fires, hurricanes, landslides,
  tsunamis, and volcanoes. El Niño and La Niña phenomena occur periodically, exacerbating
  the impacts of hydrometeorological events in the LAC region. Unplanned urban expansion,
  environmental and natural resource degradation, and land-use management challenges also
  increase populations' vulnerability and exposure to natural hazards.
- USAID/OFDA supports DRR programs in LAC to build resilience and improve emergency
  preparedness, mitigation, and response capacity at the local, national, and regional levels.
   USAID/OFDA focuses on strategic, context-specific programs designed to meet particular
  risk reduction needs in each country, with capacity building a consistent theme across DRR
  activities.
- In FY 2017, USAID/OFDA provided approximately \$34.9 million to support DRR
  initiatives throughout the LAC region. USAID/OFDA staff based in the regional office in
  Costa Rica and the field office in Haiti engaged directly with community members, national
  officials, and other stakeholders to prepare for, respond to, and lessen the effects of
  disasters.

1

<sup>&</sup>lt;sup>1</sup> USAID's Office of U.S. Foreign Disaster Assistance (USAID/OFDA)

<sup>&</sup>lt;sup>2</sup> The LAC region encompasses Antigua and Barbuda, Argentina, The Bahamas, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, Uruguay, and Venezuela.

#### STAND-ALONE DRR PROGRAMS IN LAC

In FY 2017, USAID/OFDA provided nearly \$34.4 million for stand-alone DRR initiatives that improved preparedness and aimed to prevent and reduce the worst impacts of disasters. USAID/OFDA provided additional funding for global DRR programs that included activities in the LAC region. At the regional and country levels, USAID/OFDA and implementing partners engaged communities, national and local governments, international and regional organizations, and non-governmental organizations (NGOs) to develop effective strategies tailored to the needs of at-risk populations. Analysis of existing capacities and social, economic, and environmental trends guided program design, and USAID/OFDA programs addressed underlying causes of recurrent disasters, such as environmental degradation, when possible. The programs reflect USAID/OFDA's commitment to support capacity development; strengthen linkages among risk identification, monitoring, early warning, and preparatory action; and expand partnerships among stakeholders at local, national, and regional levels.

#### **LAC Regional Programs**

- Capacity Building for DRR in Higher Education Institutions: USAID/OFDA provided the Central American University Higher Council (CSUCA) with nearly \$1.2 million in FY 2017 to continue a project designed to assist universities in the LAC region to incorporate DRR into planning, management, research, and training. In coordination with the Network of Latin American and the Caribbean Universities for Disaster Risk Reduction (REDULAC), CSUCA is supporting partner institutions to continue conducting applied research on DRR, providing DRR courses to bolster risk management capacity in the region, and establishing and strengthening DRR centers at universities—modeled after existing centers in the Dominican Republic, Guatemala, and Peru—to contribute to campus DRR initiatives and national DRR systems.
- DRR in the Americas: To reinforce DRR best practices in the LAC region and strengthen DRR programs among public- and private-sector organizations, particularly universities, USAID/OFDA entered into a cooperative agreement with Florida International University (FIU) in FY 2008. With more than \$1.5 million in FY 2017 funding, USAID/OFDA continued to support the educational and professional development of the next generation of Latin American DRR leaders through scholarships, student and faculty exchanges, and small grants. Through the FIU-managed DRR in the Americas program, universities in Latin America train professionals—including builders, land-use managers, and urban planners—to incorporate DRR into national plans for disaster risk management. In FY 2017, the program led workshops across the LAC region on topics including emergency operations systems, hurricane preparedness, and risk management; conducted courses for a graduate certificate on DRR, local development planning, and land use management at four universities in Argentina, Chile, Colombia, and Mexico; and offered online DRR training courses, among other activities. In addition, FY 2017 funding supported an FIU team to evaluate the effectiveness and sustainability of USAID/OFDA's approach to urban DRR in the LAC region, aiming to build an evidence base for urban DRR methods and inform future USAID/OFDA programming in the region. From FY 2008–FY 2017, USAID/OFDA provided nearly \$11 million for the DRR in the Americas program.
- Building Civil Society DRR Capacity in LAC: USAID/OFDA provided more than \$151,000 in FY 2017 funding to
  support the Global Network of Civil Society Organizations for Disaster Reduction (GNDR) to increase collaboration
  between GNDR member organizations in LAC and other DRR stakeholders. By increasing civil society capacity to
  monitor and contribute to DRR action in accordance with commitments to the Sendai Framework, the project is
  intended to ensure DRR policies are accountable to local communities, promote the inclusion of vulnerable populations,
  and build community resilience to natural disasters.
- Strengthening National Disaster Risk Management Systems: Recognizing the potential for increased use of cash transfer programming to respond to natural disasters in Central America and the Caribbean, USAID/OFDA supported GOAL with nearly \$399,000 to increase the capacity and preparedness of national disaster risk management systems (NDRMSs). The program aims to increase preparedness and coordination capacity of NDRMSs and other humanitarian actors in the Dominican Republic, El Salvador, Guatemala, and Honduras to provide high quality, timely cash- or voucher-based interventions, when appropriate, in response to natural disasters.

- RDAP: USAID/OFDA provided nearly \$6.9 million to support Regional Disaster Assistance Program (RDAP) activities in the LAC region in FY 2017. Established in 1989, RDAP is the primary vehicle for USAID/OFDA's support to manage disaster risk in LAC. In FY 2017, USAID/OFDA's team of San José, Costa Rica-based staff and a consultant network of 29 disaster risk management specialists throughout the region continued to oversee and monitor RDAP programs, which expanded local and regional capabilities, improved intra- and inter-governmental coordination, and strengthened disaster preparedness, mitigation, and risk management activities. In addition, USAID/OFDA maintained a network of more than 400 local surge staff available for activation, as needed, to respond to disasters throughout the region. Over the past decade, RDAP has provided training to thousands of emergency responders, including courses on DRR, emergency management systems, the incident command system (ICS), forest fire prevention and control, school safety, urban search-and-rescue (USAR), disaster management, and damage assessment and needs analysis. RDAP has also provided small grants to promote community-level DRR projects. The grants, averaging \$30,000 each and supporting projects for up to one year, contributed to host governments' DRR priorities and supported innovative DRR initiatives and pilot projects. Since FY 2008, USAID/OFDA has provided more than \$75 million for RDAP.
- PREPARE: Miyamoto International launched the Preparing Rescue and Emergency Personnel to Ameliorate the Response to Earthquakes (PREPARE) program in FY 2015 to strengthen the capacity of officials and USAR teams in the LAC region. With \$750,000 in USAID/OFDA FY 2017 assistance, Miyamoto International expanded the program into El Salvador and Mexico, while maintaining existing efforts in Colombia and Costa Rica. The program continues to identify urban structures vulnerable to earthquakes; increase USAR teams' knowledge of building collapse scenarios and best response practices; and support municipal authorities to understand the potential effects of earthquakes, strengthen coordination for effective response, and implement damage assessments in the aftermath of disasters. USAID/OFDA has provided nearly \$2.1 million for the PREPARE program since FY 2015.
- Building Tsunami Preparedness: USAID/OFDA provided the National Oceanic and Atmospheric Administration (NOAA) with \$150,000 in FY 2017 to establish the multi-year Tsunami Ready program in coastal communities of Grenada, Haiti, and Honduras to advance tsunami awareness, education, and planning. Program activities include developing and distributing tsunami evacuation maps and emergency operation plans; installing tsunami signage; and supporting awareness, education, and training activities to save lives and livelihoods in the event of a tsunami. NOAA, with prior year assistance, also continued to implement Tsunami Ready program activities in other nations, including Saint Kitts and Nevis. Additionally, USAID/OFDA supported NOAA and the International Tsunami Information Center to develop a standardized training course and processes to facilitate the development of reliable tsunami evacuation maps at the community level.
- Strengthening Humanitarian Coordination and Capacity: In FY 2017, USAID/OFDA supported the UN Office for the Coordination of Humanitarian Affairs (OCHA) with \$500,000 to build the capacity of OCHA's Regional Office for LAC by strengthening response and surge capacity, as well as collaborating with regional and national partners—including the Caribbean Disaster Emergency Management Agency and Central American Coordination Center for the Prevention of Natural Disasters (CEPREDENAC)—to maintain and increase preparedness and harmonize disaster response protocols in accordance with UN standards.
- Health Sector Resilience in LAC: In FY 2017, USAID/OFDA provided \$1 million to the Pan American Health Organization (PAHO) to continue supporting health sector resilience in the region. The five-year program—which completed its fourth year in FY 2017—aims to enhance the capability of LAC countries to provide timely, appropriate, and gender-sensitive health responses following disasters and other crises. With USAID/OFDA support, PAHO worked to bolster the effectiveness of national health through the development of guidelines and interventions to improve the resilience of health services throughout the region, as well as increase the effectiveness and efficiency of disaster responses. In addition, PAHO advocated for health-specific DRR programs through the publication of scientific

reports on the cost-effectiveness of preparedness and mitigation measures. Since FY 2013, USAID/OFDA has provided nearly \$4.9 million to PAHO for the Health Sector Resilience in LAC program.

