

**Testimony of U.S. Agency for International Development
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**House Foreign Affairs Committee Subcommittee on Asia and the Pacific
“Everest Trembled: Lessons Learned from the Nepal Earthquake Response”**

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Chairman Salmon, Ranking Member Sherman and Members of the Subcommittee: Thank you for inviting USAID to testify on the U.S. humanitarian response to the Nepal earthquake. Thank you also for your continued support for USAID’s humanitarian and development programs, which save lives and put people on a path toward democracy, resilience, and prosperity.

We would like to express our deepest condolences to the families who lost loved ones in the April 25 earthquake and May 12 aftershock. It is heartbreaking to see the devastation and loss of life caused by this disaster and the damage to sacred sites. We also extend our condolences to the families of the six U.S. Marines and two Nepalese soldiers who died while delivering relief supplies. We are grateful to our military, urban search-and-rescue teams, partners, and staff who are taking risks every day to save lives in Nepal.

Landlocked between India and China, Nepal is one of the poorest countries in the world and continues to cope with the effects of a decade-long insurgency that ended in 2006. In line with USAID’s mission to end extreme poverty and promote resilient, democratic societies, U.S. development efforts support progress toward a democratic, resilient, and prosperous Nepal.

For more than two decades, USAID has partnered with the Government of Nepal to strengthen its governance system, especially its disaster management and emergency response capabilities. While the April 25 earthquake and subsequent aftershocks caused significant damage to the country, preparedness measures put in place prior to the earthquake—such as the pre-positioning of supplies and training on earthquake-resistant construction—helped to save lives and mitigate damage. To date, the U.S. Government has provided nearly \$47 million in humanitarian assistance to earthquake-affected populations. We know that our investments before the crisis and after will be critical to ensuring that Nepal can overcome this latest tragedy and build a democratic, resilient future.

Prior to the earthquake, Nepal had made significant development gains, including with support from the Feed the Future program, and Global Health and Global Climate Change initiatives. Through these and other initiatives, USAID helped Nepal cut its extreme poverty rate in half to 25 percent. We supported Nepal in achieving a 50 percent increase in the number of children under two consuming a minimally acceptable diet in 20 targeted districts, and we helped achieve maternal and infant mortality decreases that put Nepal on track to meet its Millennium Development Goals in these areas.

USAID has been a committed partner in helping key institutions in Nepal—such as the Election Commission, political parties, and the new Constituent Assembly—become more democratic,

effective, and inclusive of all citizens. Since 2006, we have supported Nepal in carrying out two free and fair elections, with high voter turnout due to our voter registration support. Despite these achievements, Nepal has significant challenges ahead. The combination of weak institutions of democratic governance and a natural disaster threaten the stability of this fragile democracy and the economic development gains made over the last decade. We know that nation states with the capacity to manage risks and encourage inclusive growth are best able to withstand disasters. As Nepal underscores, addressing state fragility and promoting good governance is key to building resilience.

Today, we would like to provide an overview of the current humanitarian conditions as well as an update on our response efforts and critical next steps.

Current Situation and U.S. Response

On April 25, a magnitude 7.8 earthquake struck central Nepal—the worst to hit the country in over 80 years. It caused widespread damage across the country, nearly destroyed entire villages, and triggered several landslides and avalanches. The earthquake was followed by more than 100 aftershocks¹, including a magnitude 7.3 tremor on May 12 that triggered additional landslides and collapsed buildings already damaged by the April 25 earthquake.

According to the Government of Nepal’s latest statistics, the earthquake and its aftershocks have killed over 8,600 people, injured over 16,800, and damaged or destroyed more than 760,000 homes. Authorities expect these numbers to grow.

Hours after the first earthquake hit, USAID’s Office of U.S. Foreign Disaster Assistance (OFDA)—which has Presidential authority to coordinate the U.S. Government response to international disasters—deployed a Disaster Assistance Response Team (DART) to Nepal to assess the damage, airlift relief supplies, coordinate relief efforts with the Government of Nepal and other donors, and conduct search-and-rescue missions. The DART comprised more than 20 experienced USAID disaster experts; a 57-person urban search-and-rescue (USAR) team from Fairfax County, Virginia; a 57-person USAR team from Los Angeles County, California; and 12 rescue canines. USAID also stood up a Response Management Team in Washington for operational support and coordination with other U.S. Government agencies.

Building on lessons learned from previous disaster responses, we know that strong coordination is critical for a timely and effective response. Given our need to reach remote areas, we requested assistance from the U.S. Department of Defense (DoD) to provide its unique capabilities, including airlift and logistical support to the USAID-led effort. DoD activated a Joint Task Force out of U.S. Pacific Command and deployed four MV-22 Ospreys and three UH-1Y Hueys to support USAID’s efforts to transport critical commodities to, and conduct aerial assessments of, earthquake-affected areas. On May 4, USAID’s DART Leader and the Commanding General of the 3rd Marine Expeditionary Brigade conducted the first U.S. aerial assessment to the severely-impacted Dolakha and Ramechhap districts and neighboring areas. Since May 4, we have

¹ http://www.usgs.gov/blogs/features/usgs_top_story/magnitude-7-8-earthquake-in-nepal/

worked with the U.S. military to transport about 109 tons of relief supplies to hard-hit districts identified by Nepalese officials.

Together with the military, we addressed major logistical obstacles to ensure that humanitarian assistance could flow more quickly to the people and places most in need. Collaboration and coordination between USAID and the U.S. military—which has strengthened over the years—has been exemplary for the Nepal earthquake.

USAID also partnered with the U.S. Geological Survey (USGS) to get timely information on the April 25 earthquake and its aftershocks that helped to shape our response activities. USAID funds the USGS Prompt Assessment of Global Earthquakes for Response (PAGER) system. The system—developed in consultation with USAID—provides rapid estimates of likely fatalities and economic losses following an earthquake. In addition, USGS provided forecasts that gave our DART and the affected population a sense of the frequency, magnitude, and duration of aftershocks.

On April 30, USAR members of the USAID DART helped pull a 15-year-old boy out of the rubble in Kathmandu, five days after the earthquake hit. The teen was quickly transported to an Israeli field hospital where he was treated and later released. USAR teams also surveyed more than 130 buildings and bridges in Kathmandu for earthquake damage, including an ancient Hindu temple complex recognized as a UNESCO World Heritage Site.

The continued presence of our USAR specialists in Nepal allowed them to rapidly resume operations following the May 12 aftershock. Within hours, our USAR teams rescued a 41-year-old woman from a collapsed building in Singati, and provided medical care to her and 11 other injured people. USAID had another USAR team in the nearby village of Charikot, where medics treated additional people for injuries. At Kathmandu's Tribhuvan International Airport, our USAR medics worked with U.S. military personnel to set up a triage center—using medical supplies purchased and airlifted by USAID—and treated more than 50 people who had been evacuated to safety. We began to demobilize our USAR specialists on May 14 as the Government of Nepal signaled efforts should pivot toward assessing needs and coordinating relief and recovery programs. However, USAID disaster experts remain in Nepal to assist with managing the U.S. Government response.

Immediate Needs

Despite progress made over the past few weeks, substantial humanitarian needs remain in Nepal. Our current funding will continue to support improved logistics and humanitarian coordination and provide emergency shelter, safe drinking water, food, improved sanitation, hygiene promotion, and protection for the vulnerable, including women and children.

With the monsoon season fast approaching in June, our humanitarian partners are concerned that heavy rains will impede the delivery of assistance to remote areas. Monsoon rains will increase the risk of landslides in regions already destabilized by recent seismic activity, further affecting families who have lost homes, livelihoods, and loved ones. We and our partners are prioritizing

communities in these areas and delivering as many critical commodities as possible to ensure they have a three-month supply to get through the full monsoon season.

Logistics

In the immediate aftermath of the earthquake, the response effort was hampered by damaged infrastructure and blocked roads. While Kathmandu's Tribhuvan International Airport quickly reopened, a shortage of landing slots and limited cargo-handling capacity created bottlenecks for relief supplies arriving in Nepal. Debris and landslides blocked access to mountainous areas, creating challenges for distribution beyond Kathmandu.

Since May 4, the USAID DART has been working with the U.S. military to transport emergency relief supplies to remote earthquake-affected areas. USAID is also coordinating with the U.S. Air Force 36th Contingency Response Group and the Nepal Civil Aviation Authority to streamline airfield operations at the airport, maintain runway integrity, and expedite cargo flow so that relief supplies can be delivered more quickly to places in need.

Shelter

In Kathmandu, while some structures sustained damage, a majority remain standing. However in affected rural areas, the earthquake destroyed as many as 80 to 95 percent of structures. In addition to using pre-positioned supplies, USAID immediately transported emergency shelter materials from its global emergency stockpiles. The first airlift of USAID heavy-duty plastic sheeting arrived in Kathmandu on April 30 and was rapidly distributed by partners to help up to 35,000 affected people in the Kathmandu Valley and Sinhupalchowk and Gorkha districts. As aftershocks continued, it became apparent that shelter needs would increase.

We are prioritizing the provision of plastic sheeting, a cost-effective, durable, and lightweight material that can be easily transported to families in hard-hit rural areas choosing to stay near their damaged homes and farms. Plastic sheeting provides a water-resistant barrier for building temporary shelters and protecting damaged homes against rain. Moreover, plastic sheeting is a multi-purpose material that has been used to create child friendly spaces, latrines, rainwater catchment ponds, and even quarantine fencing during USAID's Ebola response.

In total, USAID is airlifting 6,200 rolls of heavy-duty plastic sheeting to help up to 310,000 people. Our partners are distributing emergency shelter kits with plastic sheeting, tools, and rope to families in hard-hit districts and conducting trainings on how to construct temporary shelters.

In the long-term, we are exploring how we might support the repair and reconstruction of homes and vital infrastructure, such as schools and health clinics.

Water, Sanitation, and Hygiene

USAID and the humanitarian community are prioritizing access to safe drinking water and sanitation facilities. According to the Government of Nepal, affected communities generally have access to water sources. However, the earthquake has severely impacted water quality. Landslides contaminated drinking water sources, requiring residents to boil or chlorinate their water to make it safe for consumption. Latrines were destroyed, forcing communities to practice

open defecation. As a consequence, more people are at risk of contracting waterborne diseases such as cholera, which is endemic to Nepal. With the heavy rains come heightened risks.

Between 660,000 and 1.7 million people will require water, sanitation, and hygiene (WASH) assistance, according to the United Nations (UN) and other partners. USAID partners are distributing hygiene kits containing soap, toothbrushes, and sanitary supplies. We have temporarily shifted our gold-standard nutrition program, which before the earthquake was helping over 625,000 households in 41 districts, to support Save the Children's efforts to distribute hygiene and baby kits to earthquake survivors and provide emergency nutrition services to pregnant women and children. Our partners are educating communities on good hygiene practices. We plan to support a disease surveillance system to quickly identify and respond to potential disease outbreaks.

Food

While emergency food needs are not acute at this time, we are concerned about the long-term impact of the earthquake on food security, especially since 75 percent of the population lives off of farming. Many farmers had their grain storage sheds destroyed, and lost livestock, seeds, and tools. Seismic movements caused farms to shift or be wiped out by landslides. At the time of the earthquake, winter wheat was about to be harvested and spring corn was mostly planted; however, the country's main rice crop—a vital grain in local diets—had not yet been planted. With monsoon rains on the horizon, the window to meet the planting cycle is closing.

An estimated 1.4 million people are expected to need immediate food assistance in the next three months. According to the UN, as of May 13, food aid has reached more than one million people in 11 districts. On April 29, USAID provided the UN World Food Program with \$2.5 million to buy 1,390 metric tons of regionally grown rice for 120,000 people for one month. The time required to ship U.S. food to Nepal, a landlocked country, would have taken weeks. By buying rice locally, we ensured emergency food was available in the crucial early relief stages. In the coming weeks, USAID intends to draw down on pre-positioned food stocks from our warehouse in Sri Lanka to help meet ongoing food security needs. Through an ongoing development program, USAID will distribute vegetable seed packets for homestead vegetable gardening in hard-hit areas, as these crops will be critical to improve food security and nutrition in the coming months.

