

INDONESIA: DISASTER RESPONSE AND RISK REDUCTION

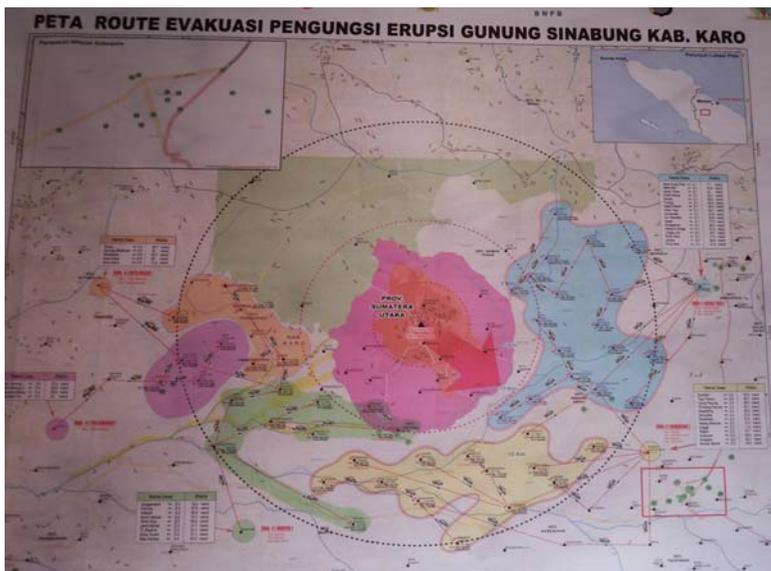
OVERVIEW

Indonesia is one of the most disaster-prone countries in the world, regularly experiencing earthquakes, tsunamis, landslides, volcanic eruptions, flooding, and drought. Spread across 6,000 inhabited islands, communities in Indonesia face a numerous different hazards, as well as differing levels of disaster response capacity, posing a challenge to preparing for and responding to disasters. Poverty, population growth, and rapid urbanization exacerbate these vulnerabilities, along with climate change and the resulting changes in rainfall patterns, storm severity, and sea level.

In addition to responding to disasters when they occur, USAID/OFDA helps build local response capacity and reduce risks associated with natural hazards. In January 2012, USAID/OFDA established a sub-regional office in Jakarta to enhance in-country program monitoring, coordination, and information management. The sub-regional office works closely with USAID/Indonesia, Government of Indonesia (GoI) disaster response authorities, and humanitarian partners to prepare for and respond to disasters.

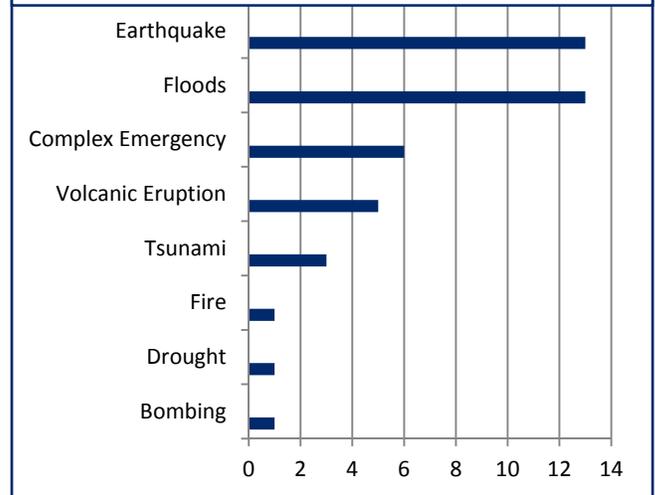
As a result of USAID/OFDA preparedness and disaster risk reduction (DRR) efforts, Indonesians are better prepared to respond to disasters, and the country is becoming less reliant on international disaster resources. First responders trained through a USAID/OFDA-funded program are capably providing assistance during emergencies, and community-based programs are raising awareness of the ways that residents can mitigate risk and improve preparedness for disasters.

