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

## **ASIA – Disaster Preparedness and Mitigation Programs**

Fact Sheet #1, Fiscal Year (FY) 2007 (Revised)

April 10, 2007

### **Background**

People in the Asia–Pacific region are severely affected by natural hazards such as earthquakes, typhoons, floods, landslides, volcanoes, droughts, tsunamis, and wildfires. Asia’s vulnerability is compounded by socio-economic conditions that steadily increase the impact of disasters. Demographic changes, urbanization, and environmental degradation have reduced the amount of habitable land available, forcing the settlement of hazard-prone, marginal lands, such as flood plains and steep slopes. In addition to natural disasters, civil crises and complex emergencies also impede development in the Asia–Pacific region. USAID/OFDA remains committed to assisting in the development of preparedness, mitigation, and emergency response capacities in the region for natural disasters and conflicts. Since 1995, USAID/OFDA has provided approximately \$43 million for ongoing preparedness and mitigation projects throughout the region. To date in FY 2007, USAID/OFDA has provided nearly \$3.9 million for disaster preparedness and mitigation projects in the Asia–Pacific region.

### **USAID/OFDA Asia Preparedness and Mitigation Assistance**

#### ***Regional Programs***

- **Program for Hydrometeorological Risk Mitigation in Asian Cities (PROMISE)**: In September 2005, USAID/OFDA provided a grant to the Asian Disaster Preparedness Center (ADPC) for a new three-year phase of urban disaster mitigation activities entitled “PROMISE”. This program builds upon the activities of the Asian Urban Disaster Mitigation Program (AUDMP) through which pilot disaster preparedness projects were developed in targeted cities in Asia. PROMISE promotes hydrometeorological, or rainfall-related, disaster preparedness through demonstration projects in five highly vulnerable secondary urban centers in South and Southeast Asia, including Chittagong, Bangladesh; Hyderabad, Pakistan; Dagupan City, the Philippines; Kalutara, Sri Lanka; and Da Nang, Vietnam. All five target cities are rapidly growing urban areas that experienced significant impacts from hydrometeorological disasters. In FY 2007, an urban center in Indonesia will be added as the sixth participating city. Activities planned in the target cities include preparedness and mitigation action planning workshops, hazard mapping and vulnerability assessments, and the establishment of community-based early warning mechanisms. Additional programming included training and capacity building for risk-based urban land use planning, piloting community-based flood forecasting and warning systems, developing city-level disaster management information systems and public awareness and advocacy campaigns, and the facilitation of micro-credit enterprises to promote proper construction and improve resistance of houses to disasters. USAID/OFDA is providing \$855,286 for PROMISE in FY 2007, and funding since FY 2005 totals \$1,855,286.
- **Program for the Enhancement of Emergency Response (PEER), Phase II**: PEER is a USAID/OFDA-funded program to promote disaster preparedness through the development of national and regional cadres of professional emergency response instructors. PEER is geared primarily towards earthquake preparedness, but is widely applicable to any collapsed structure or mass casualty situation. PEER assists local, regional, and national disaster management agencies in organizing and conducting training in medical first response, collapsed structure search and rescue, and hospital preparedness for mass casualties after a disaster. The first phase of PEER, managed by ADPC, began in 1998 in India, Indonesia, Nepal, and the Philippines. Phase II of PEER, implemented by the National Society for Earthquake Technology (NSET) based in Nepal, continues the activities begun in the original countries with the addition of Bangladesh and Pakistan. During Phase II, PEER will increase the corps of trainers, adapt courses to national requirements, and create a coordinating network of disaster responders in each country. Phase II of PEER began in March 2003 and will continue through March 2008. USAID/OFDA has provided \$941,801 to date in FY 2007, and a total of \$10,430,255 since FY 1998.
- **Pacific Islands Disaster Assistance Program (PDAP)**: Since 1995, USAID/OFDA has supported PDAP, implemented by The Asia Foundation (TAF). The objectives of the program are the following: improve the capacity and performance of local and national disaster management agencies and individuals, develop and adapt training materials relevant to the region, and strengthen the capacity of South Pacific nations to organize and conduct disaster management courses. The Cook Islands, Fiji, Kiribati, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands,