- Strengthening Resilience-Building Capacity at the Local Level: With \$500,000 in FY 2017 assistance, USAID/OFDA supported the UN Office for Disaster Risk Reduction (UNISDR) to promote the development and implementation of local, national, and regional DRR strategies in the LAC region, and specifically to advance the implementation of the Sendai Framework for DRR in the Americas. In FY 2017, UNISDR-supported activities included the development of four national strategies aligned with the Sendai Framework and eight local resilience action plans among national governments in the LAC region; with prior year funding, USAID/OFDA continued to support UNISDR to implement additional activities designed to promote adoption of the Sendai Framework and bolster public-private partnerships for DRR.
- VDAP: Following the 1985 eruption of Colombia's Nevado del Ruiz Volcano, which resulted in approximately 23,000 deaths, USAID/OFDA and the U.S. Geological Survey (USGS) established the Volcano Disaster Assistance Program (VDAP) to provide technical assistance to national volcano monitoring organizations, including training in hazard assessment, development of early warning plans, and installation and updating of volcano monitoring equipment. At the request of host governments, VDAP teams travel to areas with significant volcanic risks throughout the world and use mobile volcano monitoring equipment to quickly assess hazards and help local agencies generate eruption forecasts. The early warning forecasts enable local authorities to evacuate high-risk areas before a disaster occurs, reducing fatalities and economic loss. VDAP programs also include training and technical assistance for local geologists to enhance preparedness and response for future volcanic events. In FY 2017, USAID/OFDA provided nearly \$549,000 in LAC-specific support to continue VDAP activities in the region—part of the more than \$4.8 million in USAID/OFDA fiscal year funding for worldwide VDAP activities, including additional activities in LAC. The funding supported seismic monitoring activities benefiting more than 3.4 million people, training for nearly 290 individuals on geological procedures, and the provision of technical expertise—provided both remotely and in person—for seismic events.
- Assessing and Mitigating Earthquake Risk in the Caribbean and Central America: With prior year funding,
  USAID/OFDA supported the Global Earthquake Model Foundation (GEM) in FY 2017 to increase earthquake risk
  assessment capacity and the integration of risk assessments into DRR efforts in the Caribbean and Central America.
  Using GEM's existing open source technology for hazard and risk modeling, data collection, and assessments, the
  organization trained local experts—including engineers, seismologists, and social scientists—to perform risk assessments
  and connected them with policymakers to establish initiatives that reduce risks related to seismic activity.

#### **Caribbean Regional Programs**

- Youth-Led Community Action for Increased Disaster and Climate Change Resilience: In FY 2017, USAID/OFDA continued to support Catholic Relief Services (CRS) to engage and train young people in hazard-prone communities in Grenada, Jamaica, and Saint Lucia through the Youth Emergency Action Committees (YEAC) program. With \$600,000 in FY 2017 USAID/OFDA assistance, CRS promoted the development of community and household disaster plans and worked to strengthen the role of YEAC members in local communities. During the fiscal year, CRS completed Phase V of the project—which continued with prior year USAID/OFDA support through April 2017—and began Phase VI, which focused on forming six new YEACs while continuing to build the capacity of members of the 17 existing YEACs through collaboration with local disaster management authorities. USAID/OFDA has provided nearly \$2 million to CRS for youth DRR program activities since FY 2013.
- Building the Capacity of Caribbean Red Cross National Societies: With \$700,000 in USAID/OFDA FY 2017 funding, the International Federation of Red Cross and Red Crescent Societies (IFRC) is supporting Red Cross National Societies in The Bahamas, Barbados, Belize, Dominica, and St. Lucia with training activities and peer-to-peer exchanges for national and local resilience planning. Trainings provided to national societies included community engagement, emergency communications, financial management, project management, and proposal writing. In addition, IFRC

activities aimed to support communities to develop early warning systems, engage in contingency planning, and train and equip community disaster response teams.

- Developing an Integrated Coastal Inundation Forecasting System: With \$500,000 in FY 2017 funding to NOAA, USAID/OFDA continued to support a multi-year pilot program in the Dominican Republic and Haiti to build local capacity and develop tools and products for storm surge forecasting that will aid in risk reduction, preparedness, and evacuation efforts. In partnership with the World Meteorological Organization (WMO) and national meteorological and hydrological services, the program worked to identify needs for storm surge planning and preparedness, conduct trainings, develop a wave-modeling system, and begin laying the foundation for a regional approach to storm surge and wave-modeling and forecasting in the Caribbean region.
- Supporting Practical Family Preparedness in Haiti and the Dominican Republic: With more than \$218,000 in FY 2017 funding, USAID/OFDA continued to support USGS to build earthquake preparedness for vulnerable households in the Dominican Republic and Haiti. Through the project, USGS is developing locally-appropriate earthquake hazard guidance in coordination with GeoHazards International—including resource booklets in local languages and messaging strategies developed in collaboration with community members—for at-risk families in four cities in the Dominican Republic and Haiti. Using the materials, GeoHazards International and local partners are conducting household preparedness activities, such as home hazard assessments and outreach on earthquake-resistant home construction.
- Saving Lives in the Caribbean through Preparedness: USAID/OFDA continued to support the American Red Cross (AmCross) in FY 2017 to expand a program to better mitigate and respond to the adverse effects of hydrometeorological risks and disasters in Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, and Trinidad and Tobago. AmCross, building on lessons learned from a previous USAID/OFDA-funded program, planned, implemented, and monitored small-scale disaster mitigation projects; worked to increase long-term community engagement; and provided trainings that reinforced disaster management skills and knowledge to community members, national Red Cross society staff, and volunteers. Program activities, which ended in July 2017, included workshops on cash transfer programming, first aid instructor training, and facilitation skills, as well as promoting mobile applications to disseminate life-saving first aid and hazard information. Cumulatively, USAID/OFDA provided more than \$1.3 million to AmCross for project activities from FY 2013–FY 2017.

#### **Central America Regional Programs**

- Building Capacity for Urban DRR and Risk Information Management: Through \$1.5 million in FY 2017 assistance, USAID/OFDA supported the Central American Coordination Center for the Prevention of Natural Disasters (CEPREDENAC) to promote education, improve coordination, and strengthen processes for urban DRR throughout Central America. Program activities included coordinating with national authorities to generate tools for risk reduction in housing and infrastructure planning, as well as supporting regional exchanges between Central American emergency operations centers and with U.S. universities. In addition, through prior year funding, USAID/OFDA continued to support CEPREDENAC in FY 2017 to further bolster capacity and standardize procedures across Central American national disaster risk management agencies. In 2017, for example, CEPREDENAC conducted national and regional disaster risk management simulation exercises.
- Central America Weather-Ready Nations-Phase I: Through \$500,000 in FY 2017 assistance, USAID/OFDA supported NOAA to continue partnering with national disaster management agencies and national meteorological and hydrological services in Costa Rica, El Salvador, and Guatemala to advance impact-based forecasting to improve early actions resulting from early warnings. The Weather-Ready Nations program prepares countries to respond to extreme weather events, shifting the focus of national meteorological and hydrological services from forecasting to describing the potential effects of hydrometeorological hazards.

- Supporting a Regional Approach to Storm Surge Forecasting: USAID/OFDA provided NOAA with \$350,000 in FY 2017 to support a multi-year program in Belize and Mexico's Yucatan Peninsula that aims to build local capacity and develop tools and products for storm surge forecasting that will aid in risk reduction, preparedness, and evacuation efforts. In partnership with the WMO and national meteorological and hydrological services, NOAA worked to identify needs for storm surge planning and preparedness, conduct trainings, develop a wave-modeling system, and begin laying the foundation for a regional approach to storm surge forecasting and wave-modeling.
- Protection of Persons with Disabilities in Emergencies-Phase II: USAID/OFDA provided \$300,000 in FY 2017 to support the second phase of a UN Children's Fund (UNICEF) program designed to facilitate the protection of persons with disabilities during emergencies in Costa Rica, El Salvador, Guatemala, Honduras, and Panama. The program works to improve the ability of institutions implementing DRR programs to include persons with disabilities in their planning, preparedness, and response processes through workshops and the creation of standard guidelines. Program activities supported the implementation of regional standards that include persons with disabilities in disaster management planning and increased public awareness regarding the needs of persons with disabilities during emergencies.