RECENT DISASTER RESPONSES



A map plots out evacuation routes from the area surrounding Mt. Sinabung. (Photo by Harlan Hale, USAID/OFDA)

Number and Type of U.S. Disaster Declarations in Indonesia (FY 1990 to FY 2014)



- The Mt. Sinabung volcano in Indonesia's North Sumatra Province erupted between September 2013 and February 2014, producing pyroclastic flows—fast-moving currents of hot gas and rock—that resulted in 16 deaths and displaced approximately 31,400 people. In response, USAID/OFDA provided \$100,000 through USAID/Indonesia to the International Organization for Migration (IOM) for the procurement and distribution of emergency relief commodities. USAID/OFDA also provided \$200,000 to the U.N. World Food Program (WFP) to support the response. Additionally, staff from the USAID/OFDA-funded Volcano Disaster Assistance Program (VDAP) assisted with monitoring and analyzing seismic data and satellite imagery.

- In July 2013, a magnitude 6.1 earthquake struck the Aceh Tengah and Bener Meriah districts of Aceh

Province, resulting in at least 42 deaths, more than 2,500 injuries, and the displacement of approximately 53,000 people. In response, USAID/OFDA provided \$100,000 to the International Organization for Migration (IOM) for the distribution of emergency shelter and hygiene kits, and \$300,000 to the American Red Cross (AmRC) and its partner the Indonesian Red Cross Society—locally known as Palang Merah Indonesia (PMI)—for the distribution of relief items, as well as water, sanitation, and hygiene support. USAID/OFDA also provided \$270,000 to Build Change to increase the capacity of homeowners, builders, government officials, non-governmental organizations (NGOs), and partner organizations to rebuild safe, sustainable houses.

- Severe flooding throughout Jakarta in mid-January 2013 resulted in more than 30 deaths and temporarily displaced tens of thousands of people. In response, USAID/OFDA provided \$150,000 to Mercy Corps and its partners Save the Children and World Vision to distribute cleaning supplies, hygiene items, and other commodities to approximately 42,000 affected residents.
- Torrential rains in August 2012 resulted in flooding and landslides in Ambon city in eastern Indonesia’s Maluku Province, killing 10 people and displacing several thousand others. In response, USAID/OFDA deployed an assessment team and provided \$100,000 to Mercy Corps for the distribution of relief commodities to affected populations.



USAID/OFDA partner PMI delivers water to earthquake-affected areas in Aceh Tengah. (Photo by USAID/OFDA)

REGIONAL DRR PROGRAMS ACTIVE IN INDONESIA¹

- **Volcano Monitoring and Response Assistance:** With USAID/OFDA support, the U.S. Geological Survey (USGS) VDAP program has provided technical assistance and responded to volcanic eruptions in Indonesia since the 1990s, including the 1994, 2006, and 2010 eruptions at Mt. Merapi, as well as the recent Mt. Sinabung eruption. In FY 2013, VDAP staff participated in on-site crisis response in Indonesia at Dieng, Raung, and Tangkuban Perahu volcanoes, as well as remote responses—including technical consultation and remote sensing analysis—during crises at Ijen, Lokon, Raung, Rokatenda, Sinabung, and Tangkuban Perahu volcanoes. USAID/OFDA has provided \$330,000 in FY 2014 funding for VDAP programming in Indonesia.
- **Program for the Enhancement of Emergency Response (PEER):** Since 1998, USAID/OFDA has supported PEER in Indonesia to develop a cadre of professional emergency response instructors and assist in organizing and conducting standard training in medical first response, collapsed structure search and rescue, and hospital preparedness for mass casualties following a disaster. PEER-trained responders, including PEER’s local implementing partner Ambulan 118, responded to the Banda Aceh tsunami in 2004, a mosque collapse in Jakarta in 2005, and the Padang earthquake in 2009. During the 2009 response, Ambulan 118 was the first civilian disaster response team to arrive at the disaster site, and its collapsed structure search and rescue team was able to rescue survivors trapped under rubble.
- **Good Governance, Equitable and Sustainable Development, and Security in ASEAN:** USAID/OFDA supports the Association of Southeast Asian Nations (ASEAN)—U.S. Partnership for Good Governance, Equitable and Sustainable Development, and Security (PROGRESS) to provide technical assistance, training, materials, and general support to advance good governance and regional security, as well as promote resilience and development in Southeast Asia. USAID/OFDA provided \$250,000 in FY 2014 funding to Development Alternatives, Inc. (DAI) to support PROGRESS. This program will support the development of disaster management curriculum to enhance the disaster response capacity of National Disaster Management Organizations in ASEAN.