Tonga, Tuvalu, and Vanuatu participated in the first phase of the program. The first phase worked to improve disaster management training in multiple South Pacific nations. From 2004 to 2008, Phase II continues activities begun in the initial countries, with the addition of the Federated States of Micronesia and the Republic of the Marshall Islands which are currently transitioning from the Federal Emergency Management Agency (FEMA) to USAID for U.S. disaster assistance. The second phase includes the adaptation of USAID/OFDA-developed training materials for Pacific country applications. In FY 2007, USAID/OFDA is providing \$302,729 to PDAP, and total funding to date is \$3,906,813 since 1995.

- Asia Flood Network (AFN): AFN aims to strengthen the capacity of regional and national hydrometeorological institutions in climate, weather, and hydrological forecasting, directly involving communities at risk to reduce vulnerability to hydrometeorological hazards. In collaboration with partners in Asia, AFN is jointly implemented by USAID/OFDA, the National Oceanic and Atmospheric Administration (NOAA), and the U.S. Geological Survey (USGS). Current activities are focused on Cambodia, China, Laos, Thailand, and Vietnam in the Mekong river basin and Bangladesh, India, Nepal, and Pakistan in the Ganges-Brahmaputra-Megna (GBM) basin. USAID/OFDA, in cooperation with NOAA and USGS, has been providing 24-hour satellite estimates and short-term forecasts of rainfall in these regions. Under AFN, the Mekong River Commission (MRC), the International Center for Integrated Mountain Development (ICIMOD), and country representatives in the Mekong and GBM river basins were trained on the application of satellite-based rainfall estimates (SRE) to floods and droughts, flash flood guidance, and dissemination of information to vulnerable populations in remote areas. ICIMOD initiated the verification of SRE with ground data in the GBM river basin, and MRC plans similar verification in the lower Mekong basin in 2007. In addition, USAID/OFDA, NOAA, and USGS will work with partners to implement flash flood guidance in the region. This program will continue through August 2008. To date, USAID/OFDA has provided \$2,329,927 of the estimated \$2,500,000 total cost.
- Volcano Disaster Assistance Project (VDAP): The USAID/OFDA-funded VDAP program, implemented by the USGS, provides technical assistance to national volcano monitoring organizations. In Asia, VDAP provides technical assistance to the Philippines Institute of Volcanology and Seismology, the Center of Volcanology and Geological Hazard Mitigation (CVGHM) in Indonesia, and to the Port Moresby Geophysical Observatory and Rabaul Volcano Observatory in Papua New Guinea. VDAP assistance includes training in hazard assessment, development of early warning plans, installation and updating of volcano monitoring equipment, and other technical assistance. Since FY 2005, VDAP has worked with CVGHM to improve volcano hazard monitoring and assessment through the construction of a regional volcano observatory for North Sulawesi, where more than 500,000 people live on the flanks of hazardous volcanoes. In FY 2007, a VDAP team worked with Indonesian experts to install a new volcano monitoring base station, seismic field station, and repeaters in the area. VDAP also provided assistance for Philippine volcanologists in FY 2007. In Asia, USAID/OFDA has provided \$460,000 to the VDAP program in FY 2007, and a total of \$3,425,000 to date.