Markets in Nepal's worst-affected districts are showing signs of early recovery, although markets remain closed in some of the country's mountainous regions. Remittance flows are accelerating the recovery, and we expect that markets will respond once transportation access is restored. Meanwhile, USAID is looking to support market-based activities to improve access to food items and agricultural supplies. Our partners are exploring cash-for-work projects to help people buy food in revived local markets. We are also working with farmers to overcome key obstacles to growing and getting their crops to market. USAID is well positioned to be effective in these efforts. Through Feed the Future, we have been working in Nepal for four years to address the challenges of low agricultural productivity and lack of market access. In 2014, USAID helped 90,000 households increase their agricultural productivity and incomes.

Protection

We know that women, children, the elderly, and those with special needs often fare worst during disasters, which is why we emphasize protection from the start of any emergency response. This is especially the case in Nepal, where a recent gender analysis by CARE showed that more than one-third of households in hard-hit Gorkha are female-headed, with approximately one in five headed by women ages 60 and older. Prior to the earthquake, human trafficking was a prevalent problem in Nepal; the current disaster puts women and girls at greater risk of exploitation, including in Sindhupalchowk, Kavre, and Dhading, which already had high labor migration.

To mitigate the risk of earthquake survivors falling prey to trafficking, sexual abuse, and gender-based violence, the UN stood up a protection cluster, which coordinates between UN agencies, non-governmental organizations, and others to address protection concerns. The protection cluster plans to identify a coordinator. We also require partners to mainstream protection in their relief efforts to ensure maximum safety and dignity for women, children, the elderly, the disabled, and others. For example, distribution lines are organized in consultation with the affected community, taking into account location and ease of access, so that beneficiaries—especially women and girls—don't need to travel too far or at night to receive aid.

USAID is also leveraging its anti-human trafficking program in Nepal to respond to heightened protection needs. Our partner, the Asia Foundation, mobilized mobile psychological support services for earthquake-affected communities in Sindhupalchowk. They are also coordinating with the Sindhupalchowk District Health Office to identify areas in need and set up a camp that will provide psychosocial first aid and counseling support to women, girls, children, and men to help them cope with the trauma of loss, and help them make decisions that do not put them at risk of trafficking, sexual abuse, and exploitation. USAID will expand these efforts to five more districts, targeting the most vulnerable people to provide psychosocial care, shelter, livelihoods support, and awareness-raising regarding protection services. These efforts build on USAID's ongoing legal counseling to survivors of trafficking and sensitization of hundreds of justice sector officials on rights-based approaches for effectively investigating, prosecuting, and adjudicating trafficking cases.

Long-Term Recovery

Time and again we have seen the value of initiating recovery efforts even as disaster response is underway, and we know this approach will be critical to ensure Nepal stays on a path of progress. While our robust humanitarian activities continue to save lives, we are already beginning to look at ways to restart economic activity and get people back on their feet.

In the coming weeks and months, we will work with the Government of Nepal, the international community, and local civil society to assess what will be required so that the long-term recovery advances in a way that bolsters future resilience and sustainable development. While those assessments are ongoing, we anticipate the recovery will focus on shelter and infrastructure, livelihoods and food security, health and hygiene, water and sanitation, education, protection of vulnerable people, and disaster risk management. Efforts to strengthen governance systems will also be critical to ensure that our recovery investments are transparent, accountable, and responsive to local needs. We know that shelter will be the greatest need and have learned from

past disasters that recovery in other areas is contingent on people having a safe place to live. With more than 90 percent of schools and health facilities damaged or destroyed in some districts, rebuilding public infrastructure will be critical.

We will be updating Congress as we proceed.

Building Resilience

We cannot stop shocks like earthquakes from happening, but USAID is committed to helping people mitigate risks and build the capacity to withstand them. In fiscal year 2014 alone, we have spent more than \$58 million to reduce disaster risk and strengthen response capabilities throughout Asia. Early warning is key to early action, which is why we have helped establish 17 global, regional, or national early warning systems for disasters such as volcanoes, cyclones, and floods. For example, we partner with the USGS on the Volcano Disaster Assistance Program, which worked with the Government of Indonesia to create an early warning system that helped evacuate more than 10,000 people when Mount Merapi erupted in 2010.

A massive cyclone slammed into the eastern coast of India in 1999, killing at least 10,000 people; due to disaster preparedness measures we helped the Indian government put in place over the past 15 years—including the training of thousands of emergency personnel—a similar storm in 2013 resulted in less than 50 fatalities.

In Nepal, our disaster risk reduction investments have focused on support to key institutions and communities to prepare for and respond to disasters. Before the earthquake, we partnered with the Nepal Red Cross Society to pre-position hygiene kits and latrine construction materials and install two water treatment units in two districts that have been severely affected by the earthquake. We helped the Nepal Red Cross Society stock 12 warehouses with emergency relief items, which were distributed to 3,000 families days after the earthquake. We funded the International Organization for Migration to work with the Government of Nepal to identify, prepare, and preserve more than 80 open spaces, so that in the event of a disaster there would be sites available for displacement camps, emergency warehouses, and other humanitarian activities. About half of these sites are now being used to shelter displaced people.

Since 1998, USAID has supported the Program for the Enhancement of Emergency Response (PEER) in Nepal and nine other countries. PEER assists local, regional, and national disaster management agencies in organizing and conducting trainings on medical first response, collapsed structure search-and-rescue, and hospital preparedness for mass casualties following a disaster. Dr. Pradeep Vaidya, a PEER graduate, implemented lessons learned and helped his hospital develop a disaster plan. As a result, Kathmandu's Tribhuvan Teaching Hospital fastened furniture to the walls, laminated windows, prepositioned supplies, and installed a seismic-resistant blood bank. These efforts allowed the hospital to stay open right after the earthquake, and its doctors treated 700 patients and performed more than 300 surgeries.

For more than 15 years, USAID has partnered with the Kathmandu-based National Society for Earthquake Technology (NSET) to increase earthquake awareness and preparedness. The organization educates homeowners, masons, and government authorities on the benefits of seismic-resistant construction and retrofitting best practices. The program also works with

schools, hospitals, and airport and transportation authorities to conduct seismic risk assessments and develop earthquake-preparedness plans. After the earthquake, NSET mobilized quickly to conduct structural assessments to determine which surviving structures were safe. In addition, later this month, USAID plans to fund the deployment of a USGS team that will provide technical assistance to Nepalese seismologists and geologists on hazard and damage assessments.

We have not only invested in emergency preparedness in Nepal, but also in recognizing and addressing the comprehensive set of risk factors and vulnerabilities that set Nepal's poorest communities back in the wake of recurring disasters. As part of USAID's new policy on resilience, we launched a \$70 million Community Resilience Program that integrates disaster risk reduction and climate change adaptation into our food and nutrition security efforts. In addition, USAID's climate change activities aggressively address awareness and preparedness for extreme weather events and climate-induced disasters. We continue to identify opportunities to design joint humanitarian and development programs that invest in a range of areas—from livelihoods to nutrition to disaster risk reduction—to help communities adapt to and mitigate risks and stay on a path to development.

As this earthquake underscored, rural communities, which farm along steep hillsides, are especially vulnerable to mudslides. For example, along the steep banks of the Trishuli River, poor farmers had cleared the forest cover in order to grow food to support their families. Consequently, the land began to erode. In partnership with the government and farmers, USAID helped stabilize the eroding banks by planting a combination of native "broom grass," a highly marketable cash crop, and trees that will eventually produce cinnamon, lemons, and timber, further enhancing incomes. These simple but effective investments will continue to help the people of Nepal reduce their vulnerability to inevitable shocks and stresses.

Conclusion

USAID's goal is to build upon preexisting capacities to help Nepal and its people become more resilient to future disasters. Our disaster experts continue to assess needs and monitor conditions on the ground to determine what additional assistance will be needed.

Nepal will not walk the road alone. The United States was one of the first countries to enter Nepal in 1951 when the government opened its borders to outside support. We are Nepal's longest-standing development partner, and we will work alongside the Nepalese people on the front lines of this response and recovery.

Thank you for your time today and for congressional support of our disaster response and development efforts in Nepal and around the world. We look forward to your questions.