#### **South America Regional Programs**

- Building Capacity for Inclusive Disaster Risk Management: USAID/OFDA supported Handicap International with \$650,000 in FY 2017 funding to support the improvement and dissemination of inclusive disaster risk management frameworks. Program activities included inclusive DRR training in Paraguay and Peru, engaging stakeholders from Bolivia, Chile, Ecuador, Nicaragua, Paraguay, and Peru. In addition, Handicap International plans to provide small grants for several innovative pilot projects to capture best practices for the inclusion of at-risk groups in DRR systems and encourage replication and dissemination of effective practices by local authorities and involved communities.
- South America Flash Flood Guidance System: With \$500,000 in USAID/OFDA funding, NOAA continued to partner with WMO and national meteorological and hydrological services in FY 2017 to develop and implement a flash flood guidance system to improve early warning capabilities for flash floods in the northwestern region of South America, including Colombia, Ecuador, and Peru. In FY 2017, NOAA supported meetings among national meteorological and hydrological services in Colombia and guidance system planning and development.

#### **Country-Specific Programs**

#### Chile

- Community-Based Wildfire Prevention: With prior year funding, USAID/OFDA partner CRS continued to coordinate with Chile's National Forestry Corporation (CONAF) and local partner Caritas in FY 2017 to develop, validate, and implement a model for community-based urban interface wildfire prevention. The program aims to train and organize firefighters, local disaster prevention and emergency management officials, municipal authorities, and individuals from 10 vulnerable communities in Chile's Araucanía, Maule, and Metropolitan regions on wildfire preparedness, mitigation, and management techniques using the new model. In FY 2017, CRS completed development of the community-based prevention model and supported community fire prevention activities. In addition, CRS supported school-based activities designed to educate Chilean children on the risks of wildfire and the mission of CONAF.
- Developing an Earthquake Early Situational Awareness System: In April 2014, northern Chile experienced a
  magnitude 8.2 earthquake, and experts suggest that earthquakes of similar magnitude may occur in the future. In early
  FY 2017, with prior year USAID/OFDA funding, USGS completed the design and installation of a rapid situational
  awareness system—using inexpensive cell phone technology—that provides time-critical earthquake information that can
  be used for automated alerts and to inform response decisions in Chile.

#### Colombia

- Supporting Local Agriculture and Food Security in La Guajira: Ongoing insecurity and El Niño-related drought have resulted in food insecurity and high levels of malnutrition for ethnic Wayuu populations in northern Colombia's La Guajira Department since 2014. With nearly \$271,000 in FY 2017 assistance, USAID/OFDA supported Acción Contra el Hambre/Spain to promote improved agricultural and livestock management techniques among drought-affected Wayuu communities in La Guajira. Program activities included strengthening family livestock production systems and training community members on improved agricultural techniques, including seed procurement, soil preparation, and integrated pest and disease management.
- Supporting Small Businesses to Mitigate Disaster Risk in Medellín: In FY 2017, USAID/OFDA provided nearly \$598,000 to Colombia's National Merchants' Federation (FENALCO) to support DRR activities and promote community capacity for disaster risk management in low-income neighborhoods of the city of Medellín. The program, which continues through 2020, aims to assist 1,800 entrepreneurs to identify disaster risk and create business continuity plans. In addition, FENALCO promoted the development of early warning systems, including alarms and signposting, and provided training on sustainable environmental management techniques for small business owners.
- Training Firefighters in Colombia: In 2016, more than 4,600 forest fires affected 29 of Colombia's 32 departments. USAID/OFDA supported World Vision with \$200,000 in FY 2017 funding to train more than 300 firefighters and 400 community members to improve local capacity to manage and respond to forest fires in Bogotá, Caldas, Cesar, Cundinamarca, Magdalena, Meta, Nariño, Norte de Santander, and Risaralda departments. The program expands upon the activities of a previous USAID/OFDA-supported program that ended in January 2017 through which World Vision trained nearly 200 firefighters in five of Colombia's departments.
- Strengthening Preparedness for Volcanic Eruptions: With prior year funding, USAID/OFDA continued to support AmCross to strengthen the resilience of approximately 20 communities in Colombia's Caldas and Tolimas departments affected by the Nevado del Ruiz Volcano, which has contaminated water sources and adversely affected agriculture activities during previous eruptions. AmCross aimed to increase community awareness and responsiveness to future volcanic eruptions; activities included improving water management practices and promoting hygiene and basic sanitation. The project also provided local government disaster response authorities with equipment to monitor and effectively respond to eruptions.
- Knowledge and Engagement to Reduce Disaster Risk: With prior year assistance, USAID/OFDA continued supporting Global Communities in FY 2017 to promote community and private- and public-sector engagement to reduce the social and economic impacts associated with frequent earthquakes, fires, flooding, and landslides in four highly vulnerable mountain neighborhoods of Medellín. Program activities, which concluded in January 2017, included training and capacity building for neighborhood emergency committees; housing and infrastructure upgrades; and strengthening small-business resilience through public-private partnerships and contingency plan development.

#### Costa Rica

- Building an Earthquake Early Situational Awareness System in Costa Rica: USAID/OFDA supported USGS with \$441,000 in FY 2017 to develop a rapid situational awareness system to provide earthquake information to Government of Costa Rica authorities. Based on previous USGS work in Chile, the program aims to use cell phone technology to provide rapid earthquake updates that can trigger automated alerts and inform response in the event of a major seismic event.
- Capacity Building for Municipal Emergency Committees: USAID/OFDA supported World Vision with \$150,000 in FY 2017 funding to strengthen communities' ability to plan for and mitigate the effects of disasters through capacity building activities for members of local Municipal Emergency Committees (CMEs) in four cantons in Costa Rica's northern Alajuela Province. Aiming to address community vulnerabilities identified by CMEs after Hurricane Otto

struck Costa Rica in November 2016, program activities included the strengthening of community emergency protocols and plans and training for CME members in ICS methodology.

• Reducing the Effects of El Niño and Climate Change: With prior year funding, USAID/OFDA continued to support AmCross to promote environmental management to mitigate the impact of climate-related hazards and the El Niño phenomenon in Filadelfia, Palmira, and Sardinal communities in Costa Rica's Guanacaste State. The targeted communities are at high risk due to the frequency of droughts and floods and associated consequences, such as drinking water shortages and decreased agricultural production. In collaboration with local government authorities and relevant national ministries, AmCross program activities—including trainings in energy saving and efficient water use, reforestation campaigns, and capacity building for Costa Rica Red Cross Staff—reached nearly 3,900 people and worked to expand public-private coordination and improve community management of challenges, such as periods of drought.

#### Cuba

• Building U.S.-Cuban Coordination for Geohazard Mitigation: Through nearly \$63,000 in FY 2017 funding to USGS, USAID/OFDA supported a bilateral meeting between U.S. and Cuban authorities to discuss earthquake and tsunami hazards, in addition to funding for Cuban scientists to travel to the U.S. for geological hazard trainings. In April 2017, three USGS scientists held discussions of geological hazards with counterparts from Government of Cuba's Instituto de Geología y Paleontología and Centro Nacional de Investigaciones Sismológicas. In addition, USGS staff presented during the annual meeting of the Sociedad Cubana de Geología and participated in geological field visits. USAID/OFDA also supported USGS with approximately \$135,000 in additional FY 2017 funding, with plans to support future geological hazard mitigation work in the LAC region.

