



DISASTER RISK REDUCTION – SOUTH ASIA

OVERVIEW

Populations throughout South Asia face a range of natural hazards, including earthquakes, cyclones, floods, landslides, volcanoes, droughts, tsunamis, and wildfires. Declining socio-economic conditions of some populations are increasing vulnerability to hazards in the region. Demographic changes, rapid urbanization, environmental degradation, and climate change have increased exposure to natural hazards, often resulting in more natural disasters and compounding the impact of civil conflicts and other complex emergencies. USAID’s Office of U.S. Foreign Disaster Assistance (USAID/OFDA) is committed to assisting in the development of disaster risk reduction (DRR) and emergency response capacities in the region.

USAID/OFDA implements stand-alone DRR programs—initiated in anticipation of disasters that can be prevented or mitigated—and integrates DRR activities into disaster response to meet emergency humanitarian needs while reducing the impact of future disasters. USAID/OFDA programs include constructing hazard-resistant transitional shelters, supporting training aimed at enhancing the safety and security skills of staff delivering humanitarian assistance, providing temporary employment to rehabilitate infrastructure in a way that reduces risk, and restoring water infrastructure to reduce vulnerability to future water-borne disease outbreaks.

In FY 2011, USAID/OFDA emphasized DRR activities in urban areas, particularly in cities that face seismic risks in South Asia, as well as the development of public-private partnerships to reduce risk. USAID/OFDA also enhanced existing DRR programs, some of which have been active in the region for more than a decade. In FY 2011, USAID/OFDA provided more than \$18 million for DRR projects throughout South Asia, including programs that integrate DRR with disaster response.

SOUTH ASIA DRR FUNDING PROVIDED IN FY 2011 ¹	
Stand-Alone DRR Programs in South Asia (see pages 1-4)	\$6,372,437
Programs that Integrate DRR with Disaster Response ² (see pages 5-6)	\$11,991,069
TOTAL DRR Funding in South Asia	\$18,363,506

STAND-ALONE DRR PROGRAMS IN SOUTH ASIA

In FY 2011, USAID/OFDA’s South Asia team provided nearly \$6.4 million for stand-alone DRR initiatives. USAID/OFDA provided additional funding for regional and global stand-alone programs that include activities in South Asia to strengthen disaster preparedness and response. 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—to reduce the risk of disasters. These programs all reflected USAID/OFDA’s commitment to support capacity development; strengthen linkages between risk identification, monitoring, early warning, and early action; and expand partnerships and joint programming. Analysis of existing capacities and social, economic, and environmental trends guided programs. When possible, USAID/OFDA programs addressed underlying causes of recurrent disasters, including environmental degradation, rapid urban growth, and climate change.

Global and Asia-Wide Programs Active in South Asia³

- Program for the Enhancement of Emergency Response (PEER), Phase III: PEER promotes disaster preparedness through the development of national and regional cadres of professional emergency response instructors and assists

¹ Year of funding indicates the Fiscal Year of obligation, not appropriation, of funds.

² The figure reported represents the integrated DRR–response portion of larger disaster response programs.

³ Funding figures for Asia-wide initiatives represent program totals, including USAID/OFDA funding for activities implemented both within and outside of South Asia.

local, regional, and national disaster management agencies to organize and conduct standardized training in medical first response, collapsed structure search and rescue, and hospital preparedness for mass casualties following a disaster. Managed by the Asian Disaster Preparedness Center (ADPC), Phase I began in 1998 in India, Indonesia, Nepal, and the Philippines. Phase II expanded activities to Bangladesh and Pakistan and increased the scope of the program. Phase III, which increases training of local emergency responders, expanded to include Cambodia, Laos, and Vietnam. ADPC and the Kathmandu-based National Society for Earthquake Technology (NSET) are jointly implementing Phase III of PEER, scheduled to continue through March 2014. In Phase III, a fourth component of the training was introduced, Community Action for Disaster Response, which provides a streamlined version of medical first responder and collapsed structure search and rescue directly to vulnerable communities. In FY 2011, USAID/OFDA provided nearly \$1.9 million for PEER Phase III.