### ***South Asia Programs***

- Regional Flood Forecasting: Since November 2001, USAID/OFDA has supported technical assessments and forums that bring together decision-makers and technical personnel from the Hindu Kush-Himalayan region to promote collaboration and develop regional approaches to flood management, flood early warning systems, and broader trans-boundary water issues. ICIMOD, a regional organization based in Kathmandu, Nepal, hosts the forums. Afghanistan, Bangladesh, Bhutan, Burma, China, India, Nepal, and Pakistan participate in the forums. USAID/OFDA has provided \$416,570 to date.
- Community Flood Monitoring and Forecasting in Bangladesh: Implemented by Riverside Technology Inc., this five-year USAID/OFDA project supports a community-based approach for flood monitoring and forecasting to reduce the vulnerability of communities living in flood plains and mitigate future flood damage in Bangladesh. The project began in September 2002 and will continue through September 2007. Total project funding to date is \$576,977.
- Kathmandu Valley Earthquake Risk Management Project: NSET in Kathmandu, Nepal, works with the Government of Nepal, non-governmental organizations (NGOs), schools, and local communities to increase earthquake awareness and preparedness by coordinating and monitoring the long-term earthquake risk reduction plan for the Kathmandu Valley. The project began in September 2000 and will continue through August 2007. To date, USAID/OFDA funding is \$796,633.

- Emergency Flood Preparedness in Bangladesh: Save the Children/U.S., World Vision, and lead agency CARE joined to form the Emergency Working Group of Cooperative Sponsors (EWG) to improve emergency response to floods in Bangladesh. The EWG also works to reduce the incidence of health problems associated with a disaster, particularly water-borne diseases. With USAID/OFDA funding, the EWG promotes coordination between communities and local authorities, maintains and operates a mobile water purification plant and zodiac boats, and operates a mobile health unit. The project began in September 2005 and will continue through March 2007. Total USAID/OFDA funding to date for this project is \$200,013.
- Drought Preparedness in India and Pakistan: Catholic Relief Services (CRS) is implementing a three-year project which seeks to help ensure that communities in Rajasthan, India, and Sindh, Pakistan, are drought resilient. The project targets 7,200 people in Sindh and 60,000 people in Rajasthan. Through this program, drought-vulnerable communities will be better able to harvest and store rainwater for increased domestic and agricultural use throughout the year, adopt water-efficient agricultural practices, utilize improved land-use techniques for agriculture and livestock, and engage with local government and other actors to improve resilience to drought. The project began in June 2006 and will continue through September 2008. In FY 2007, USAID/OFDA is providing \$200,000 to the project, and a total of \$600,000 to date.

### ***Southeast and East Asia Programs***

- Flood Early Warning Systems in the Mekong River Basin: In January 2003, USAID/OFDA and MRC, an inter-governmental river basin organization based in Laos, began an innovative demonstration project to strengthen warnings to communities most at-risk to floods. The project works with the most flood-vulnerable communities in Cambodia to develop appropriate flood information for these communities. In addition, the project develops tools, methods, and protocols—with the help of local implementing partners—to enable flood-vulnerable populations to effectively prepare and respond to flood information. This five-year program began in January 2003 and ends in December 2007. Total USAID/OFDA funding to date is \$1,250,000.
- Climate Forecast Applications: This project is a follow-up initiative to the USAID/OFDA-funded “El Niño” related Extreme Climate Events (ECE) program, which was implemented from 1998–2003. The Climate Forecast Applications project, implemented by ADPC, strengthens the national capabilities of Indonesia and the Philippines to manage and reduce the impacts of climate fluctuations through targeted demonstration projects and community participation. The project makes climate forecasting information available to farmers and local communities, and helps them utilize the data for planting and other decision making purposes. The second phase of the program began in April 2003 and will expand to include East Timor in 2007. In FY 2007 USAID/OFDA is providing \$250,000 to the project, and total funding from FY 1998 to date, including the ECE program, is \$2,623,863.
- Flood Proofing for Households in the Mekong Delta, Vietnam: USAID/OFDA provided \$180,250 to support the flood proofing of homes in the poorest flood-prone villages in the Mekong Delta from September 2005 through September 2007. This was a follow-on program to the USAID/OFDA-funded U.N. Development Program (UNDP) initiative to implement a comprehensive flood preparedness program in Quang Binh, Quang Tri, Thua Thien-Hue, Da Nang, Quang Nam, Quang Ngai, and Binh Dinh provinces of central Vietnam from June 2000 through December 2004. Working in collaboration with the Government of Vietnam’s (GVN) Ministry of Agriculture and Rural Development, the program included the following components: training of disaster officials and the affected populations on the use of flood mapping to reduce loss of life, economic consequences, and disruption of livelihoods; implementation of river flood alert systems in three river basins in central Vietnam; and a television and radio flood disaster warning system at the national level and in three provinces of Vietnam. A coastal storm early warning system implemented by the GVN with support from USAID/OFDA and UNDP helped mitigate the impact of storms such as Typhoon Damrey in September 2005, and Typhoon Durian in December 2006. Total USAID/OFDA funding for flood and storm preparedness in Vietnam, including flood early warning, coastal storm early warning, and flood proofing of households, is \$2,834,250 since FY 2001.
- Conflict Preparedness Program in Mindanao, Philippines: Implemented by Save the Children/Philippines, the first phase of this initiative supported disaster preparedness activities in response to new internal displacement and provided prompt access to these populations in the conflict-affected areas of western Mindanao. The program supports an emergency response network of local NGOs and community-based groups to implement preparedness and relief activities, provide small grants to local NGOs, and create small stockpiles of locally procured relief items for emergencies. The second phase of this initiative supports returning internally displaced persons (IDPs) through livelihood interventions using seeds and tools, basic fishing equipment, and other assistance. The program also