#### Dominican Republic

- Risk Reduction for Persons with Disabilities: With nearly \$150,000 in USAID/OFDA assistance, the Dominican
  Development Institute (IDDI) supported coordination between organizations in the Government of the Dominican
  Republic (GoDR) National System of Risk Management, aiming to reduce the vulnerability of persons with disabilities in
  16 communities of Santo Domingo Province. The program included capacity building activities designed to better
  integrate persons with disabilities and organizations working with these populations into community and municipal risk
  management systems.
- Supporting the Dominican Republic's Emergency Operations Center: With nearly \$150,000 in FY 2017 funding, USAID/OFDA assisted Plan USA to support the GoDR Emergency Operation Center (EOC), with the aim of increasing DRR capacity. By providing geospatial information systems software and training EOC technicians in the management of geospatial data, program activities promoted development of protocols for the effective collection and sharing of critical information to inform emergency decision-making processes.
- Strengthening DRR Capacity in the Dominican Republic: In FY 2017, with prior year funding, USAID/OFDA supported Plan USA—in collaboration with the GoDR—to strengthen regional and local Ministry of Education capacity through mainstreaming national DRR and disaster risk management plans among ministry supervisors and school principals. Plan USA's interventions, which concluded in March 2017, were designed to reduce loss of life, safeguard school infrastructure, increase resilience, and enhance the Ministry of Education's ability to resume education activities in early post-disaster emergency settings.
- Studying Hispaniola's Septentrional Fault: Hispaniola is located along the seismically active Caribbean—North American plate boundary that comprises the Septentrional fault, which traverses the Dominican Republic's Cibao Valley. With prior year USAID/OFDA funding, USGS continued to assess seismic risk in the city of Santiago de los Caballeros and other population centers within the rapidly growing Cibao Valley in FY 2017.

#### Ecuador

- Improving Capacity for Disaster-Resilient Construction: USAID/OFDA supported Miyamoto International with \$350,000 in FY 2017 funding to build communities' capacity to utilize disaster-resilient construction materials and techniques. In coordination with the Pacific International Center for Disaster Risk Reduction, the Universidad Laica Eloy Alfaro de Manabí, and Save the Children, Miyamoto International conducted trainings on earthquake-resistant building techniques, including construction with bamboo—a locally available and earthquake-resistant building material—for homeowners, construction workers, and masons in low-income, high-risk communities in Ecuador's Manabí Province. The program also supported a communications campaign among vulnerable communities promoting the use of bamboo as a disaster-resilient construction material.
- Strengthening Urban Search-and-Rescue Capabilities: With \$150,000 in FY 2017 funding from USAID/OFDA, Save the Children/U.S. facilitated six USAR courses and constructed two training fields to simulate collapsed structures after an earthquake. The courses—attended by firefighters and local training instructors from seven provinces—bolstered participants' capacity to efficiently respond to earthquakes and other disasters that require a significant search-and-rescue response. The trainings certified more than 170 instructors in collapsed structure search-and-rescue techniques, ensuring local capacity to conduct future exercises.
- Building Ecuador's Earthquake Monitoring and Response Capacity: In FY 2017, USAID/OFDA provided USGS with nearly \$82,000 to support earthquake monitoring upgrades for the Government of Ecuador's Instituto Geofísico de la Escuela Politécnica Nacional (IGEPN). Monitoring upgrades—including capacity for faster and more accurate earthquake data analysis, exchange, and processing, as well as improved coordination with Ecuador's emergency response agencies—aimed to strengthen IGEPN's ability to respond to significant earthquakes and increase collaboration and data exchange between IGEPN and USGS.

#### El Salvador

• Increasing Knowledge and Preparedness for Landslides and Volcanoes, Phase III: With prior year funding, USAID/OFDA continued to support AmCross to assist communities, schools, and civil protection agencies in close proximity to El Salvador's Chaparrastique Volcano to prepare for disasters. In December 2013, Chaparrastique erupted, forcing thousands of residents to flee their houses, highlighting that nearby communities and local authorities lacked preparation and preparedness training for volcanic hazards. Since 2013, the volcano has experienced a number of eruptions that adversely affected local communities. With USAID/OFDA support, AmCross began Phase I of the program in FY 2014, targeting nearly 6,400 people with activities such as first-aid training, drills and simulation exercises, and the installation of early warning systems. In Phase II, AmCross continued activities in some communities targeted during the prior year, while also expanding the program to eight new communities, reaching an estimated 6,600 individuals. During Phase III, which concluded in August 2017, AmCross continued to increase awareness and understanding of disaster preparedness and mitigation, as well as develop communities' capacity to self-mobilize in the event of a disaster, reaching approximately 3,700 people in communities near the volcano not reached by previous phases of the program.

#### Guatemala

• Coordinating Urban DRR in Guatemala: Building on the USAID/OFDA-funded "Barrio Mio/My Neighborhood" program in April 2017, Project Concern International (PCI) launched the expanded "Barrio Mio Scale Up" program with more than \$1,750,000 in FY 2017 USAID/OFDA funding. To continue reducing communities' vulnerability to floods, high winds, landslides, and seismic activity, PCI coordinated with local communities, national and municipal agencies, private-sector partners, and universities and implemented a scalable model to improve shelters, reconfigure settlements, and develop water and sanitation infrastructure. PCI also provided technical assistance on financing and resource allocation to the Government of Guatemala (GoG) to support urban disaster risk mitigation and housing improvement activities in several municipalities. USAID/OFDA has provided nearly \$2.9 million to PCI to support Urban DRR in Guatemala since 2015.

- Improving Tools for Gender Responsive DRR in Guatemala: With \$450,000 in FY 2017 funding, USAID/OFDA supported PCI to create and disseminate tools designed to integrate a gender perspective into GoG DRR programs and policies at the national, municipal, and community levels. Working with communities and local organizations in two departments, program activities supplemented PCI's ongoing urban DRR activities in Guatemala and helped to promote the validation and adoption of gender-responsive DRR tools.
- Strengthening Guatemala's DRR Capacity: USAID/OFDA supported SHARE to build local and regional disaster preparedness and risk management capacities in Petén Department, an area which is especially vulnerable to floods and forest fires, with \$150,000 in FY 2017 funding. Building on a previous program in south-central Guatemala, SHARE partnered with the GoG Executive Secretariat for the National Coordinator for Disaster Reduction (CONRED) to design and conduct a disaster preparedness, response, and risk management training program aligned with Guatemala's national DRR strategy and to disseminate lessons learned on gender equity from previous programs. In addition, SHARE supported physical improvements to the National Emergency Operations Center in Guatemala City and the CONRED office in Petén.
- Strengthening the National System for the Prevention and Control of Forest Fires: Guatemala's El Quiché and Totonicapán departments experience a high rate of forest fires. In response, USAID/OFDA continued to support CARE with prior year funding in FY 2017 to raise awareness of forest fire risks and conduct capacity-building activities for local leaders in 60 communities in the departments. To strengthen forest fire prevention and suppression capacity, CARE also provided equipment and training to municipal and technical staff associated with the GoG's National System for Prevention and Control of Forest Fires. The program ended in July 2017.
- Enhancing Food Security and Resilience in Rural Communities: Rural communities residing in the western highlands of El Quiché are particularly vulnerable to drought. To enhance the resilience of small farmers in El Quiché, USAID/OFDA continued to support CARE in FY 2017 with prior year funding. CARE assisted communities to identify and implement more sustainable agricultural practices, including the use of drought-resistant seeds, and facilitated the development of self-capitalized village savings and loan associations (VSLAs). In addition to providing people who lack access to more formal banking institutions a source of credit and a safe place to save money, VSLAs can be a source of emergency loans to help people recover from disasters and individual shocks. Program activities concluded in September 2017.
- Improving Food Security through Agricultural DRR: Cyclical drought has affected rural populations in El Progreso Department in recent years, while deforestation, hilly terrain, and poor soil quality reduce agricultural productivity. In response, USAID/OFDA continued to support the Pan American Development Foundation (PADF) in FY 2017 with prior year funding to build local capacity to withstand drought and other hazards through community-based rural development learning centers. PADF program activities, which ended in July 2017, included trainings to educate community members on more sustainable agriculture practices, such as soil conservation.
- Managing Climate Change Risk in Guatemala: With prior year funding, USAID/OFDA supported the Rainforest Alliance to strengthen the capacity of local organizations in Huehuetenango and El Quiché departments to respond to climate-related risks associated with the 2015/2016 El Niño, which exacerbated recurring natural hazards, such as drought, forest fires, and water shortages. Program activities included strengthening DRR mechanisms among farming households through the introduction of drought-tolerant potatoes and building rainwater harvesting systems to support potato production. Rainforest Alliance interventions, which concluded in March 2017, also strengthened local fire prevention and control systems by providing training and equipment for local fire brigades.
- Building Disaster Response Capacity in South Central Guatemala: In FY 2017, USAID/OFDA continued to support SHARE with prior year funding to build capacity among departmental, municipal, and local risk management

agencies in Guatemala's Chimaltenango, Escuintla, and Sacatepéquez departments to respond to El Fuego Volcano eruptions. SHARE established communication mechanisms between disaster response agencies to improve coordination and information management and conducted trainings that helped align local capacities with national disaster preparedness strategies; trainings included instruction in disaster response planning, emergency shelter management, and damage and needs assessments. Additionally, the program supported the rehabilitation and supply of local EOCs. The program ended in May 2017.

