

Stories from the field

Featuring ADPC's widespread work across the region



his booklet features a collection of stories that reflects the widespread work of Asian Disaster Preparedness Center (ADPC) across Asia and the Pacific and beyond. Join us as we share stories of paddy-growers in Sri Lanka adapting to climate change with technology, children in China preparing for the next disaster, and the journey of a brave woman overcoming gender stereotypes to fight emergencies in Bangladesh. This booklet not only showcases ADPC's extensive work to achieve its vision of safer communities and sustainable development through disaster risk reduction but also governments' commitment, partners' support, and the courage of people in disaster-prone nations.

Sincerely,

Hans Guttman **Executive Director**

Asian Disaster Preparedness Center



Spread of stories from selected ADPC project countries

ADPC is an independent regional organization that enhances the resilience of governments and communities to natural disasters and builds their capacity to adapt to climate change. Since its inception in 1986, ADPC has equipped people from across the world with skills and knowledge necessary to build resilience to disasters and climate change. ADPC's six strategic themes – climate resilience, health risk management, preparedness for response, resilient recovery, risk governance and urban resilience – focus on areas of technical and operational priorities of regional countries. Recognizing the importance of an all-inclusive approach to our success, ADPC's three cross-cutting themes are gender and diversity, poverty and livelihoods, and regional and transboundary cooperation.



Contents

Paddy growers restore agriculture in Sri Lanka	8
Connecting youth to disaster preparedness	10
Women overcome stereotypes in Bangladesh	12
Safeguarding Thailand's small and medium enterprises	14
Doctors at the forefront: preparing hospitals in Thailand	16
Understanding earthquakes in Myanmar	18
Disaster survivors overcome trauma in Bangladesh	20
Public health and emergency management in Sri Lanka	22
Woman turns grief into action in Pakistan	24
Child-centered disaster management in China	26
Resilient investment decisions in Lao PDR	28
Bringing experience from Asia to Africa	30
Protecting livelihoods in Papua New Guinea	31
ADPC Academy	32

Paddy growers restore agriculture in Sri Lanka

Colombo, Sri Lanka — Nilwala River in the Southern province of Sri Lanka often becomes a source of salinity due to tidal variation and flooding while traversing about 70 kilometers to discharge to the Indian Ocean in Matara. Farmers in the Nilwala River Basin are highly vulnerable to frequent floods, droughts, landslides, salinity and seawater intrusion.

In collaboration with the Faculty of Agriculture of the University of Ruhuna in Matara, ADPC initiated a project to restore the degrading paddy ecosystem in Nilwala River Basin. ADPC introduced low-cost technology as well as generated and shared scientific information about weather patterns and forecasts for paddy growers. The initiative engaged local farmers, officials and experts, which allowed farmers to not only voice their concerns and propose solutions but also learn about alternative options for dealing with climate change, salinity and soil acidity in the area.

Paddy growers in the Nilwala River Basin have changed their mindset. They are no longer entirely dependent on conventional farming techniques and practices. After receiving hands-on training through on-site activities, farmers are now able to use the seasonal forecasting information as a decision-making tool. Farmers also learned how to achieve greater crop yields through different agronomical practices in terms of adjustment of cropping dates, different crop varieties, plant establishment methods, and appropriate solutions for irrigation during dry spells.

ADPC also established a research and demonstration station at a site accessible to most farmers of Nilwala for collecting data, monitoring the weather, and analyzing climate variability. This active involvement at the community level allowed farmers to engage in experiments on new rice cultivation techniques to be able to withstand climate-related disasters.



The farmers at the Nilwala River Basin introduced new rice varieties and adopted innovative rice cultivation techniques to protect their livelihood from the impact of climate-related disasters.

Connecting youth to disaster preparedness

Children and youth are agents of change — without their active participation in Disaster Risk Reduction (DRR) initiatives, the Agenda 2020 and targets of the Sendai Framework for Disaster Risk Reduction cannot be achieved. Raising awareness of disaster preparedness among children and youth is one way to ignite their interest in the field.

In 2014, ADPC organized the first iPrepare Video & Essay Competition in Hanoi, Vietnam. It invited over 300 students from Hanoi School of Public Health and Vietnam National University to explore disaster preparedness measures within their community and create news stories to showcase their findings.

Over the years, the competition has been launched in three countries, including Vietnam, Bangladesh, and most recently, Myanmar. The 2017 campaign brought together 400 students from three universities across Myanmar to compose essays or videos about disaster preparedness initiatives in their communities.

"I learned so much from this competition. I've always been interested in conducting research [about my community], and participating in iPrepare allowed me to challenge my communication and analytical skills," said Lin Khant Htel, a participant of the 2017 competition, adding that he wants to "join the field in the future."

Students in Cambodia were also introduced to geospatial technology that is used to inform DRR, climate resilience, and development initiatives. 250,000 students attended the 2017 Science & Engineering Festival Exposition and Workshop (CSEF) in Cambodia, and ADPC's booth allowed students to play the role of a satellite by putting together a puzzle of Phnom Penh National Stadium, the festival venue.



Students put together a puzzle to understand the importance of satellite technology as they gather at ADPC's booth for 2017 CSEF in Cambodia.

In another event, ADPC showcased the work of SERVIR Mekong at Thailand's National Science and Technology Fair. Students attracted to ADPC's interactive booth learned how to use geospatial technologies to identify different geographic features. The booth also featured a demonstration of Google Earth, where students could learn about mapping technologies by locating their towns, schools, and homes.

ADPC is hopeful that these engagement activities will generate thousands of youths who will proactively partake in and provide inspiration to their countries' preparedness and resilience efforts.

iPrepare is an ADPC program supported by the Royal Norwegian Ministry of Foreign Affairs.

Women overcome stereotypes in Bangladesh

Dhaka, Bangladesh — Ms. Jubida Khanam's talents extend beyond her job as a beautician in a local salon. A youth volunteer for the Bangladesh Red Crescent Society, she learned life-saving skills from ADPC's Community Action for Disaster Response in Emergencies (CADRE) training program. It wasn't long after her CADRE course when the first emergency occurred within her community - a fire in the apartment next door to her salon.



Jubida recounted, "I was ready. I ran next-door, found the fire extinguisher, and rushed to the kitchen where the fire had started, but then the men in the house stopped me. They said to me, how could a girl know how to use an extinguisher?"

As a volunteer emergency responder, Jubida was prepared to extinguish a kitchen fire. She was not, however, prepared to experience gender inequity during such a scenario. Jubida was able to convince the owner of the apartment that she was qualified to extinguish the fire, and beyond the immediate impact of a crisis averted, Jubida's skillful response helped build confidence of other young female volunteers and extinguish one gender stereotype in the urban community.

In Bangladesh, as in many societies throughout the world, a woman's responsibilities increase dramatically after marriage and having children. The Bangladesh Red Crescent Society reports that they often lose many of their talented female community volunteers once they are more obliged to stay at home to run the family. "Our challenge is not getting young women to become volunteers, it's to encourage them to continue volunteering once they marry and have children," said Mrs. Monoyara Sharker, Acting Secretary General, Bangladesh Red Crescent Society.

When Jubida was asked how she will cope with being an active emergency volunteer in her community after getting married, she said, "It's no problem, I will teach my husband [the course] and we will volunteer together."

Safeguarding Thailand's small and medium enterprises

Bangkok, Thailand — SMEs represent more than 99 percent of Thai businesses and approximately 40 percent of the country's GDP. However, SMEs cannot be simplified into abstract assets of the state – they are the creations of entrepreneurial business owners, for many of whom the businesses represent hope to transcend socio-economic limitations.

In 2011, more than 550,000 unprepared SMEs saw their business operations severely disrupted causing an approximate loss of 2 billion USD per month for several months during the flooding in Thailand. In response to the tremendous losses, ADPC and partners supported SMEs to engage with local government in risk reduction activities; facilitate the sharing of best practices in the countries of the Asia-Pacific Economic Cooperation through an SME Community Forum; and develop business continuity plans (BCPs), a framework of actions that a business can take to normalize its operations during a disaster situation whilst minimizing its losses.



In 2011, more than 550,000 unprepared SMEs in Thailand saw their business operations disrupted by unprecedented flooding that affected parts of the capital city of Bangkok.



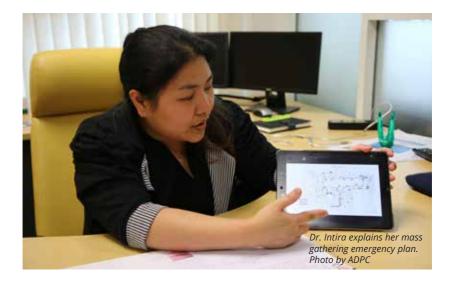
A delivery man drives a motorcycle on a flooded street during the 2011 flood in Thailand.

ADPC was surprised to learn that none of Thai SMEs had operational BCPs. To encourage and guide SMEs, ADPC conducted a training workshop for business owners to introduce ten steps to create an effective BCP. After attending the workshop, Mr. Ittirit Kinglek, Managing Director of Ao Nang Princeville Resort and Spa in Krabi, flew back to his hotel to design a BCP. He formed a BCP team and assigned managers to analyze their critical business processes and set individualized recovery time objectives. Mr. Kinglek unexpectedly gained some customer confidence when a hotel guest took notice and congratulated the BCP team, while another business owner reported a rise in employee morale since he took an interest in BCP.

The Private Sector Engagement in Thailand for Natural Disaster Risk Reduction: Resilient Economies through Business Continuity Planning and Management program was implemented by ADPC with its national partners, the Department of Disaster Prevention and Mitigation and Thailand's Office of Small and Medium Enterprises Promotion (OSMEP).

Doctors at the forefront:

preparing hospitals in Thailand



Bangkok, Thailand — Nestled in the historic area of Bangkok, the Erawan Unit of the Medical Services, Bangkok Metropolitan Administration (BMA), holds critical responsibility for emergency medical response of the bustling city. The unit works around the clock to coordinate life-saving dispatch services and manage prehospital medical services. Among the hospital workers that rotate shifts at Erawan is the unit's prized asset, Dr. Intira Outaivattananon from Sirindorn Hospital.

Dr. Intira is one of the graduates of ADPC's Hospital Preparedness for Emergencies (HOPE) training course under the Program for Enhancement of Emergency Response (PEER-3). The program aims to build the capacities of hospitals by developing qualified instructors, coordinators and monitors, and cooperation between institutions.

As one of the few national graduates of the HOPE program, Dr. Intira served as the medical commander during the royal funeral procession of the

late King Bhumibol Adulyadej in October 2017. With thousands of people gathered to pay their final respects to the King, preparing on site medical services to provide emergency response was critical to ensure the safety of mourners.

As she proudly flipped through her detailed emergency plan, Dr. Intira emphasized the role of the HOPE program. "Before the HOPE course, I could not make this plan. I realized that medical knowledge is not enough to fully respond to a disaster – it is important to know the system and structure of emergency response," she said.

As a graduate of the HOPE Training for Instructors course, Dr. Intira is also sharing her knowledge to hospital workers across Thailand, Cambodia, Lao PDR, and Viet Nam. She explains that cultural differences during international missions can be challenging to navigate, but the HOPE Training for Instructors course has taught her to assess learners' cultures and adjust to experiences and expectations.

Dr. Intira's story demonstrates the impact that one motivated individual can have on building capacity of hospitals, and reaffirms the importance of quality instructors to create a new generation of leaders and change-makers.



The HOPE under PEER Stage 3 program is funded by the US Agency for International Development Office of Foreign Disaster Assistance (USAID-OFDA) with partial funding from the American Red Cross.



Experts from the University of Bergen, Norway, leading a group of seismologists from the Department of Meteorology and Hydrology of Myanmar to inspect earthquake monitoring equipment in Nay Pyi Taw.

This project was funded by the Royal Norwegian Ministry of Foreign Affairs.

Understanding earthquakes in Myanmar

Nay Pyi Taw, Myanmar — A tectonically active area with several highrisk zones, Myanmar is one of the most earthquake-prone countries in the region. Many inhabited areas in Myanmar lie on tectonic faults, including the capital city Nay Pyi Taw which houses leadership and headquarters for all state institutions.

The Department of Meteorology and Hydrology (DMH) in Nay Pyi Taw is the main seismic monitoring center and operates to gather data from the field stations and issue earthquake information to the public. Much of the work used to be done manually and with limited functionality.

A lot has changed in the last few years. Capacity development programs by ADPC and the University of Bergen, Norway, have advanced the DMH's technological capacity through seismic data digitalization. An example of new technology installed is "SeisAn", an open-source, free software for seismic analysis and monitoring. Through this software, DMH's seismologists can now monitor all seismic events to swiftly determine epicenters and potentially affected areas. The ability to process and store data on seismic activity through SeisAn allows for the development of an extensive seismic archive and Myanmar's own seismic models.

"Digitalization and integration of seismic data is the key first step in strengthening the capacities at DMH's seismology department," says Dr. Peeranan Towashiraporn, Director, ADPC. "Having the capability to detect, analyze, and understand earthquakes will move DMH closer to being able to disseminate information on earthquakes and provide tailored advisory messages to other government agencies and the general public. Such mechanisms hadn't been properly in place in Myanmar."

The program has caused a shift in mindset amongst DMH seismological staff and officers, who are actively engaging with the new technology for their projects and making strides to revise Standard Operating Procedures for DMH to improve the flow of information from field stations to the management level of DMH.

Disaster survivors overcome trauma in Bangladesh

Dhaka, Bangladesh — In 2012, a fire broke out in Rayerbazar, an impoverished neighborhood in Dhaka, Bangladesh. Most of the residents in the area lived in single-room structures with adjoining walls that allowed the fire to spread quickly. Tragically, a family of nine died in the accident when they were unable to escape the blaze.

In the aftermath of the incident, many community members suffered from panic attacks and nightmares. Fear-induced sleeping disorders became the most common issue among women and children.





A women's only psychosocial counselling group allows women to discuss and cope with the challenges of living in an area affected by climate change.

In 2011, ADPC had initiated a training program on Mental health and Psychosocial Support (MHPSS) in Bangladesh with support from the Royal Norwegian Ministry of Foreign Affairs and in collaboration with BRAC, a leading social development organization. Through this program, ADPC developed a pool of human resources who could provide Psychosocial First Aid (PFA) to disaster survivors.

Ms. Shamima Sultana, Senior Sector Specialist, Psychosocial Counseling, BRAC-Bangladesh, was a MHPSS graduate that reached out to help the community after the fire incident. Children were among the most affected, and to help them overcome their nightmares about the accident, Ms. Sultana created 'safe space' activities to help alleviate their fears. Since her training, she has helped hundreds of people to re-establish their lives after traumatic events.

ADPC's partner, BRAC, is also providing psychosocial support to disaster-prone communities prior to the occurrence of a disaster. Since emotional recovery is a slow process, psychologically prepared communities can bounce back better and help other members who have difficulty coping with the psychological shocks that a disaster may inflict upon them. Ms. Sultana recommends sensitizing vulnerable groups to the importance of seeking psychosocial support for themselves or anyone else in need after a disaster.

Public health and emergency management in Sri Lanka



Colombo, Sri Lanka — The 2004 tsunami in Sri Lanka was one of the worst disasters ever recorded in the country's history, leaving tens of thousands dead, many more homeless, and causing widespread destruction throughout the island. Before the tsunami, Sri Lanka lacked an established and well-coordinated Disaster Risk Reduction (DRR) system. In the wake of the tsunami, the country urgently needed a DRR system to minimize losses to human life and property during disasters and emergency situations.

In late 2005, ADPC introduced a diploma in disaster management for Sri Lankan medical officers under the Public Health and Emergency Management in Asia and the Pacific (PHEMAP). Dr. Hemantha Herath was fortunate to attend the inaugural national PHEMAP, where he learned about trauma and public health issues in natural disasters and mass accidents. Over the years, 17 Sri Lankans have trained in PHEMAP and other ADPC courses.

Several years later, a post-graduate training program was developed by Dr. Prof. Rezvi Sheriff, Director of the Postgraduate Institute of Medicine (PGIM), University of Colombo, Dr. Hemantha Herath, and Dr. Eeshara Kottegoda. The most significant contribution of the PHEMAP program was the establishment of a diploma in Disaster Management for Medical Officers, established with help from Dr. Dinesh Fernando and Dr. A. Balasooriya. Graduates of the diploma program are trained to conduct risk assessments and develop and test their disaster management plans.

This program proved beneficial for the country, with approximately 20 hospitals receiving formally prepared and scientifically-based disaster management plans every year. Today, almost every hospital in Sri Lanka has participated in the program and developed their own disaster management plan. With diploma holders distributed all over the island, doctors no longer travel to distant hospitals during disasters or emergency situations. Diploma holders are also training other health workers at the local level to ensure the impact of the program continues to ripple throughout the country.



Woman turns grief into action in Pakistan



Lahore, Pakistan — When Ms. Nighat Rukhsana lost her two teenage sons in a tragic road accident, she turned grief into action and became a symbol of courage and hope for her community.

To Ms. Nighat, the death of her children and of countless other parents was a culmination of delayed emergency response. Since the tragedy, she has been putting together her efforts for saving lives and preparing women in the area to volunteer or work as emergency responders. In 2012, she received ADPC's Community Action for Disaster Response (CADRE) training along with seventeen male and seven female volunteers at the Emergency Services Academy (Rescue 1122).

Although women in Punjab province enjoy relatively more freedom than in other parts of the country, it is difficult for women to participate in activities occurring outside of educational institutions. Ms. Nighat's campaigning allowed for eight young women and seventeen men from Shahdara community to participate in CADRE training course. To ensure the sustainability and outreach of the initiative, she went as far as offering her house for regular meetings. The overwhelming level of interest and dedication to emergency management in the community led to Rescue 1122 promising technical support to the group.

"We have been working with this community for the last two years. I must say it is the most vibrant and united community I have ever engaged with for emergency management trainings. Ms. Nighat is a role model both for current and future CADRE graduates of this community. She has made it possible to run the program without much external help. This is quite unique," said Ms. Roqiya Bano, Head of Community Safety Wing at the Punjab Emergency Services.



Community Action for Disaster Response (CADRE) under the Program for Enhancement of Emergency Response (PEER) was implemented by ADPC with support from the US Agency for International Development Office of U.S. Foreign Disaster Assistance (USAID-OFDA) and American Red Cross (ARC).

Child-centered disaster management in **China**



A school teacher, who is also a course participant, explains the group assignment during a course exercise.

Sichuan, China — China has suffered 151 earthquakes measuring from 6.5 to 7 on the Richter scale between 1964 and 2013. Unfortunately, earthquakes are not the only hazard that affects Sichuan Province. Dangers such as landslides, fires and floods put those in the area at risk, especially those living in the hazard prone mountain regions. The 160 million children living in rural areas are also vulnerable to these threats.

In 2012, a program aimed to deliver long-term improvements on children's resilience and their communities' capacity for DRR was launched in Yanyuan County, southern Sichuan.

Based on a comprehensive needs assessment process, a strategy was devised to safeguard children against the impact of disasters by training parents, community leaders, teachers, and government officials on disaster risk management, including the identification of hazards and vulnerabilities of their communities.



This inclusive process was pivotal in urging relevant government agencies, schools and villages to actively integrate the whole community into disaster risk management activities – an important step in changing the community's mindset regarding disasters. In Xigou Village, a training workshop on disaster risk management was scheduled on a Saturday, so even children could participate.

The program has sparked an interest in disaster risk management activities that still resonates in the communities. "We are eager to get more capacity building programs, particularly training. We are willing to train schools and other relevant people. Before, we trained just for disaster response and rescue. We didn't have knowledge on disaster risk management," said Ms. Zhao Yan, officer in the training section of Liangshan Prefecture of Emergency Rescue Center

The program demonstrated the importance of involving all relevant stakeholders in disaster risk management to empower communities. With the positive response to the topic, the program plans to continue promoting community-based and child-centered DRR in China.

The Disaster Risk Reduction: from Recovery to Resilience – Implementing Child-centered Disaster Risk Reduction program was implemented by Save the Children China, with support from Swiss Re and ADPC.

Resilient investment decisions in Lao PDR

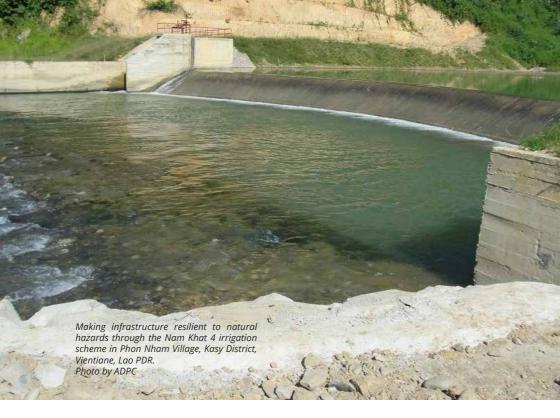
Vientiane, Lao PDR — "Our rice production will definitely go up this year, as the irrigation scheme now has the capacity to water 45 hectares as opposed to 20 hectares previously," explains Mr. Vilay Ouanpaseuth, Head of Phon Ngam village.

Mr. Vilay is referring to the impact of the Nam Khat 4 irrigation scheme, part of the Lao government's broader initiative to make public infrastructure resilient to natural hazards from 2012-2016. A landmark achievement of the project was the integration of policy guidelines on risk-sensitive investments into Lao PDR's 8th National Social and Economic Development Plan 2016–2020 (NSEDP). ADPC supported the Ministry of Planning and Investment to operationalize the mainstreaming of DRR into public infrastructure investment decisions at policy, planning and implementation levels.

An example of ADPC's support was for Lao PDR's transportation sector. As landslides frequently burden the sector, there was a need to have reliable information about the level of landslide threat to road infrastructure and commuters. ADPC developed a landslide inventory framework



Project team visits site to build resilient irrigation scheme.

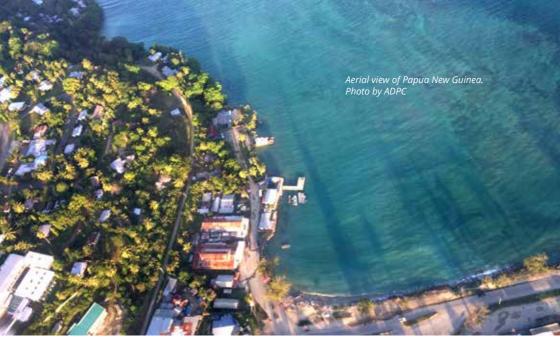


for critical national and provincial roads, including a dataset providing in-depth information about hazard levels and potential disaster impacts on vulnerable routes.

Education is critical to safeguard development gains and create sustainable change. Recognizing this, ADPC reviewed the existing curriculum of engineering courses being offered at the National University of Laos and developed modules on mainstreaming disaster and climate risk management into investment decisions.

Local people of the project's target provinces are happy to have a better and safer infrastructure, and engineers and other staff involved in the construction and monitoring of the pilot projects are better prepared to replicate similar investment decisions in the future.

This project was funded by Ministry of Planning and Investment of Lao PDR under the World Bank's Policy and Human Resources Development Technical Assistance Program, financed by the Government of Japan.



Protecting livelihoods in Papua New Guinea

Home to over 6.1 million, Papua New Guinea is the largest country in the Pacific region with abundant natural resources such as copper, gold, and oil. While natural resources account for nearly two-thirds of its export revenues, 85 per cent of the population depends on agriculture and related sectors. Due to their exposure to natural hazards that are often exacerbated by climate change, these sectors are vulnerable to disasters.

ADPC worked with PNG's Climate Change and Development Authority (CCDA) and United Nations Development Program (UNDP) to strengthen the institutional capacities of five provinces in climate change adaptation (CCA). Through a marathon of consultations with provincial authorities and other partners, ADPC developed CCA plans for key priority sectors - Agriculture and Livestock, Fisheries, Health, Education, Division of Planning, Forestry and Conservation, and the Provincial Disaster Management Centers. With sectoral CCA plans in place, PNG is now on the road to take key actions outlined in the Sendai Framework for Disaster Risk Reduction and the Paris Agreement on Climate Change to build community resilience and protect livelihoods.

ADPC Academy

ADPC is a premier source for training and capacity building in disaster and climate risk management in the Asia and the Pacific region and beyond. A broad spectrum of people from government, intergovernmental and nongovernmental organizations and academia sign up for ADPC's training courses every year. New techniques, skills, and knowledge learned during these courses broaden and deepen participants' understanding of a variety of disaster and climate change related issues.

ADPC's regional courses cover key areas in disaster risk reduction and climate change adaptation through diverse and customized approaches that cater to the emerging needs of countries. We regularly update training curricula to align it with the priorities of regional and global frameworks for disaster and climate risk management.

A snapshot of ADPC's training course

Flagship training courses

- Community-Based Disaster Risk Reduction (CBDRR)
- Disaster Management Course (DMC)
- Mainstreaming Disaster Risk Reduction into the Development Process (MDRD)
- Monitoring and Evaluation for DRR (MEDRR)

Hazard-specific courses

- Climate Risk Management in a Changing Environment (CRM)
- Earthquake Vulnerability Reduction in Cities (EVRC)
- Flood Disaster Risk Management (FDRM)
- · Seismic Hazard Risk Assessment

Tailor-made courses

- Community Action for Disaster Response (CADRE)
- Disaster Risk Communication (DRC)
- Damage assessment and need analysis (DANA)
- Gender in Disaster Risk Reduction

Meet ADPC's Alumni



Dr. Ha Van Nhu

Dr. Ha Van Nhu, head of Health Emergency Department at the Hanoi University of Public Health, Vietnam, took his first Disaster Management Course (DMC) with ADPC in 2003. Dr. Ha later attended the PHEMAP course.

"These [courses] are very important for people working in the disaster management area. Being head of the department, I had to learn about the links between disasters and health," said Dr. Ha.

Following the courses, he relayed the material back to Vietnam, where it laid the groundwork for a curriculum used by both students and public health staff. After initial concerns regarding the English language barrier of course material, he and his team translated the content into Vietnamese and developed material specific to Vietnam.



Dr. Hemantha Herath

In an effort to supplement his 27-years of experience in disaster management, Dr. Hemantha Herath, head of the Disaster Unit of the Sri Lankan Health Ministry, attended the PHEMAP course in December 2005. Thereafter, Dr. Herath and the Disaster Unit developed the Emergency Management Training Center in Perdeniya, Sri Lanka, in collaboration with PHEMAP participants and ADPC trainees.

He stresses that people involved in disaster management must prudently learn new and innovative ways of mitigating risks during disaster emergencies to ensure the safety of victims.

"Formal training at regular intervals is very important so that disaster managers apply these techniques and other approaches in a scientific manner," said Mr. Herath. He emphasized that "resources [must be] used in a cost-effective manner" to make sure that the "final benefits go to the victims."





Asian Disaster Preparedness Center

SM Tower, 24th Floor 979/69 Paholyothin Road, Samsen Nai Phayathai, Bangkok 10400 Thailand

Tel: +66 2 298 0681-92 **Fax:** +66 2 298 0012 **E-mail:** adpc@adpc.net

www.adpc.net

Asian Disaster Preparedness Center - ADI

Asian Disaster Preparedness Center (ADPC