2016 ANNUAL REPORT

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Asian Disaster
Preparedness Center

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Forewords

Dear readers,

It was October 2016 when a two-deck ferry carrying around 150 people capsized in Chao Praya River, in the province of Ayutthaya, Thailand. Equipped with the necessary tools, community first responders trained by Asian Disaster Preparedness Center (ADPC) joined the search and rescue operation and helped in saving over 100 people.

Despite the loss of 18 precious lives, the response by the community volunteers highlighted the importance of providing search and rescue training and equipment to the community. The ferry incident is one of many stories of our efforts to reduce disaster risk in the Asia-Pacific region that I would like to present to you in our 2016 Annual Report.

Our mission is to reduce disaster and climate risk impacts on communities and countries in the Asia-Pacific region. The Annual Report highlights the hundreds of initiatives taken collaboratively with governments, partners, and communities in 2016 that have enhanced their capacities to prepare for and respond to disasters effectively.

Formed in 1986 as a regional training resource center, ADPC celebrates 30 years of its partnership with governments and communities. ADPC's knowledge is drawn from over three decades of experience supporting countries in building institutional capacities for response, mainstreaming disaster risk reduction into development planning, ensuring end-to-end early warning systems, and modernizing hydro-meteorological institutions by providing new tools and training, to name a few.

The reporting year reflects how ADPC has capitalized on its experience to support the implementation of the Sendai Framework for Disaster Risk Reduction (SFDRR), the Sustainable Development Goals (Agenda 2030), and the Paris Agreement on Climate Change.

I would like to extend my heartfelt gratitude to Dr. Jingjai Hanchanlash for the leadership and compassion that he practiced during his time at ADPC as Interim Executive Director in 2016. His services will remain an asset for us, especially for initiating the revitalization process to enable ADPC to work more professionally. As the member of the ADPC's Board of Trustees, Dr. Hanchanlash will continue serving the organization in the future.

ADPC will continue to support governments and communities in realizing their objective of achieving disaster resilience at all levels.

Sincerely,

Prof. Dr. Krasae Chanawongse
Chairman
Asian Disaster Preparedness Center

Dear readers,

On behalf of ADPC, I am pleased to present the 2016 Annual Report. During this year, the world experienced 301 disasters, both small and large, which claimed over 7,600 lives, affected 411 million people, and caused economic losses worth more than $97 billion. Six of the top ten contries by number of deaths due to disasters are in the Asia-Pacific region.

The hottest year in the last 137 years, according to the World Meteorological Organization, 2016 saw extreme heatwaves and droughts in many parts of this region necessitating a new sense of urgency to invest more resources and form effective collaborations to adapt to climate change.

Within the region's risk profile, we, at ADPC, work with governments and communities to reduce disaster risk in the region. This includes bringing people together to share good practice, learn from one another and develop effective strategies for addressing risk across the region.

In 2016, ADPC implemented activities in 21 countries to strengthen national and individual capacities for disaster risk reduction and resilient development, enhanced preparedness for response, promoted regional cooperation on disaster-related issues, and engaged with the private sector to protect Small and Medium Enterprises.

We worked with government agencies to enhance their capacities to carry out hazard-specific risk assessments, generate and understand complex hydro-meteorological and seismic data, as well as understand geospatial technology.

ADPC has been supporting national disaster management offices of countries in Asia-Pacific by bringing them together every year to facilitate knowledge exchange on disaster and climate change related operational issues. This contributes to enhancing regional cooperation among policy makers and implementing organizations in the area of disaster risk and climate change.

In this regard, the 13th meeting of the Regional Consultative Committee on Disaster Management (RCC), held in Islamabad, Pakistan, was one of the highlights of the year. In this meeting, representatives of 13 Asian countries discussed the role of RCC to support governments in unpacking the Sendai Framework for Disaster Risk Reduction at national levels. RCC member countries entrusted ADPC - being its secretariat - with the task of helping them achieve the goals outlined in global frameworks.

ADPC undertook a mid-term review and revised its Strategy 2020. This report presents a snapshot of the revised Strategy that introduces a new set of thematic areas, which will cover emerging issues in the field of disaster and climate risk management from both scientific and social perspectives.

Sincerely,

Hans Guttman
Executive Director
Asian Disaster Preparedness Center

ADPC at a Glance

Asian Disaster Preparedness Center (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. In partnership with governments, development partners, UN agencies, civil society, academia, and the private sector, ADPC supports countries in the Asia-Pacific and beyond to identify risks and vulnerabilities, build stronger risk management systems, and mainstream disaster risk reduction and climate change adaptation to build sustainable development.

Since 1986, ADPC has expanded its scope and diversified its operations for an approach that offers long-term and sustainable solutions to reduce the impact of disasters and climate change.

Our Vision

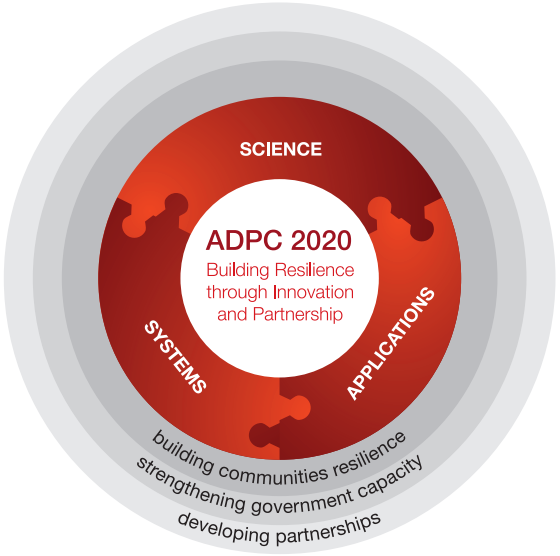
Safer communities and sustainable development through disaster risk reduction.

Core Principles

ADPC's efforts to strengthen disaster and climate risk management systems in the Asia-Pacific are anchored in three principles:

Science, Systems, and Applications

These principles encompass the utilization of scientific knowledge and technology to better understand risk, the institutionalization of systems to build resilience, as well as the application of risk-reduction measures across a range of development sectors and different national contexts within the Asia-Pacific region.



Revisiting ADPC Strategy 2020

In early 2016, ADPC started the revision process for its strategic document and defined six key thematic areas, which stem from the priority needs of governments in Asia-Pacific to reduce disaster and climate risks. The themes also seek to contribute to achieving the goals laid out in global frameworks including the Sustainable Development Goals (Agenda 2030), the Sendai Framework for Disaster Risk Reduction (SFDRR), the Paris Agreement on Climate Change, and voluntary commitments of the World Humanitarian Summit.

The strategic themes of Risk Governance, Urban Resilience, Climate Resilience, Health Risk Management, Preparedness for Response, and Resilient Recovery, with Gender and Diversity, Poverty and Livelihoods, and Regional and Trans-boundary cooperation as cross-cutting themes will drive ADPC's vision of safer communities and sustainable development through disaster risk reduction.

ADPC's Thematic Focus

Risk Governance aims to ensure that policies and practices driving development include effective measures to reduce disaster and climate risks equitably and transparently.

Urban Resilience seeks to enable people, institutions, businesses and systems in urban areas to have a greater capacity to prepare, respond, adapt, and thrive despite stresses and shocks.

Climate Resilience guides ADPC's work to improve the resilience of people and systems to climatic extremes and future climate change trends in the Asia-Pacific region.

Health Risk Management strives to strengthen health services to enable them to withstand and respond to emergencies. Through the capacity building of health workers and community volunteers, health is integrated into the wider disaster risk reduction sector to ensure that the community's physical and mental health needs are met.

Preparedness for Response focuses on enabling governments, response organizations and communities to effectively respond to and manage emergencies in a coordinated manner to reduce the loss of lives, injuries, disabilities, and displacement of affected communities.

Resilient Recovery focuses on helping governments, people and the private sector to build back better after disasters. This includes supporting countries, communities and businesses to prepare for and implement post-disaster recovery measures.

In the cross-cutting areas, ***Gender and Diversity*** promotes gender equality, diversity, and empowerment of vulnerable groups at all levels of our work and across all themes. ***Poverty and Livelihoods*** seeks to ensure a pro-poor and resilient livelihoods approach in the work we do and support through governments, the private sector, and civil society. ***Regional and Trans-boundary cooperation*** aims to use ADPC´s programs and technical expertise to strengthen international cooperation, collaboration and coordination to make preparedness, risk mitigation, and relief and recovery efforts more impactful, inclusive, and sustainable.

In 2016, ADPC worked in 21 countries and enhanced the capacity of 3,300 people through 59 projects

This map is for informational purposes only, representing the approximate relative location of where ADPC worked in 2016.

Country highlights

Bangladesh

- Enhanced the capacity of 125 hospital staff in managing mass casualty incidents, and carried out a risk assessment at 16 hospitals in six earthquake prone municipalities to develop health emergency management plans to handle post-disaster health situations.
- Trained 480 volunteers of the Bangladesh Fire Service and Civil Defense on collapsed structure search & rescue, firefighting, and first aid.
- Completed national multi-hazard risk assessment, modeling and mapping activities in partnership with the Department of Disaster Management.
- A total of 380 people were trained in 44 districts across the country on the application of risk assessment.

Bhutan

- Carried out a National Disaster Risk Management Status Review as part of the country´s efforts to implement the SFDRR. The report highlights gaps and challenges, which will be addressed over the next five years.

Cambodia

- 168 people enhanced their capacities on area-specific contingency planning and effective communication through the Cambodia Humanitarian Forum (CHF).
- Following a drought impact assessment study by CHF members in 10 provinces across Cambodia, 122 villages became aware of the risk posed by drought on local water sources such as wells, tube-wells, ponds, lakes, and canals.

During a simulation, volunteers in Dhaka learn how to use a rock drill provided by the SERB program.

Dr. Senaka Basnayake explains how a solar-powered automatic rain gauge station functions to record, store, and send data to a central database.

China

- 28 government officials and community members from Guangxi Zhuang Autonomous Region benefited from ADPC's Community Based Disaster Risk Management course to formulate disaster management plans at the local level.
- Published a field practitioner's handbook on 'Making Communities Safer for Children - An Integration of Community-Based Disaster Risk Management and Child Centered Approaches' with support from China's Social Publishing House in Beijing. The book guides practitioners on how to develop strategies for child-centered and community-based disaster risk management. The first 2,000 volumes were distributed through Save the Children's office in Chengdu.

India

- ADPC assisted the State Government in Bihar to reduce disaster-related deaths by 75 percent by 2030 through capacity building activities identified under the Bihar Roadmap for Disaster Risk Reduction 2015–2030.
- Eighteen engineers of the Department of Energy in Bihar became master trainers for mainstreaming Disaster Risk Reduction (DRR) into the energy sector.
- Accessible online and offline, Standardized Disaster and Loss Assessment (DaLA) reporting tools, post Disaster Needs Assessment User Handbook, training modules, and guidelines developed by ADPC are being used by the ten most vulnerable States.
- A pool of trained national and sub-national government officials are able to undertake DaLA in the future without external assistance.

Indonesia

- Organized Indonesian National Business Forum on SME Development and Disaster Resilience in Jakarta, which brought together 80 delegates from the private and other sectors to explore partnerships and networking options for disaster resilient business practices.
- Revitalized the knowledge and practical skills of senior city managers in emergency response through the 'Senior Management Training for Disaster Management Leadership' in Manado, North Sulawesi.

Lao PDR

- Supported the communities of Ban Keo Manee to establish more effective local communication mechanisms for use during the rainy season. With the help of enhanced equipment, the community can issue early warnings in the event of heavy rainfall.

Malaysia

- Helped 21 journalists from eight countries generate story ideas on disaster mitigation through a regional workshop on Disaster Risk Reduction in partnership with the United Nations Office for Disaster Risk Reduction (UNISDR) and the Asia-Pacific Institute for Broadcasting Development (AIBD).

Mongolia

- Conducted an impact evaluation for the 'Strengthening Community-Based Disaster Risk Management' project. Results demonstrated substantive increases in awareness of emergency preparedness and disaster mitigation among those surveyed.

Myanmar

- Focused on multi-hazard risk assessment scenarios and risk informed decision-making, training courses in Geospatial Information Technology (GIT) benefited experts from the Relief and Resettlement Department (RRD), and academia at the Mandalay Technological University (MTU).


Sri Lanka

Philippines


Viet Nam

Commune president and ADPC discussing the design of the [illegible] iron bridge

- The Weather Research & Forecasting Model (WRF) set up at the Department of Meteorology and Hydrology has substantially enhanced its ability to increase the forecasting lead-time from 2–3 to 8–10 days for cyclones, heavy precipitation events, high winds, and other extreme weather phenomena.
- Developed "Myanmar Climate Data Portal" to enhance the Department of Meteorology and Hydrology's (DMH) climate service and to provide easy access to climate data and information.
- DMH's capacity for earthquake data processing, integration, and analysis has been enhanced through advanced training programs, hands-on practical sessions, demonstrations, and research exchanges at the University of Bergen Norway.
- ADPC mentored 45 youths from 15 states in Myanmar to learn leadership skills to become change agents for disaster resilience and preparedness in their respective communities.

Nepal

- Developed an improved econometric methodology for flood loss and damage assessment to minimize the adverse impact of floods on crops.
- Identified future flood events in the targeted areas through screening and extracting imminent precipitation events (rain spells) from the downscaled climate scenarios.

Philippines

- Brought 150 people together from the private and development sectors to consolidate areas of co-operation by organizing 'The Philippines National Business Forum on SME Development and Disaster Resilience' in July.

Sri Lanka

- A detailed flood hazard assessment in Metro Colombo has enabled the City Authorities to take mitigation measures to save the lives and properties of citizens.
- Developed an improved econometric methodology for flood loss and damage to minimize adverse impact on crops.

Thailand

- Over 80 participants from the government, private, and development sectors attended the Thailand National Business Forum on 'Private Sector Investment in Disaster and Climate Resilience´, held in September to showcase experiences and initiatives by businesses on contributing to disaster and climate resilience.
- The on-going Program for Reduction of Vulnerability to Floods in Thailand contributed to adaptation in the way the Koh Pra community handles recurring flooding, from being responsive to proactively prepared. The program interventions were put into practice by community members during the flood season in 2016.
- Provincial government of Songkhla and Chiang Rai are utilizing online risk data portals developed by ADPC for disaster management and development planning.

Viet Nam

- Provided technical assistance to the Viet Nam Institute of Geosciences and Mineral Resources (VIGMR) for installation of a pilot system for monitoring land subsidence in Ca Mau Province.
- One hundred participants from government agencies, development partners and private businesses, in particular SMEs, as well as academia, exchanged best practices and lessons learned for private sector engagement in DRR efforts during the Viet Nam National Business Forum on 'Strengthening Disaster Resilience of SMEs' held in Hanoi in September.
- The Center for Information, