

NEPAL EARTHQUAKE: DISASTER RISK REDUCTION PREPARATION



PHOTO: KASHISH DAS SHRESTHA - USAID

On April 25, 2015, a magnitude 7.8 earthquake struck central Nepal. Within hours of the earthquake, a USAID Disaster Assistance Response Team (DART) was deployed to Nepal to assist with relief and recovery. The DART worked with the local authorities to find survivors and help the displaced. On May 12, a magnitude 7.3 aftershock struck Nepal's Dolakha District, approximately 76 km northeast of Kathmandu, causing further casualties and damage in areas affected by the April 25 earthquake.

DISASTER RISK REDUCTION: PREPARATION AND IMPACT

In preparation for a potential earthquake disaster, USAID has worked over 20 years supporting disaster risk reduction (DRR) efforts in Nepal. USAID's support enabled partners to strengthen earthquake response capacity at the local and national levels in collaboration with the Government of Nepal (GoN), nongovernmental organizations, private companies, and local communities.

KEY EMERGENCY-RELIEF ACTIVITIES INCLUDED:

Pre-Positioned Supplies: USAID worked with partners to ensure emergency relief supplies were



PHOTO: USAID PAHAL PROGRAM/MERCY CORP



PHOTO: BIMALA RAI COLAVITO/IDE NEPAL

available in Nepal in the event of a natural disaster. With USAID support, the Nepal Red Cross Society (NRCS) maintains warehouses in 12 strategic locations throughout Nepal, pre-positioning stocks of emergency relief items - including plastic sheeting, blankets, clothes, and kitchen supplies - to enable an immediate response in cases of rapid-onset disasters. The NRCS was immediately able to distribute pre-positioned emergency relief items to approximately 3,000 families in earthquake-affected districts. With Nepal Army helicopter support, USAID partners like Save the Children quickly reached the heavily affected districts and distributed pre-positioned household shelter kits. USAID had also pre-positioned two water treatment systems that are currently being used at full capacity, and helped reduce the impact of water and sanitation-related health problems post-earthquake.

Community-Level Response Training:

Since 1998, USAID's Office of U.S. Foreign Disaster Assistance (USAID/OFDA) has supported the Program for Enhancement of Emergency Response (PEER) to promote disaster preparedness through the development of national and regional cadres of professional emergency response instructors. PEER aims to assist local, regional, and national disaster management agencies in organizing and conducting

standardized training in medical first response, community action for disaster response (CADRE), collapsed structure search and rescue (CSSR), and hospital preparedness for emergencies (HOPE). For over a decade, USAID has worked with the Nepal Red Cross Society to train community teams to respond to multi-casualty incidents such as earthquakes and landslides. These volunteers receive training on basic life support, mitigation measures, light search and rescue, and even dead body management. Graduates from the PEER program come from Nepal Police, Nepal Armed Police Force, Nepal Army, Nepal Red Cross Society and various Municipality offices, to name a few, and are part of an existing squadron of over 737 first responders in Nepal. Their efforts proved vital after the April 25 earthquake.

Following the earthquake, Nepal Red Cross immediately deployed 75 CADRE volunteers to provide assistance, while the many other volunteers were themselves affected and using their skills and intuition to assist their immediate family and communities. The Teaching Hospital in Kathmandu, with approximately 400 hospital staff trained by the HOPE program and a seismic-proof blood bank



PHOTO: KASHISH DAS SHRESTHA - USAID

onsite, was able to treat over 700 patients and perform more than 300 surgeries in less than 24 hours immediately following the earthquake.

Read more: <https://usaidpubs.exposure.co/one-doctors-story-of-hope>



PHOTO: KASHISH DAS SHRESTHA - USAID

Preparedness and Management of Open Spaces for Effective Humanitarian Response:

In 2013, USAID supported the International Organization for Migration (IOM) to identify, prepare, and preserve more than 80 open spaces to ensure that the sites were available for displacement camps and other humanitarian purposes—such as distribution centers and warehouses—following a large-scale disaster. In addition, USAID/OFDA support helped IOM raise public awareness, increase the capacity of Government of Nepal authorities to respond to disasters in the region, and ensure sustainable and comprehensive approaches to disaster response. Many of these open spaces in the Kathmandu Valley are still being used for relief distribution and shelter space.