• Increasing Community Resilience to Drought: Eastern Guatemala's Dry Corridor receives less rainfall than other areas of Guatemala and experiences recurrent drought conditions that decrease agricultural production. In FY 2017, USAID/OFDA continued to support World Vision with prior year funding to improve household food security and nutrition conditions in one municipality in Chiquimula and one municipality in Jutiapa department affected by El Niño-related drought. Program activities, which prioritized vulnerable children, included hygiene promotion campaigns and risk management for water, sanitation, and hygiene (WASH) resources, such as rainwater harvesting to meet irrigation needs during the driest months of the year. World Vision also provided training, seeds, and other agricultural inputs to increase the cultivation of drought-tolerant native plant species. The program ended in September 2017.

#### Haiti

- Strengthening Haiti's Disaster Preparedness and Response Capacity: With more than \$453,000 in FY 2017 funding, USAID/OFDA supported AmCross to help position the Government of Haiti (GoH) Department of Civil Protection (DPC) and the Haitian Red Cross (HRC) as the lead agencies for disaster response activity coordination. AmCross program activities—which centered in Haiti's Nord-Ouest, Ouest, and Sud departments—aimed to improve the integration of local, regional, and national response systems by training HRC staff and volunteers on contingency plan implementation. AmCross also conducted meetings and workshops to improve coordination between DPC and other Haitian disaster risk management actors.
- Bolstering Neighborhood Preparedness in Port-au-Prince: Many marginalized communities in Haiti's capital city of Port-au-Prince are vulnerable to natural disasters such as earthquakes, landslides, and floods. In FY 2017, USAID/OFDA provided \$475,000 to Cooperazione Internazionale (COOPI) to provide disaster-affected residents of Tabarre and Cité Soleil communes with relief commodities, including hygiene kits and water containers, and conduct support activities to help residents better mitigate and respond to future disasters. Through small-scale disaster mitigation projects, disaster preparedness and management trainings, and the creation of public-private partnerships for DRR, the project engaged community members, local government, and private sector actors in strengthening disaster preparedness and mitigation.
- Building the Capacity of Community- and Faith-Based Organizations: USAID/OFDA supported CRS with \$1.5 million in FY 2017 funding to improve the capacity of Haitian community and faith-based organizations to respond and coordinate with local government authorities in the event of a disaster. The two-year program, jointly supported by USAID/FFP, improved the capacity of 40 Haitian organizations to manage, implement, and report on disaster response projects. In collaboration with World Vision, the DPC, and other response actors, CRS conducted trainings on coordination, accountability, and transparency in local and national response efforts. CRS also continued to support a Rapid Response Fund that provided small grants to local organizations to respond to emergencies, with CRS mentoring and monitoring the implementation of response activities.
- Measurement and Analysis to Promote Resilience in DRR Programming: With \$200,000 in FY 2017 funding from USAID/OFDA, GOAL provided technical assistance to USAID/OFDA implementing partners COOPI and PADF to conduct 58 assessments across Haiti, using a community resilience measurement and analysis tool developed by GOAL in 2011. The key findings and recommendations from these assessments will be shared amongst the DRR community in Haiti to provide evidence to support future disaster resilience programming.

- Pre-Positioning Relief Supplies and Strengthening Logistics Capacity: With nearly \$1.5 million in FY 2017 funding, USAID/OFDA supported the International Organization for Migration (IOM) to continue its work prepositioning emergency relief supplies in Haiti and build the capacity of GoH DPC staff to effectively manage the supply pipeline and distribution during an emergency. Based on a previous IOM program which concluded in December 2016, relief supplies are available to local response partners like the GoH and HRC, as well as international organizations, allowing rapid local response to disasters. IOM also aims to develop an online tool—through which partner organizations can submit requests for commodities, check request status, and view information on the type and amount of relief supplies available—to facilitate the distribution process.
- Strengthening Departmental and National EOCs in Haiti: With \$225,000 in FY 2017 funding, USAID/OFDA supported the U.S. Forest Service (USFS) to increase collaboration with the DPC to build the capacity of national and departmental disaster management systems, including EOCs. USFS activities, including consultations and workshops, promoted the integration of lessons learned from the Hurricane Matthew response into DPC policy and strengthened contingency planning capacity. In addition, USFS continued to plan for the integration of ICS—globally recognized as a best practice for emergency response—into the DPC's disaster management system.
- Building Local Capacity at the Departmental Level: With prior year support from USAID/OFDA, CRS and the U.S. Forest Service continued to collaborate in FY 2017 to bolster local disaster management capacity in Haiti's Grand'Anse, Nord, Nord-Est, Sud, and Sud-Est departments through trainings for local responders and support to departmental EOCs. Trainings in the departments, which are high-risk areas for flooding and hurricanes, focused on implementing the ICS to provide organizational structure and establish processes to improve the speed and effectiveness of disaster response. Through the program, USAID/OFDA also supported efforts to improve the functionality of the EOCs and collaborated with local authorities to update maps that identify areas most vulnerable to disasters and improve local early warning systems and community-level response communications. Program activities concluded in June 2017.
- Training Systems for Emergency Managers: In FY 2017, USAID/OFDA supported IOM with prior year funding to continue a training-of-trainers program for Haitian officials on displacement response options, evacuation shelter management, information management, and management of warehouses and relief commodities. Program activities, which concluded in August 2017, included trainings to build the capacity of the DPC and other local emergency responders to protect lives and property before, during, and after emergency events. In coordination with the IOM training program, the UN Development Program (UNDP) used prior year USAID/OFDA assistance to help the DPC develop a competency-based training system and framework for local responders to use at the national and departmental levels. UNDP also helped strengthen DPC-led information management efforts during emergency responses by preemptively establishing local information management cells in each department.
- Strengthening Humanitarian Coordination and Capacity Building: OHCA leads emergency response coordination efforts to ensure that humanitarian actors implement a coherent response. With prior year assistance from USAID/OFDA, OCHA continued efforts in early FY 2017 to strengthen humanitarian coordination between GoH and UN officials, relief organizations, and other stakeholders to enable rapid, effective action in the event of a disaster. OCHA also continued to support information management and provide analyses of the Haitian humanitarian context, contributing to a common understanding among response actors of the needs and existing response capacity in the country. The program ended in December 2016.
- Supporting Emergency Preparedness in Cité Soleil: USAID/OFDA continued to support Oxfam/Great Britain (Oxfam/GB) with prior year funding to further strengthen disaster risk management capacity in Port-au-Prince's Cité Soleil, one of the most impoverished and densely populated communes in the city. In coordination with local and national authorities, Oxfam/GB worked with residents to increase hazard awareness, update community evacuation

maps, develop family emergency plans, and implement small-scale mitigation projects. Oxfam/GB also collaborated with the GoH to assess and rehabilitate existing emergency evacuation shelters. The program ended in August 2017.

- UPGRADE: Prior year funding from USAID/OFDA—in coordination with USAID/Haiti—supported PADF to continue a three-year urban resilience program, Urban Planning to Generate Resilience Against Disaster (UPGRADE). The program, which continues through FY 2019, utilizes existing local urban development plans, risk analyses, and needs assessments to identify and prioritize specific community capacity-building and disaster mitigation activities. UPGRADE coordinates with the DPC and other local actors to strengthen community response teams, support family emergency plans, conduct simulation exercises, bolster community-level contingency planning, improve drainage infrastructure, and rehabilitate community emergency evacuation shelters. During the fiscal year, PADF launched the program in the vulnerable Martissant area of Port-au-Prince and in Ouanaminthe commune in Haiti's Nord-Est Department, conducted DRR trainings and workshops in schools and communities, and evaluated local early warning systems. The UPGRADE program also includes a significant WASH component funded by USAID/Haiti to deliver clean water through the rehabilitation of public water supply networks at schools and churches that serve as disaster shelters. In FY 2017, PADF WASH activities included sanitation messaging and rehabilitation of sanitation systems as part of the GoH's Hygiene Friendly Schools Initiative and supported school-based hygiene behavior change to reduce the risk of waterborne diseases. USAID/OFDA has provided nearly \$2.3 million to PCI to support UPGRADE since FY 2016.
- Support to Haiti's National Disaster Risk Management System: Through prior year funding to UNDP,
   USAID/OFDA continued to support FY 2017 GoH efforts to strengthen national institutional capacity for disaster
   mitigation and response. The GoH and UNDP coordinated to develop a formal DRR training system and provided the
   DPC with critical technical staff to enable strong DPC emergency operations management. Program activities concluded
   in March 2017.

#### Honduras

- Bolstering Livelihoods in Honduras' Dry Corridor: USAID/OFDA provided nearly \$1.7 million to GOAL in FY 2017 to support livelihoods among vulnerable communities in Honduras's drought-affected Intibucá, La Paz, and Lempira departments. With USAID/OFDA support, GOAL provided drought-affected households with cash transfers to replace livelihood assets, such as farming equipment and livestock, and prevent households from engaging in negative coping strategies. In addition, GOAL worked to connect low-income households to financial markets, helping them access to microfinance institutions offering savings and loan services, and bolstered the emergency response capacity of local and national Government of Honduras officials through trainings on standardized drought response policies and protocols.
- Supporting Resilient Neighborhoods in Tegucigalpa: USAID/OFDA has supported GOAL to reduce urban disaster risk in three neighborhoods in the Ulloa sector of Honduras' capital city of Tegucigalpa since FY 2013. In FY 2017, USAID/OFDA provided GOAL more than \$1.28 million to expand program activities from Ulloa to the Las Brisas, Los Pinos, and Villanueva sectors in Tegucigalpa, beginning a new multi-year program to reduce disaster risk through a neighborhood-based approach promoting local coordination and capacity for DRR. FY 2017 program activities aimed to reduce housing and public infrastructure vulnerability, protect livelihoods, and increase community capacity for disaster preparedness and response. GOAL also supported national- and regional-level adoption of the neighborhood-based approach and fostered engagement among educational actors and government institutions. USAID/OFDA also provided GOAL an additional \$300,000 in FY 2017 to continue activities in Ulloa. Cumulatively, USAID/OFDA has provided nearly \$3 million to GOAL to support urban DRR activities in Tegucigalpa since FY 2013.
- Building DRR Training Capacity in the Education Sector: In FY 2017, USAID/OFDA provided \$150,000 to
  World Vision in FY 2017 to strengthen the capacity of the Honduran education system to support disaster prevention
  and mitigation. Through the project, World Vision collaborated with Government of Honduras education officials,
  university staff, and students to support the creation of DRR curricula and promote DRR research in high schools,

universities, and non-formal education institutions. In FY 2017, World Vision also conducted trainings for university emergency committees to ensure disaster preparedness and response capacity.

- Supporting Community-Level DRR and WASH Preparedness: In FY 2017, through prior year funding, USAID/OFDA continued to support AmCross to implement community-level DRR and WASH preparedness activities in Honduras' Jesus de Otoro municipality, Intibucá Department. In response to recent drought conditions and other climate-related risks, AmCross collaborated with the Honduran Red Cross to raise awareness of WASH-related disease transmission risks and train communities and local authorities on safe WASH practices. The program also conducted trainings for individuals, communities, and institutions to increase disaster resilience. Program activities concluded in September 2017.
- Mitigating Climate-Related Disaster Risk in Intibucá: In FY 2017, USAID/OFDA continued to support CRS
  through prior year funding to reduce agriculture and food security risks in Intibucá, where communities relying on smallscale farming for livelihoods are particularly vulnerable to the effects of drought, higher temperatures, and other climaterelated hazards. CRS reached nearly 700 farmers with activities designed to improve the capacity of households to
  respond to climate variability, including through drought forecasting and preparation, effective irrigation practices, and
  sustainable land and water management.
- Improving Drought Response Capacity in the Dry Corridor: In FY 2017, USAID/OFDA, with prior year funding, continued to support Save the Children/U.S. (SC/US) to mitigate drought vulnerability in Honduran communities susceptible to prolonged periods without rain. SC/US reached more than 15,000 people in Francisco Morazán, Intibucá, and Valle departments with trainings to improve agricultural practices, capacity-building activities, and health-seeking behaviors to enhance disaster readiness. SC/US also worked with the Government of Honduras Standing Commission of Contingencies (COPECO) to strengthen the disaster response capacity of municipal and community organizations in the targeted departments through trainings and study tours. The program concluded in April 2017.
- Increasing Drought Resilience through Household and Community Training: Through prior year funding, USAID/OFDA continued to support World Vision in FY 2017 to address drought vulnerability in Lempira Department. Program activities, which concluded in September 2017, included providing technical support for households to establish rainwater collection and irrigation systems on small plots of land, and for municipalities to develop DRR curricula and conduct trainings on disaster management, mitigation, and preparedness.

#### Jamaica

• Building Resilience and Community DRR Capacities: USAID/OFDA has supported Habitat for Humanity in Jamaica since FY 2014 to address risks associated with natural disaster hazards, such as drought, flooding, hurricanes, and tropical storms. With USAID/OFDA support, Habitat for Humanity has created community redevelopment plans, implemented DRR-oriented shelter and infrastructure improvements, and conducted community-awareness and coalition-building campaigns in St. Catherine Parish's Portmore municipality. In FY 2017, USAID/OFDA continued to support Habitat for Humanity to conduct DRR programming in a highly vulnerable area of Portmore, where many households reside in informal urban settlements.

#### Nicaragua

• Bolstering Protection and WASH Services in San Francisco Libre: With prior year funding, USAID/OFDA continued to support World Vision in FY 2017 to improve disaster preparedness in three communities of Nicaragua's San Francisco Libre municipality in Managua Department, where barriers to accessing public water sources have resulted in increased health and protection risks among vulnerable populations. Program activities, which concluded in July 2017, included building disaster response capacity in households and schools, conducting hygiene promotion campaigns, and improving water supply infrastructure. Through support for the integration of DRR-specific curricula—including the Government of Nicaragua's curriculum for integrated risk management and the Sendai Framework for DRR for

Children—into the education system, World Vision trained educators to provide child protection and psychosocial support services during emergencies. In addition, students and teachers designed and implemented school safety plans and received emergency response kits.

#### Panama

- Improving Disaster Response Capacity in Los Santos: With prior year funding, USAID/OFDA continued to support AmCross in FY 2017 to implement disaster preparedness, preparation, and mitigation activities in communities and schools in Panama's Los Santos Province. With USAID/OFDA assistance, AmCross worked with the Panamanian Red Cross to conduct first aid trainings, establish early warning systems, and instruct communities on water storage techniques to avoid contamination and shortages. Program activities ended in August 2017.
- Disaster Risk Management in Inclusive and Safe Education Centers: With continued prior year funding in FY 2017, USAID/OFDA supported Foundation for the Refugee Education Trust (RET) to develop, institutionalize, and operationalize a guide for inclusive disaster risk management in education centers. Through the program, RET helped to integrate the guide—which consolidated disaster preparedness work carried out by the Panamanian Institute for Special Adaptation, the Ministry of Education, and the National Civil Protection System—into Panama's national disaster risk management policies. Program activities concluded in August 2017.

#### Paraguay

- Promoting Risk Management and Emergency Preparedness: USAID/OFDA provided \$1.3 million to ACDI/VOCA in FY 2017 to promote sustainable food production among households affected by flooding and other natural disasters in Paraguay's Caazapá and Presidente Hayes departments. ACDI/VOCA activities supported the provision of agricultural inputs and technical assistance to initiate or improve vulnerable households' small poultry infrastructure and vegetable gardens. In addition, ACDI/VOCA coordinated with the Government of Paraguay to form community- and municipal-level disaster risk management councils. The program builds upon a previous USAID/OFDA-funded project, which concluded in February 2017, to bolster food security and resilience to climate-related risk among populations in Paraguay's San Pedro Department.
- Strengthening Humanitarian Logistics and Response Capacity in Paraguay: In FY 2017, USAID/OFDA provided \$200,000 to the UN World Food Program (WFP) to coordinate with the Government of Paraguay's National Emergency Secretariat to improve humanitarian logistics, including warehouse management, and build capacity among key logistics actors in Paraguay. Through the program, WFP provided trainings to Government of Paraguay officials and local and international NGO staff on humanitarian supply chain management and coordination in emergency logistics operations, among other topics.

#### Peru

- Risk Reduction in Vulnerable Areas of Lima: With \$150,000 in additional USAID/OFDA support in FY 2017, the Center for Disaster Studies and Prevention in Peru (PREDES) continued to strengthen community, municipal, and national disaster risk management capacities in the vulnerable Independencia District of Lima. During FY 2017, the program supported an assessment to identify earthquake-vulnerable structures and conducted technical studies to determine appropriate techniques and materials to improve building strength and functionality. In addition, PREDES supported pilot reforestation projects on unstable hillsides and promoted the sustainable management of local forest resources.
- Building DRR Coordination and Capacity: With \$500,000 in USAID/OFDA funding in FY 2017, UNDP began a multi-year program to support improved coordination and decision-making processes for disaster response among national and local authorities in Peru. The program aimed to provide tools and methodologies to the Government of Peru National System for Disaster Risk Management to support the adoption of a territorial approach to disaster risk management, grouping provinces and districts by geography, accessibility, and exposure to natural hazards. UNDP also

supported the formulation of strategies for post-disaster continuity of operations at facilities critical to humanitarian operations, including airports and seaports.

- Landslide Dating for Risk Assessment in Lima: In FY 2017, USAID/OFDA provided more than \$19,000 to USGS to support two USGS scientists to conduct a technical assistance mission in Peru. Using USGS landslide dating technology, the mission increased understanding of the likelihood and potential effects of landslides in the Rímac River basin, which includes Peru's capital city of Lima, and contributed to the prevention and mitigation of future flooding and landslides in the area. In addition, USGS staff worked to train Peruvian scientists in the use of landslide dating technology.
- Supporting Urban Risk Reduction in Northern Lima: In FY 2014, USAID/OFDA and SC/US began a three-year program supporting urban neighborhoods in Peru's Carabayllo District in northern Lima Province to increase disaster resilience through the adoption of DRR-aligned policies and procedures. As part of the program, SC/US worked to strengthen critical community infrastructure and build local capacity through the identification and reinforcement of key local market systems and services. With previous year funding from USAID/OFDA, SC/US continued to foster participation and investment in DRR projects from private-sector actors, academic institutions, and community members in FY 2017. Program activities concluded in September 2017
- Safe and Resilient Communities in Pamplona Alta: Located in Peru's San Juan de Miraflores District, Pamplona Alta town is vulnerable to earthquakes, floods, and landslides; the effects of these disasters are exacerbated by inadequate WASH facilities. With prior year USAID/OFDA funding, AmCross continued working in early FY 2017 to increase resilience in Pamplona Alta through community engagement and sanitation improvements. Program activities, which ended in November 2016, included disaster preparedness and mitigation training and hygiene promotion campaigns for more than 3,000 people residing in Pamplona Alta. In addition, AmCross supported alarm installation in seven communities as part of an early warning system in the area.
- Reinforcing Innovative Mechanisms for DRR in Rímac: With previous year USAID/OFDA support, COOPI continued to work with civil society organizations, local authorities, and the private sector in FY 2017 to strengthen risk management in marginalized informal communities of Rímac District in Peru's capital city of Lima. The program disseminated risk management tools among government authorities with decision-making capacity, upgraded hazard-prone infrastructure, strengthened capacities of community groups, provided practical training, and developed a geographical information system database to identify and help address existing vulnerabilities.

#### PROGRAMS THAT INTEGRATE DRR WITH DISASTER RESPONSE

In addition to stand-alone DRR programs implemented to prepare for or mitigate the effects of disasters in the LAC region, USAID/OFDA integrated preparedness and mitigation into disaster response in Haiti during FY 2017.

#### Haiti

- WASH Support For Hurricane-Affected Households: In FY 2017, USAID/OFDA provided more than \$506,000 to
  International Medical Corps (IMC) to support WASH interventions for vulnerable populations affected by Hurricane
  Matthew in Haiti's Sud Department. Program activities, which ended in April 2017, included promotion of improved
  hygiene practices, installation of handwashing stations, rehabilitation of damaged WASH infrastructure, and provision of
  safe drinking water and water purification tablets at school-based shelters and health facilities.
- Strengthening Family Farms: With prior year funding, USAID/OFDA continued to support the UN Food and Agriculture Organization in early FY 2017 to strengthen the resilience of vulnerable farming families affected by drought in Haiti's Nord and Sud-Est departments through agricultural production recovery activities. The project distributed

drought-resistant seeds and cuttings to participants and increased the resilience of rural communities through training and education on sustainable farming methods. The program ended in December 2016.

- Emergency WASH Intervention: With prior year USAID/OFDA funding, Solidarités International continued to strengthen access to safe drinking water in Sud-Est, including through WASH response activities following Hurricane Matthew. Program activities, which ended in May 2017, included implementing chlorination mechanisms for household water supplies; protecting settling basins; providing water trucking to at-risk communities; and rehabilitating water supply infrastructure, including catchment areas. Solidarités International also provided education on the importance of good hygiene through door-to-door and public outreach activities and trained local committees to manage and maintain water supply systems to increase community resilience to drought.
- Providing Emergency Nutrition: With prior year funding, UNICEF continued in FY 2017 to provide treatment for malnourished children and promote appropriate infant and young child feeding practices in 38 drought-affected rural areas of Haiti. The project, implemented in coordination with the GoH Ministry of Health, targeted severely malnourished children younger than five years of age and pregnant and breastfeeding women, providing preventive activities, case management of severe acute malnutrition, therapeutic feeding inputs and medicines, and nutritional interventions, including micronutrient supplementation. Program activities concluded in April 2017.
- Promoting Health Through Access to Clean Water: USAID/OFDA continued to support UNICEF in FY 2017
  with prior year funding for emergency WASH interventions in Sud-Est. The program, which concluded in March 2017,
  reduced the risk of waterborne and hygiene-related diseases as a consequence of water shortages and contamination and
  increased access to clean water in drought-affected communities.

#### **USAID/OFDA DRR FUNDING FOR LAC IN FY 2017**1

PROGRAM	PROGRAM ACTIVITY PARTNER		SUBTOTAL	TOTAL
USAID/OFDA	FUNDING FOR STAND-ALON	IE DRR PROGI	RAMS	
Capacity Building for DRR in Higher Education Institutions	Risk Management Policy and Practice	CSUCA	\$1,180,000	
DRR in the Americas	Humanitarian Studies, Analysis, or Applications, Risk Management Policy and Practice	FIU	\$1,510,000	
Building Civil Society DRR Capacity in LAC  Risk Management Policy and		GNDR	\$151,316	
Strengthening National Disaster Risk Management Systems			\$398,971	
RDAP	Administrative Support	IRG	\$6,880,164	\$13,569,109
PREPARE	Risk Management Policy and Practice	Miyamoto International	\$750,000	
Building Tsunami Preparedness	Natural and Technological Risks	NOAA	\$150,000	
Strengthening Humanitarian Coordination and Capacity	Humanitarian Coordination and Information Management	ОСНА	\$500,000	
Health Sector Resilience in LAC	ector Resilience in Health, Humanitarian Coordination and Information Management		\$1,000,000	
	Capacity Building for DRR in Higher Education Institutions  DRR in the Americas  Building Civil Society DRR Capacity in LAC  Strengthening National Disaster Risk Management Systems  RDAP  PREPARE  Building Tsunami Preparedness  Strengthening Humanitarian Coordination and Capacity  Health Sector Resilience in	Capacity Building for DRR in Higher Education Institutions  Risk Management Policy and Practice  Humanitarian Studies, Analysis, or Applications, Risk Management Policy and Practice  Building Civil Society DRR Capacity in LAC  Strengthening National Disaster Risk Management Systems  Humanitarian Coordination and Information Management, Risk Management Policy and Practice  RDAP  Administrative Support  PREPARE  Risk Management Policy and Practice  Building Tsunami Preparedness  Natural and Technological Risks  Strengthening Humanitarian Coordination and Information Management  Humanitarian Coordination and Information Management  Humanitarian Coordination and Information Management  Health Sector Resilience in Health, Humanitarian Coordination	Capacity Building for DRR in Higher Education Institutions  Risk Management Policy and Practice CSUCA  Humanitarian Studies, Analysis, or Applications, Risk Management Policy and Practice and Practice  Building Civil Society DRR Capacity in LAC  Strengthening National Disaster Risk Management Policy and Information Management, Risk Management Policy and Practice  RDAP  Administrative Support  Risk Management Policy and Practice  RISK Management Policy and Practice  RDAP  Administrative Support  Risk Management Policy and Practice  RISK Management Policy and Practice  ROAL  Miyamoto International  Building Tsunami Preparedness  Natural and Technological Risks  NOAA  Strengthening Humanitarian Coordination and Information Management  Humanitarian Coordination and Information Management  Humanitarian Coordination and Information Management  Health Sector Resilience in Health, Humanitarian Coordination	Capacity Building for DRR in Higher Education Institutions  Risk Management Policy and Practice  CSUCA \$1,180,000  PRR in the Americas  Humanitarian Studies, Analysis, or Applications, Risk Management Policy and Practice  Building Civil Society DRR Capacity in LAC  Strengthening National Disaster Risk Management Policy and Practice  RDAP  Administrative Support  Risk Management Policy and Practice  RISK Management Policy and Practice  RDAP  Administrative Support  Risk Management Policy and Practice  Risk Management Policy and Practice  RDAP  Administrative Support  RG  \$6,880,164  PREPARE  Risk Management Policy and Practice  Miyamoto International  \$750,000  Strengthening Humanitarian Preparedness  Natural and Technological Risks  NOAA  \$150,000  Strengthening Humanitarian Coordination and Information Management  Humanitarian Coordination and Information Management  PAHO  \$1,000,000

	Strengthening Resilience- Building Capacity at the Local Level	Risk Management Policy and Practice	UNISDR	\$500,000		
	VDAP	Natural and Technological Risks	USGS	\$548,658		
Caribbean Regional	Youth-Led Community Action for Increased Disaster and Climate Change Resilience	Risk Management Policy and Practice	CRS	\$600,000		
	Building the Capacity of Caribbean Red Cross National Societies	Risk Management Policy and Practice	IFRC	\$700,000	\$2,018,347	
	Developing an Integrated Coastal Inundation Forecasting System	Natural and Technological Risks	NOAA	\$500,000		
	Supporting Practical Family Preparedness in Haiti and the Dominican Republic	Natural and Technological Risks	USGS	\$218,347		
	Building Capacity for Urban DRR and Risk Information Management	Risk Management Policy and Practice	CEPREDENAC	\$1,500,000		
Central	Central America Weather- Ready Nations-Phase I	Natural and Technological Risks	NOAA	\$500,000		
America Regional	Supporting a Regional Approach to Storm Surge Forecasting	Natural and Technological Risks	NOAA	\$350,000	\$2,650,000	
	Protection of Persons with Disabilities in Emergencies- Phase II	Protection	UNICEF	\$300,000		
South America	Building Capacity for Inclusive Disaster Risk Management	Protection	Handicap International	\$650,000	\$1,150,000	
Regional	South America Flash Flood Guidance System	Natural and Technological Risks	NOAA	\$500,000		
	Supporting Local Agriculture and Food Security in La Guajira	Agriculture and Food Security	Acción Contra el Hambre/Spain	\$270,714		
Colombia	Supporting Small Businesses to Mitigate Disaster Risk in Medellín	·		\$597,818	\$1,068,532	
	Training Firefighters in Colombia	Risk Management Policy and Practice	World Vision	\$200,000		
Costa Rica	Building an Earthquake Early Situational Awareness System in Costa Rica	Natural and Technological Risk	USGS	\$441,000	4501.000	
	Capacity Building for Municipal Emergency Committees	Risk Management Policy and Practice	World Vision	\$150,000	\$591,000	
Cuba	Building U.SCuban Coordination for Geohazard Mitigation	Natural and Technological Risks	USGS	\$197,777	\$197,777	
Dominican Republic	Risk Reduction for Persons with Disabilities	Risk Management Policy and Practice	IDDI	\$149,636	\$299,592	

	Supporting the Dominican Republic's Emergency Operations Center	Risk Management Policy and Practice	Plan USA	\$149,956		
Ecuador	Improving Capacity for Disaster-Resilient Construction	Shelter and Settlements	Miyamoto International	\$350,000		
	Strengthening Urban Search-and-Rescue Capabilities	Risk Management Policy and Practice	SC/US	\$150,000	\$581,844	
	Building Ecuador's Earthquake Monitoring and Response Capacity	Natural and Technological Risks	USGS	\$81,844		
	Coordinating Urban DRR in Guatemala	ERMS, Risk Management Policy and Practice, Shelter and Settlements	PCI	\$1,750,000	\$2,350,000	
Guatemala	Improving Tools for Gender Responsive DRR in Guatemala	Risk Management Policy and Practice	PCI	\$450,000		
	Strengthening Guatemala's DRR Capacity	Risk Management Policy and Practice	SHARE	\$150,000		
	Strengthening Haiti's Disaster Preparedness and Response Capacity	Logistics Support and Relief Commodities, Risk Management Policy and Practice, Shelter and Settlements, WASH	AmCross	\$453,069		
Haiti	Bolstering Neighborhood Preparedness in Port-au- Prince	Logistics Support and Relief Commodities, Natural and Technological Risks, Risk Management Policy and Practice	СООРІ	\$475,000		
	Building the Capacity of Community- and Faith- Based Organizations	Humanitarian Studies, Analysis, or Applications, Logistics Support and Relief Commodities, Risk Management Policy and Practice, Shelter and Settlements, WASH	CRS	\$1,500,000	\$4,303,062	
	Measurement and Analysis to Promote Resilience in DRR Programming	Risk Management Policy and Practice	GOAL	\$200,000		
	Pre-Positioning Relief Supplies and Strengthening Logistics Capacity	Logistics Support and Relief Commodities, Risk Management Policy and Practice, Shelter and Settlements, WASH	IOM	\$1,449,993		
	Strengthening Departmental and National EOCs in Haiti	Risk Management Policy and Practice	USFS	\$225,000		
	Bolstering Livelihoods in Honduras' Dry Corridor	ERMS, Risk Management Policy and Practice	GOAL	\$1,696,367		
Honduras	Supporting Resilient Neighborhoods in Tegucigalpa	ERMS, Natural and Technological Risks, Risk Management Policy and Practice, Shelter and Settlements, WASH	GOAL	\$1,583,262	\$3,429,629	
	Building DRR Training Capacity in the Education Sector	Risk Management Policy and Practice	World Vision	\$150,000		
Paraguay	Promoting Risk Management and Emergency Preparedness	Agriculture and Food Security, Risk Management Policy and Practice	ACDI/VOCA	\$1,300,000	#1 F00 000	
	Strengthening Humanitarian Logistics and Response Capacity in Paraguay	Risk Management Policy and Practice	WFP	\$200,000	\$1,500,000	

	Risk Reduction in Vulnerable Areas of Lima	Natural and Technological Risks, Risk Management Policy and Practice, Shelter and Settlements, WASH	PREDES	\$150,000		
Peru	Building DRR Coordination and Capacity	Risk Management Policy and Practice	UNDP	\$500,000	\$669,460	
	Landslide Dating for Risk Assessment in Lima	Natural and Technological Risks	USGS	\$19,460		
TOTAL USAID/OFDA FUNDING FOR STAND-ALONE DRR PROGRAMS					\$34,378,352	

USAID/OFDA FUNDING FOR PROGRAMS THAT INTEGRATE DRR WITH DISASTER RESPONSE						
Haiti	WASH Support For Hurricane-Affected Households	WASH	IMC	\$506,355	\$506,355	
TOTAL U	ISAID/OFDA FUNDING FO	R PROGRAMS THAT	INTEGRATE DRR WITH DISAST	ER RESPONSE	\$506,355	
TOTAL USAID/OFDA DRR FUNDING FOR LAC IN FY 2017				\$34,884,707		

<sup>&</sup>lt;sup>1</sup>Year of funding indicates the date of commitment or obligation, not appropriation, of funds. USAID/OFDA funding represents actual or obligated amounts as of September 30, 2017. This chart captures all USAID/OFDA DRR funding provided in FY 2017; program descriptions in the fact sheet reflect USAID/OFDA-supported DRR programs active during the fiscal year, regardless of year of funding.

#### **PUBLIC DONATION INFORMATION**

- The most effective way people can assist relief efforts is by making cash contributions to humanitarian organizations that are conducting relief operations. A list of humanitarian organizations that are accepting cash donations for disaster responses around the world can be found at <a href="https://www.interaction.org">www.interaction.org</a>.
- USAID encourages cash donations because they allow aid professionals to procure the exact items needed (often in the
  affected region); reduce the burden on scarce resources (such as transportation routes, staff time, and warehouse
  space); can be transferred very quickly and without transportation costs; support the economy of the disaster-stricken
  region; and ensure culturally, dietary, and environmentally appropriate assistance.
- More information can be found at:
  - USAID Center for International Disaster Information: www.cidi.org or +1.202.661.7710
  - Information on relief activities of the humanitarian community can be found at www.reliefweb.int.