- Flash Flood Risk Reduction: Strengthening Capacity in the Hindu Kush-Himalayas: In the Hindu Kush-Himalaya region, including Afghanistan, Bangladesh, Bhutan, Burma, China, India, Nepal, and Pakistan, floods recurrently threaten lives and constrain socio-economic development in agriculture, energy, infrastructure, and industrial production. In addition to preparedness measures, reliable and timely flood forecasting and warning minimize the negative impacts of floods by reducing the loss of lives and property. In partnership with the International Center for Integrated Mountain Development (ICIMOD), USAID/OFDA has supported activities to build and strengthen the capacity of communities and key stakeholders, community organizations, and national partners to reduce the risk of flash flooding. The project aims to increase understanding of the physical and socio-economic dimensions of flash floods in the target areas, which include China, India, Nepal, and Pakistan. It also is designed to enhance and encourage trans-boundary coordination and sharing of lessons learned in the Himalaya region. Since 2006, USAID/OFDA has contributed \$664,089 for the program, which is scheduled to continue through March 2012.
- Asia Flood Network (AFN): AFN aims to strengthen the capacity of regional and national hydrometeorological institutions in climate, weather, and hydrological forecasting, while directly involving at-risk communities in reducing vulnerability to hydrometeorological hazards. Covering 12 countries in Asia, AFN is jointly implemented by USAID/OFDA, the National Oceanic and Atmospheric Administration (NOAA), and the U.S. Geological Survey (USGS), in addition to the Mekong River Commission, ICIMOD, and national meteorological and hydrological services in the region. In FY 2011, USAID/OFDA provided \$200,000 to USGS and \$200,000 to NOAA to support AFN and other flood mitigation activities, including an August operational workshop for Pakistani meteorologists on hydrometeorological characteristics of flash floods and flash flood warning system design, including curricula on the use of satellite, radar, and rain gauge precipitation in flash flood warning systems.
- Mainstreaming DRR in Asia: Moving Faster from Policy to Practice Conference: In April 2011, leaders from Asian countries and global donors attended a conference in Washington, D.C., that aimed to advance disaster preparedness and risk reduction across Asia. The one-day conference, co-sponsored by USAID, helped to strengthen awareness of the importance of DRR strategies in Asia and provided donors and government officials with an opportunity to discuss ways to mainstream DRR into longer-term policy and planning. USAID/OFDA funding for this conference totaled more than \$6,300.

South Asia Regional Programs

- Incident Command System (ICS) Training for South Asia: ICS is a management framework designed to integrate personnel, equipment, procedures, facilities, and communications during complex events, enabling more effective response operations within a common organizational structure. Since the mid-1980s, USAID/OFDA has utilized technical expertise from the U.S. Forest Service (USFS) to institutionalize systems for disaster response and to implement disaster management capacity building programs internationally. With \$200,000 in USAID/OFDA funding from FY 2010, the USFS conducted a basic and intermediate ICS course in Sri Lanka in March 2011 for 20 senior emergency response managers from national disaster management offices (NDMOs) of South Asian Association for Regional Cooperation (SAARC) member countries. To capture the success of previous trainings in India and Sri Lanka, a trainer from both countries participated in the training cadre alongside the USFS trainers. In September 2011, USFS conducted a second ICS course for participants from SAARC member state NDMOs and other organizations with a role in disaster management. This training also included ICS trainers from India and Sri Lanka. In FY 2011, USAID/OFDA provided \$100,000 for ICS activities in South Asia to be conducted in FY 2012, as well as \$200,000 for ICS activities in Nepal described below.