supports community activities to ensure potable water resources. Initiated in March 2003, these programs will continue until July 2007. The total project funding to date is \$1,100,000.

- Text Messaging Disaster Alert System in the Philippines: USAID/OFDA provided funding through USAID/Philippines to help the Philippine National Red Cross (PNRC) implement a nationwide disaster alert system. U.S. Ambassador Kristie A. Kenney and PNRC Chairman Senator Richard Gordon formally launched the alert system in January 2007 via an exchange of text messages. Text messaging is being increasingly adopted as a low-cost method for rapid mass dissemination of disaster alerts. This project will enable the PNRC to issue alerts down to sub-district level for a total investment by USAID/OFDA of just \$7,660.
- Strengthening Emergency Preparedness and Response in Indonesia: International Medical Corps (IMC), with USAID/OFDA support, is promoting the technical, administrative, financial, and logistical capabilities of Ambulan 118, a leading Indonesian NGO, to respond rapidly and effectively to disasters in Indonesia. IMC is strengthening and expanding training in emergency relief best practices and creating a training-of-trainers program. In addition, Ambulan 118 and IMC are pre-positioning medical and non-medical equipment and supplies in the field. Through this project, medical teams from Ambulan 118 and IMC provided emergency medical care during the March 2007 West Sumatra earthquakes, the January 2007 Jakarta flooding, and the May 2006 Yogyakarta earthquake. This project began in September 2005 and will continue through September 2007. In FY 2007, USAID/OFDA provided \$35,963 and total funding to date is \$1,353,963.
- Avian Influenza Preparedness: The U.N. World Health Organization (WHO) reports that since 2003, 145 people have died from the “H5N1” Avian Influenza virus in Cambodia, China, Indonesia, Laos, Thailand, and Vietnam. Over the past four years USAID/OFDA provided \$250,000 to WHO to support Avian Influenza containment activities in the region, pre-positioned 10,000 sets of personal protective equipment (PPE) in the countries most at risk, and provided funding to the American Red Cross to facilitate, in cooperation with host-country Red Cross societies, Avian Influenza preparedness and response workshops in Cambodia and China. In FY 2007, USAID/OFDA provided \$64,336 to transport PPEs to Bangladesh, Burma, Cambodia, Vietnam, and Laos. USAID/OFDA is an active participant of USAID’s Avian Influenza Working Group, which works with other agencies involved in Avian Influenza preparedness and response, including the U.S. Department of Agriculture, U.S. Department of Health and Human Services, U.S. Department of State, and U.S. Department of Defense. USAID/OFDA funding to date since FY 2004 is \$685,786.
- Drought Preparedness: CARE, with USAID/OFDA support, is implementing drought preparedness activities in Cambodia and East Timor. This program promotes community-based drought preparedness planning while also developing expertise in effective low-cost and innovative drought mitigation and preparedness technologies. In FY 2007, USAID/OFDA is providing \$500,000, and the total provided to date is \$1,200,000.
- Promoting the Private Sector Role for Disaster Assistance in China: In FY 2007, USAID/OFDA supported TAF programming to enhance private sector participation in and contribution to disaster preparedness, and to promote multi-sectoral approaches to disaster management. TAF is cooperating with the American Chamber of Commerce, Chinese business associations, and the Ministry of Civil Affairs, which has a lead role in disaster management in China. The program will also involve domestic NGOs and charities such as the China Charity Federation and other organizations. This project began in October 2006 and will continue to September 2008. USAID/OFDA is providing \$240,000 in FY 2007, and the total is \$590,000 to date.
- U.S./Japan Community-Based Preparedness: USAID/OFDA is funding the Japan-based Asian Disaster Reduction Center (ADRC) to implement a disaster preparedness program through schools in Galle District, Sri Lanka. ADRC is working collaboratively with the Government of Sri Lanka’s National Disaster Management Center and Department of Education to help raise school awareness of the effect of natural disasters and to develop strategies and capacity building for risk reduction. Total funding to date is \$74,908.

**Total USAID/OFDA FY 2007 Preparedness and Mitigation Assistance for Asia.....\$3,870,260**

## USAID/OFDA FY 2007 Preparedness and Mitigation Assistance by Sector for Asia

Project Name	Hydromet	Earthquake/ Volcanoes	Health	Conflict	Multi-Hazard
PROMISE	\$855,286				
PEER, Phase II					\$941,801
PDAP					\$302,729
VDAP		\$460,000			
Drought Preparedness in India and Pakistan	\$200,000				
Mekong River Basin Flood Early Warning	\$20,145				
Climate Forecast Applications	\$250,000				
Indonesia Emergency Preparedness through IMC/Ambulan 118			\$35,963		
Avian Influenza Preparedness			\$64,336		
Drought Preparedness	\$500,000				
Private Sector Role for Disaster Assistance in China					\$240,000
<b>Total: \$3,870,260</b>	<b>\$1,825,431</b>	<b>\$460,000</b>	<b>\$100,299</b>		<b>\$1,484,530</b>

## Total USAID/OFDA Funding for Active Programs to Date for Asia

Project Name	Hydromet	Earthquake/ Volcanoes	Health	Conflict	Multi-Hazard
AUDMP					\$9,453,800
PROMISE	\$1,855,286				
PEER		\$5,889,395			\$4,540,860
PDAP					\$3,906,813
AFN	\$2,329,927				
VDAP		\$3,425,000			
Regional Flood Forecasting	\$416,570				
Flood Forecasting in Bangladesh	\$576,977				
Kathmandu Valley Earthquake Preparedness		\$796,633			
Bangladesh Emergency Flood Preparedness	\$200,013				
Drought Preparedness in India and Pakistan	\$600,000				
Mekong River Basin Flood Early Warning	\$1,250,000				
Climate Forecast Applications	\$2,623,863				
Flood Proofing in Vietnam	\$180,250				
Philippines Conflict Preparedness				\$1,100,000	
Philippines Text Messaging Alert System					\$7,660
Indonesia Preparedness through IMC/Ambulan 118			\$528,963		\$825,000
Avian Influenza Preparedness			\$685,786		
Drought Preparedness	\$1,200,000				
Promoting Private Sector Role for Disaster Assistance in China					\$590,000
U.S./Japan Community-based Preparedness					\$74,908
<b>Total: \$43,057,704</b>	<b>\$11,232,886</b>	<b>\$10,111,028</b>	<b>\$1,214,749</b>	<b>\$1,100,000</b>	<b>\$19,399,041</b>