Building Capacity of Key Nepali

Institutions: One of USAID's most enduring disaster risk reduction partnerships in Asia has been with the Kathmandu-based National Society for



CREDIT : USAID

Earthquake drill in public schools.

Earthquake Technology (NSET). Established in 1993, NSET's mission is to reduce the risks associated with earthquakes in Nepal. USAID's partnership with NSET began in 1997. Since that time, USAID has provided more than \$8 million in support of NSET's activities, helping it evolve into one of the world's

leading organizations on earthquake preparedness and mitigation.

In coordination with the GoN, NSET strengthened earthquake preparedness by working with schools, hospitals, and airport

and transportation authorities to conduct risk assessments and develop earthquake-preparedness plans. NSET assisted several municipalities in Nepal to develop earthquake damage scenarios and management plans for incorporation into periodic municipal development plans. In collaboration with GoN agencies, NSET expanded this process of urban risk assessment to selected urban/urbanizing settlements in Nepal. NSET also raised public awareness of the use of "go bags"—easy-to-carry bags containing medications, non-perishable food, a portable radio, and other items useful in an emergency. The program focused on Kathmandu Valley and other urban areas of Nepal, including four submetropolitan cities, 53 municipalities and 135 small towns. By April 2015, NSET had trained more than 4,000 people, and distributed more than 600 go bags.

Similarly, USAID/OFDA has worked to build the capacity of the Nepal Red Cross Society (NRCS) which is at the forefront of the current response and relief efforts. With USAID/OFDA support, NRCS procured and pre-positioned critical relief supplies to help reduce waterborne disease transmission in the aftermath of a disaster for the benefit of up to 5,000 people in Bhaktapur District. NRCS pre-positioned hygiene promotion kits, emergency latrine construction materials, and two emergency water treatment plants, as well as provided first response training to members of a National Disaster Response Team.

Debris Management Planning: In 2013, USAID/OFDA supported IOM to help the GoN to develop a debris management plan for a post-earthquake scenario. This plan pre-identified nine sites for rubble disposal in Kathmandu. In January 2015, the Ministry of Federal Affairs and Local Development formally took ownership of the plan, which provided organizational structure and standardized guidelines for disposal of post-



PHOTO: KASHISH DAS SHRESTHA - USAID

earthquake debris in an environmentally responsible manner.

Building Code Implementation:

For years, USAID partners like NSET have conducted training and awareness-raising on seismically safer construction for municipality staff and technical personnel, including building contractors and masons. This effort established incentive systems for building code implementation.

Integrating DRR into Development

Programs: Over the past several years, USAID/Nepal integrated DRR and preparedness activities into all relevant development projects. For example, USAID's new five-year Community Resilience Program, which operates in many of the most-affected districts, has robust community preparedness components. Additionally, USAID/Nepal's flagship environment program, Hariyo Ban, implements climate change adaptation-related interventions that focus on creating awareness and preparedness for extreme weather events and climate-induced disasters such as floods, landslides, and forest fires.

Tribhuvan University Teaching Hospital

Blood Bank: The U.S. Government, through the Department of Defense, helped construct and equip a seismically safe blood bank at Tribhuvan University Teaching Hospital. After the earthquake, the blood bank remained fully operational, helping to equip not only Tribhuvan University Teaching Hospital but also surrounding hospitals with blood. Overall, it distributed over 700 pints of blood to other medical centers immediately after the earthquake.



PHOTO: KASHISH DAS SHRESTHA - USAID

Construction of Deep Tube Wells:

In collaboration with the Department of Defense, USAID helped construct seven new deep tube wells within the Kathmandu Valley to provide water supplies to the population in a major disaster. Two deep tube wells are operational and providing vital water supplies to Kathmandu residents. ●

Many of these open spaces in the Kathmandu Valley are still being used for relief distribution and shelter space.