- South Asia Flash Flood Guidance System: USAID/OFDA is implementing a program to assist national meteorological and hydrological services (NMHSs) and work with national disaster management agencies and NGOs to improve flash flood guidance and early warning systems in Afghanistan, Bangladesh, Bhutan, India, Nepal, Sri Lanka, and Pakistan. The program aims to strengthen the capacity of NMHSs by cross-training hydrologists and meteorologists from different countries within South Asia. It also encourages international cooperation in monitoring flash floods, preparing warnings, and developing awareness and response strategies. USAID/OFDA conducts this program in coordination with the U.N. World Meteorological Organization (WMO), the Hydrologic Research Center, NOAA, and NMHSs. In FY 2011, USAID/OFDA provided \$600,000 to WMO to fund this program through FY 2016.

Country-Specific DRR Programs

Bangladesh

- Amrao Pari Program: USAID/OFDA is seeking to educate vulnerable coastal communities in Bangladesh on ways to reduce their vulnerability to and protect their livelihoods from natural hazards, such as cyclones, flooding, and tidal surges. In FY 2011, USAID/OFDA provided \$500,000 to Catholic Relief Services (CRS) to train and organize communities and key stakeholders in early warning systems, protective environmental resources, water management, and disaster preparedness, mitigation, and management. This three-year program is scheduled to begin in FY 2012.

Bhutan

- ICS Training: USFS is scheduled to conduct a basic and intermediate ICS course in December 2012 using \$150,000 from USAID/OFDA obligated in FY 2010.

India

- Cross-Sectoral Strategies for Risk Reduction, Phase II: USAID/OFDA is implementing phase two of the Cross-Sectoral Strategies for Risk Reduction in India program, which aims to reduce vulnerability to disaster shocks and promote more effective disaster management in the Indian states of Andhra Pradesh, Bihar, Gujarat, Odisha, and Uttarakhand through Project Concern International (PCI). In FY 2011, USAID/OFDA initiated a one-year, \$279,000 project to strengthen disaster response networks at state, district, and local levels in India.

Nepal

- Promoting Public-Private Partnerships for Earthquake Risk Management (3PERM): In FY 2011, USAID/OFDA partner NSET initiated 3PERM, a program to improve disaster resilience in Nepal by promoting public-private partnerships for earthquake risk management. With nearly \$670,000 from USAID/OFDA, this three-year program uses mass communications to raise earthquake hazard awareness within the private sector and population at large. 3PERM also seeks to demonstrate the private sector benefits of earthquake risk management and establish the economic, social, and corporate feasibility of public-private partnerships in DRR, with the aim of establishing a proven business case for investing in risk reduction.
- Nepal Earthquake Risk Management Project (NERMP II): With \$450,000 from USAID/OFDA, NSET is expanding NERMP II to reduce earthquake risk. NSET is working with the Government of Nepal (GoN), NGOs, schools, and local communities to increase earthquake awareness and preparedness by coordinating the long-term earthquake DRR plan for the Kathmandu Valley. The project, which is scheduled to last for three years, also supports school earthquake resistance retrofitting, earthquake awareness and preparedness activities, and mason training programs.
- DPR IV: Enhancing Community Capacity in Disaster Preparedness and Response: With nearly \$400,000 in FY 2011 USAID/OFDA funding, Save the Children/U.S. (SC/US) is implementing activities in Nepal to enhance disaster preparedness and response capacities of vulnerable communities and local authorities. Program activities include stocking emergency relief supplies and raising awareness of post-disaster protection concerns through trainings, mainstreaming into other programs, coordination, and advocacy. SC/US also is rehabilitating and improving essential water supply infrastructure to safeguard water in disaster-prone communities. The program is scheduled to last one year.