¹ The listed programs and funding are not exhaustive, but represent funding committed or obligated as of October 24, 2014.

- **Building Capacity for Disaster Response in ASEAN:** The Logistics Institute–Asia Pacific at the National University of Singapore (NUS) seeks to equip individuals with humanitarian logistics knowledge and tools for effective disaster preparedness and response activities. With approximately \$300,000 in USAID/OFDA support, NUS is targeting humanitarian actors—including government officials, NGO staff, and private sector representatives—in Indonesia, the Philippines, Singapore, and Thailand for training in supply chain management, strengthening their ability to manage preparedness operations, such as pre-positioning supplies, as well as response operations, such as relief distributions.
- **Strengthening Regional Emergency Preparedness and Response Capacity:** In FY 2014, USAID/OFDA provided \$150,000 to the U.N. Children’s Fund (UNICEF) to strengthen the emergency preparedness and response capacity of UNICEF country offices in East Asia and the Pacific, including in Indonesia, through trainings, simulations, webinars, and support from specialists. UNICEF will also use funding from USAID/OFDA to enhance humanitarian knowledge management, conduct studies on emerging response topics, and support regional coordination.
- **Improving Public Access to Disaster Preparedness Information:** AmRC continues to use prior year funding from USAID/OFDA to develop interactive applications for mobile devices to share first aid and disaster preparedness information, including communications from existing early warning systems. The program targets populations residing in at-risk urban areas in Burma, Indonesia, the Philippines, and Vietnam.

ONGOING INDONESIA-SPECIFIC DRR PROGRAMS

- **Reducing Risks from Natural Disasters and Displacement:** In Aceh Province, which was devastated by the Indian Ocean tsunami in 2004, USAID/OFDA is working with IOM to strengthen the disaster management capacity of provincial, district, and city disaster management authorities; enhance comprehensive, multi-sectoral disaster planning among local government agencies; and link communities to government and non-governmental disaster management organizations to encourage community participation in DRR planning. In FY 2014, USAID/OFDA provided an additional \$1.3 million to IOM to expand programming into eight additional districts, bringing the total number of districts reached to 13.
- **Institutionalizing Disaster Management Capacity:** USAID/OFDA is supporting Mercy Corps’ work to institutionalize disaster management capacity in Indonesia. Mercy Corps’ program plans to embed qualified teams of trainers within the provincial disaster management agencies to provide ongoing, day-to-day technical support tailored to the needs of each province, as well as to implement a series of training modules coordinated and standardized with Indonesia’s National Disaster Management Agency. The program will directly reach more than 4,200 people with training and indirectly benefit more than 42 million people in six provinces by improving the local population’s capacity to prepare for and recover from environmental shocks and stresses. In FY 2014, USAID/OFDA provided \$4 million for the two-year, \$5 million program.
- **Indonesia All-Hazard Warnings, Analysis, and Risk Evaluation (InAWARE):** Designed by the Pacific Disaster Center (PDC), the Disaster AWARE web-based platform integrates information, modeling, and mapping technologies to provide disaster authorities with a stream of information on current hazards. With USAID/OFDA support, PDC—which is managed by the University of Hawaii/Manoa in cooperation with the U.S. Department of Defense—is working to enhance Indonesia’s capacity to monitor and respond to natural hazards through a custom AWARE platform in Indonesia. InAWARE features an Indonesian language interface and integrates real-time data from Indonesian agencies. Throughout the course of the multi-year program, PDC is also supporting government agencies to formalize information-sharing processes and training local authorities on interpreting and making decisions based on data received through InAWARE. In FY 2014, USAID/OFDA committed nearly \$837,000 to continue PDC’s activities.
- **Indonesia Liquidity Facility after Disasters (ILFAD):** In Indonesia, many poor households and small business owners rely on microfinance institutions (MFIs), such as rural banks and credit unions, which provide financial services to lower-income populations. However, MFIs are often affected by the same disasters that increase the vulnerability of their clients. Recognizing that MFIs can help communities recover after a disaster, USAID/OFDA partnered with a



