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

VOLCANO DISASTER ASSISTANCE PROGRAM (VDAP)

OVERVIEW

Since 1980, volcanic activity worldwide has killed more than 29,000 people and displaced more than a million others. On average, approximately 10 eruptions a year cause significant damage and casualties, while major disasters occur several times a decade. Following the 1985 eruption of Nevado del Ruiz volcano in Colombia, which resulted in the deaths of approximately 25,000 people, USAID/OFDA and the U.S. Geological Survey (USGS) established the Volcano Disaster Assistance Program (VDAP). USAID/OFDA-funded and implemented by USGS, VDAP has provided technical assistance to national volcano monitoring organizations since 1986 and serves as the only international rapid-response volcano crisis team in the world. VDAP also contributes to strengthening risk reduction and response capacity in developing countries through the transfer of volcano-monitoring equipment, development of early warning plans, and training in monitoring technology and hazard assessment. To date, VDAP has responded to 24 major crises and worked to build capacity in 12 countries, helping to save tens of thousands of lives and to safeguard property worth hundreds of millions of dollars. USAID/OFDA has provided $13 million to VDAP since its inception, including $1.1 million in FY 2007. The success of VDAP underscores the value of preparedness and long-term international partnerships, establishment and maintenance of national monitoring networks, and availability of technical assistance.

VDAP Website: http://volcanoes.usgs.gov/About/Where/VDAP/main.html

VDAP Team Deployments Worldwide

RESPONDING TO CRISIS IN COLOMBIA

Nevado Huila Volcano, Colombia Courtesy of VDAP.

Following the February 2007 eruption of Nevado del Huila Volcano, USAID deployed three VDAP volcanologists to the affected area. The team provided technical training on volcano-monitoring technology, response-related communication contingency plans, and the development and implementation of evacuation plans. On April 18, a second eruption occurred, resulting in a volcanic mudflow, also referred to as a lahar. Relying on the training provided by VDAP during the first visit, INGEOMINAS, a Government of Colombia (GOC) volcano and earthquake monitoring agency, recommended the evacuation of an estimated 5,000 people prior to the eruption. VDAP's assistance in successfully forecasting eruptions and the rapid and timely response of VDAP and the GOC proved integral to saving lives and preventing serious injuries. In April 2007, VDAP returned to Colombia to assist INGEOMINAS in interpreting data on the volcano's activity. VDAP also improved and expanded the monitoring network at the volcano and INGEOMINAS observatory infrastructure in Popayán, Cauca Department.

BUILDING CAPACITY IN INDONESIA

Started in 2004, VDAP's capacity-building project in North Sulawesi, Indonesia, continues to make important advances in strengthening local volcano monitoring, mitigation, and response capacity. In February and March 2008, VDAP conducted training on monitoring volcano-related earthquakes and volcanic gas emissions, established a real-time seismic network, assessed hazards from three 2007 eruptions, and worked with Indonesia's Center of Volcanology and Geologic Hazard Mitigation (CVGHM) to continue building a new volcano observatory in North Sulawesi to monitor the 11 active volcanoes in the region that threaten at least a half million people. Since 2007, CVGHM and VDAP have increased the number of seismic stations monitoring volcanoes from 4 to 14 providing a higher quantity and quality of data about small volcano-related earthquakes that are precursors to eruptions. This information will allow CVGHM to forecast eruptions more accurately and quickly.

VDAP and CVGHM scientists install a station for sending data about volcanic activity in North Sulawesi. Courtesy of VDAP.