- ICS Training in Nepal: In FY 2011, USAID/OFDA supported USFS in conducting initial consultations with the GoN regarding ICS and laid the groundwork to conduct ICS training in FY 2012. USFS received \$200,000 from USAID/OFDA in FY 2011 for these activities.
- Increased DRR Staffing: With more than \$141,000 from USAID/OFDA, USAID/Nepal hired two local staff in FY 2011 to bolster the number of staff members focusing on DRR in the Mission.
- Kathmandu DRR Symposium: In February 2011, USAID/OFDA supported a DRR conference in Kathmandu through nearly \$30,000 to NSET. More than 400 policy makers and practitioners attended the event, which aimed to raise awareness of Nepal's vulnerability to earthquakes, demonstrate participants' commitment to DRR, and incorporate lessons learned from recent disasters into policy and planning.
- U.S. Government (USG) Assessment of Risks in Nepal: USAID/OFDA provided administrative support to USG staff to participate in a whole-of-government assessment of risks in Nepal that took place in September 2011. The assessment team comprised participants from across the USG and worked to develop a five-year DRR strategy, including recommendations on how all USG agencies could engage in DRR in Nepal. In April, staff from USAID/OFDA and USAID's Office of Conflict Management and Mitigation traveled to Nepal to meet with USAID/Nepal, the U.S. Embassy in Kathmandu, and other relevant agencies to prepare for the September assessment. FY 2011 funding for this assessment totaled more than \$29,000.
- Livelihood Assets and Strategies Research: With more than \$1.1 million in FY 2009 funding from USAID/OFDA, the Feinstein International Center at Tufts University is conducting field-based and desk research on the impacts of crises on livelihoods assets and strategies in Nepal, as well as Haiti and Kenya. The outputs of this research will include case studies, publications, programming tools, and analyses that identify the impacts, costs, and benefits of DRR interventions; the effectiveness of integrated and stand-alone DRR approaches; the underlying risk factors in contexts where agencies are already responding to humanitarian emergencies; appropriate sequencing and targeting of DRR approaches; and how best to link long-standing programs to DRR objectives and outcomes. The program is scheduled to conclude in FY 2012.

Pakistan

- Community-Based Disaster Risk Reduction Pilot Program: In FY 2011, USAID/OFDA engaged Pakistani communities in managing DRR through the Community-Based Disaster Risk Reduction Pilot Program, implemented by an NGO partner in collaboration with the U.N. Development Program (UNDP), the One U.N. Disaster Risk Management (DRM) project, and the Government of Pakistan National Disaster Management Authority. Beginning with pilot activities in three provinces, with one priority district in each, the capacity building and training program will be rolled out across 88 Union Councils. Aligning this project with the UNDP/One U.N. DRM project will allow for greater coverage in the pilot phase as the training modules are finalized, training of trainers takes place at national and provincial levels, and strategic plans for national scale-up are completed. USAID/OFDA provided more than \$1.8 million in FY 2011 for this one-year initiative, which is scheduled to conclude in FY 2012.

PROGRAMS THAT INTEGRATE DRR WITH DISASTER RESPONSE

In addition to stand-alone DRR programs implemented to prevent or mitigate the effects of hazards in the region, USAID/OFDA integrated preparedness and mitigation into disaster response, early recovery, and transition programs. These initiatives, which were in accordance with regional DRR strategies, incorporated risk reduction objectives into a broad range of sectoral interventions to increase the resilience of communities to future shocks. In FY 2011, USAID/OFDA integrated DRR into disaster response programs after flooding in Pakistan and the complex emergency and flooding in Sri Lanka, as well as to build international community response and coordination capacity in Nepal.

Nepal

- Humanitarian Coordination and Support for Emergency Preparedness and Response: With more than \$480,000 from USAID/OFDA, the U.N. Office for the Coordination of Humanitarian Affairs (OCHA) is working to develop effective humanitarian coordination mechanisms to allow cooperation between the GoN and international relief organizations in the aftermath of a disaster. Funded in FY 2011, this program is scheduled to conclude in early FY 2012.

Pakistan

- Integrating DRR into Floods Response: In response to the Pakistan floods, USAID/OFDA established the Responding to Pakistan's Internally Displaced (RAPID) fund, managed by a USAID/OFDA grantee, which can fund short-term emergency programs for up to \$300,000 to meet priority humanitarian needs. The RAPID fund allowed USAID/OFDA to respond through vetted local NGOs, which often have better access to affected communities, understand local needs, and incur fewer overhead costs. Through RAPID, USAID/OFDA funded more than \$4 million in programs with DRR components that re-established agricultural-based livelihoods, as well as addressed shelter, protection, health, and water, sanitation, and hygiene (WASH) needs of flood-affected individuals. In addition, programs funded through RAPID facilitated humanitarian coordination and information management.
- With prior-year funding, a USAID/OFDA program aimed to build capacity among humanitarian staff working in Pakistan by delivering sector-specific workshops and support focused on cluster coordination, security management, and humanitarian practice. The program, which ran through January 2011, sought to address the frequent turnover of staff and the fast pace of changes in coordination and security needs of relief workers in Pakistan.
- USAID/OFDA supported community management of acute malnutrition (CMAM) programs through more than \$2 million to two implementing partners. While responding to immediate flood-related needs, the programs prepared communities to prevent and respond to future increases in malnutrition levels by building local health facility capacity, training community health workers, and increasing community knowledge of hygiene and feeding practices that reduce the risk of malnutrition.

Sri Lanka

- Integrating DRR into Complex Emergency Response: Since FY 2010, USAID/OFDA has been helping conflict-affected families access the necessary resources to resume livelihoods and improve market opportunities. This program involves capacity building for community-based organizations, including training on DRR techniques to protect livelihoods from seasonal disasters, as well as the establishment of seed storage facilities to mitigate flood losses. In FY 2011, USAID/OFDA provided \$1.5 million to World Vision to continue program implementation into FY 2012.
- With \$1.1 million from USAID/OFDA, ZOA is increasing access to agricultural inputs to improve income-generating opportunities for nearly 500 beneficiaries. The NGO is working with returnees to improve produce storage as a means of obtaining favorable market prices, form connections with stable suppliers, and select traditionally successful seed stock—activities that will improve returnees' economic resilience to future disasters. This program is scheduled to conclude in FY 2012.
- Other USAID/OFDA agriculture, economic recovery and market systems (ERMS), and WASH programs with DRR components in Sri Lanka include a \$400,000 Sarvodaya intervention, \$500,000 to the Sewalanka Foundation, \$290,000 to Practical Action, and a \$200,000 U.N. Food and Agriculture Organization (FAO) project. In addition to meeting urgent needs, the programs all use strategies such as establishing home gardens, rehabilitating water sources, and providing training on small business practices to reduce the vulnerability of beneficiaries to disasters that might otherwise deplete their resources.
- USAID/OFDA provided \$400,000 to OCHA to support Government of Sri Lanka-led information management and advocacy efforts in Colombo, the capital of Sri Lanka, and other provinces. This program, scheduled to conclude in FY 2012, is also reinforcing transitional structures in the Office of the U.N. Resident and Humanitarian Coordinator.
- Integrating DRR into Floods Response: In response to flooding in Sri Lanka, USAID/OFDA provided nearly \$400,000 to Sarvodaya to increase beneficiaries' access to safe drinking water, improve food security through home gardening, and conduct hygiene programs that not only reduced risk of disease from the immediate floods, but also gave beneficiaries skills to protect against water-borne illnesses during seasonal floods in coming years. Through this six-month program, USAID/OFDA also provided seeds and agricultural supplies to help flood-affected people resume their livelihoods.
- USAID/OFDA provided \$400,000 to the Sewalanka Foundation to restore basic household food security, generate income for women, contribute to the restoration of livelihoods and market activities, rehabilitate irrigation canals, and reduce the spread of diseases. This program targeted 38,000 people and ended in November 2011.
- With \$800,000 from USAID/OFDA, FAO is providing emergency agricultural assistance to flood-affected families into FY 2012, which also will increase household food self-sufficiency and thereby build resilience to future shocks.

USAID/OFDA DRR FUNDING IN SOUTH ASIA IN FY 2011⁴

USAID/OFDA STAND-ALONE DRR FUNDING IN SOUTH ASIA					
Country/Region	Program	Activity	Partner	Subtotal	Total
Asia	PEER	Natural and Technological Risks	ADPC	\$176,586	\$1,146,306 ⁵
		Natural and Technological Risks	NSET	\$969,720	
Asia	April 2011 DRR Conference	Administrative Support	Administrative Support	\$6,350	\$6,350
Bangladesh	Amrao Pari	Natural and Technological Risks	CRS	\$500,000	\$500,000
India	Cross-Sectoral Strategies for Risk Reduction, Phase II	Natural and Technological Risks	PCI	\$278,974	\$278,974
Pakistan	Community-Based Disaster Risk Reduction Pilot Program	Natural and Technological Risks	Implementing Partner	\$1,828,468	\$1,828,468
Nepal	3PERM	Natural and Technological Risks	NSET	\$669,998	\$1,912,339
	NERMP	Natural and Technological Risks	NSET	\$450,000	
	DPR IV: Enhancing Community Capacity in Disaster Preparedness and Response	Logistics and Relief Commodities, Protection, and WASH	SC/US	\$391,753	
	ICS	Humanitarian Coordination and Information Management	USFS	\$200,000	
	Increased DRR Staffing	Administrative Support	USAID/Nepal	\$141,568	
	Kathmandu DRR Symposium	Humanitarian Coordination and Information Management	NSET	\$29,973	
	USG Assessment of Risks in Nepal	Administrative Support	USAID	\$29,047	
South Asia	South Asia Flash Flood Guidance System	Natural and Technological Risks	WMO	\$600,000	\$600,000
South Asia	ICS	Humanitarian Coordination and Information Management	USFS	\$100,000	\$100,000
TOTAL USAID/OFDA STAND-ALONE DRR FUNDING IN SOUTH ASIA				\$6,372,437	
USAID/OFDA PROGRAMS THAT INTEGRATE DRR WITH DISASTER RESPONSE IN SOUTH ASIA⁶					
Country/Region	Program	Activity	Partner	Subtotal	Total
Nepal	Humanitarian Coordination and Support for Emergency Preparedness and Response	Humanitarian Coordination and Information Management	OCHA	\$480,704	\$480,704
Pakistan	Floods Response	Agriculture and Food Security, ERMS, Health, Humanitarian Coordination and Information Management, Nutrition, Protection, Shelter and Settlements, WASH	RAPID	\$4,000,000	\$6,064,306
		Nutrition	Implementing Partner	\$1,314,879	
		Nutrition	Implementing Partner	\$749,427	

Sri Lanka	Complex Emergency	Agriculture and Food Security, ERMS	Practical Action	\$289,857	\$3,846,061
		Agriculture and Food Security, ERMS, WASH	Sarvodaya	\$399,999	
		Agriculture and Food Security, ERMS, Shelter and Settlements, WASH	Sewalanka Foundation	\$500,000	
		Agriculture and Food Security	FAO	\$200,000	
		Humanitarian Coordination and Information Management	OCHA	\$400,000	
		ERMS	World Vision	\$1,500,000	
		Agriculture and Food Security, ERMS, WASH	ZOA	\$556,205	
Sri Lanka	Floods Response	Agriculture and Food Security, ERMS, WASH	Sarvodaya	\$399,998	\$1,599,998
		Agriculture and Food Security, ERMS, WASH	Sewalanka Foundation	\$400,000	
		Agriculture and Food Security	FAO	\$800,000	
USAID/OFDA TOTAL INTEGRATED FUNDING IN SOUTH ASIA				\$11,991,069	
TOTAL USAID/OFDA DRR FUNDING IN SOUTH ASIA FY 2011				\$18,363,506	

⁴ Year of funding indicates the Fiscal Year of obligation, not appropriation, of funds.

⁵ This figure represents the South Asia portion of the nearly \$1.9 million provided by USAID/OFDA for PEER in FY 2011.

⁶ The figure reported represents the integrated DRR–response portion of larger disaster response programs.