Mission Disaster Relief Officer John Hansen distributes relief commodities to people affected by the 2013 earthquake in Aceh province. (Photo by Yusak Oppusunggu, USAID)

non-profit institution, technical experts, and a wholesale commercial bank to build the capacity of Indonesian MFIs. USAID/OFDA, through Mercy Corps, provides training and one-on-one assistance to Indonesian MFIs on disaster preparedness and supports the development of tools and financial services specifically designed for disasters, such as disaster recovery loans to help affected people repair homes and businesses or replace tools and inventories. The public-private partnership also increases MFIs' access to short-term, post-disaster funding by providing a mechanism for emergency cash injections to MFIs. In total, USAID/OFDA has provided more than \$1.6 million in support of the ILFAD project, including more than \$750,000 in FY 2014.

- **Improving Agricultural Resilience and Reducing Disaster Risks:** USAID/OFDA provided more than \$1.2 million in FY 2014 funding to World Neighbors (WN) to improve economic resilience to disasters by strengthening food production systems, running savings and credit groups, and building the capacity of provincial and district disaster management agencies. WN plans to comprehensively address natural resource management, livelihoods, and community preparedness for disasters through the implementation of climate-resilient agricultural practices. In addition, WN plans to advocate for the inclusion of disaster management activities in district, sub-district and regional regulations; map disaster prone areas at the district level; and create modules, simulations, and media campaigns to raise awareness about disasters.
- **Reducing Risks of Population Displacement:** Indonesia is vulnerable to various natural disasters—including floods, earthquakes, and volcanic eruptions—that can displace people from their homes. With nearly \$700,000 in USAID/OFDA support, IOM is building the capacity of Indonesia's National Disaster Management Agency (BNPB) to develop contextually appropriate training on humanitarian camp coordination and camp management (CCCM). Program activities include training BNPB and other relevant officials in CCCM practices, developing a cadre of national CCCM trainers who can conduct courses at the provincial and district level, and creating standard operating procedures for managing evacuation sites in Indonesia.
- **Improving Humanitarian Logistics Capacity:** With nearly \$494,000 in FY 2014 assistance, USAID/OFDA—through partner WFP—is supporting BNPB to strengthen its ability to manage humanitarian logistics operations. Program activities include adapting and translating a WFP-developed training curriculum, teaching participants to lead disaster management trainings, developing disaster scenarios for training exercises, and supporting the BNPB to develop a logistics management system.
- **Improving Flash Flood Early Warnings:** USAID/OFDA provided \$400,000 in FY 2014 funding to the U.N. World Meteorological Organization (WMO) for the Flash Flood Guidance System (FFGS) in Indonesia. FFGS provides hardware, software, and data so that meteorological services can produce timely early warnings for flash floods.
- **Resilient Environment through Active DRR Initiatives (READI):** With an FY 2014 contribution of \$215,000 to Mercy Corps, USAID/OFDA continues to reduce risks for Indonesian coastal communities by enhancing tsunami warning systems through the READI program. The program targets nearly 1.7 million people in the most populous cities on Sumatra's west coast, as well as in the isolated Mentawai and Nias islands. Program activities include installing tsunami sirens in areas that lack public warning systems and partnering with local radio stations to raise awareness of risks and broadcast information in the immediate aftermath of a disaster. Mercy Corps also plans to work with local governments to identify existing structures of sufficient height for use as tsunami shelters, designate and map evacuation routes, and facilitate training for local disaster management officials.
- **Support for Coordination and Information Management:** USAID/OFDA provided \$200,000 to the U.N. Office for the Coordination of Humanitarian Affairs (OCHA) in FY 2014 for information management and humanitarian coordination activities in Indonesia. The funding helps ensure that OCHA is positioned to coordinate assistance, identify needs, and avoid duplication in the aftermath of a major disaster.
- **Improving Disaster Response Management and Coordination:** To improve the management and coordination of disaster responses, USAID/OFDA and USAID/Indonesia support the U.S. Forest Service (USFS) training on the incident command system (ICS)—a framework enabling more effective response operations within a common organizational structure—throughout Asia. In FY 2012, USAID/OFDA began ICS training in Indonesia, supporting an ICS specialist to work with the Gol to develop and translate course materials and conduct basic and intermediate courses for members of Indonesia's two disaster rapid response teams. In September 2012, 60 staff members from the Gol and NGOs received basic ICS training. Additionally, 30 of these participants also received further instruction to become ICS master trainers, who are able to conduct additional trainings for provincial- and

district-level disaster managers. The trainings helped improve Gol coordination during the January 2013 Jakarta floods response and the July 2013 Aceh earthquake response. To date, USAID/OFDA has provided \$450,000 to support ICS training in Indonesia.

- **Enhancing Disaster Management through University Partnerships:** The University of Hawaii/Manoa continued to use prior year USAID/OFDA funding to develop disaster management curricula at Indonesian universities. In the first year of the program, faculty members from four Indonesian universities participated in the University of Hawaii/Manoa's Disaster Management Humanitarian Assistance summer institute. In subsequent years, University of Hawaii/Manoa faculty plan to work with Indonesian universities to develop and establish curricula and certificate programs adapted to the local context, improving disaster management education and research within the country.
- **Adapting to Climate Change and Reducing Food Insecurity through Conservation Agriculture:** The most food insecure populations in Indonesia reside in the southern, drought-prone provinces of East Nusa Tenggara and West Nusa Tenggara. The U.N. Food and Agriculture Organization (FAO) continued to use prior year USAID/OFDA funding to improve household food insecurity and enhance resilience of populations vulnerable to climate-related disasters and climate change. During the first phase of the program, FAO plans to promote conservation agriculture among universities, research centers, local governments, and farmers. Through a variety of measures, conservation agriculture helps improve agriculture sustainability, reduce crop losses, enhance soil fertility, and increase crop diversification.

- **Mitigating Risks for Coastal Communities:** AmRC, in partnership with PMI, continues to use prior year USAID/OFDA funding to reduce coastal communities' vulnerability to natural hazards by increasing the DRR knowledge and capacity of community members, strengthening the organizational and management capacity of PMI, and conducting community mitigation activities to decrease environmental risks. Communities participating in the program map local hazards, develop evacuation routes, and receive updated communications equipment and skills training to disseminate disaster early warnings. Community members also receive training on the planting and management of mangrove forests.



Workers dig a drainage ditch along a road in Aceh to help reduce flooding. (Photo by USAID/OFDA)

- **Increasing Coastal Communication and Resilience:** ACTED continued to use prior year USAID/OFDA funding to help communities in East Nusa Tenggara better prepare for disasters. Program activities include the establishment of a community radio station, formation of village disaster preparedness committees, creation of DRR plans and emergency drills, provision of training on strategies for using natural resources to reduce coastal hazards, and implementation of small-scale mitigation projects.
- **Climate Adaptation and Disaster Resilience (CADRE):** Since 2011, USAID/OFDA has provided more than \$1.5 million to the CADRE program, enabling USAID/OFDA and USAID/Indonesia to partner in funding projects that educate and engage communities and local officials in climate change adaptation measures and improve linkages between national-, provincial-, and district-level governments, leading to more coordinated and inclusive DRR and climate change planning. Over the past several years, USAID/OFDA funding for CADRE has supported Project Concern International (PCI), Farmer Initiatives for Ecological Literacy and Democracy (FIELD), Lutheran World Relief, Mercy Corps, and WN to improve sustainable land use, reduce disaster vulnerability, and mitigate the impact of climate change by rehabilitating mangrove forests and increasing community capacity for effective coastal land management.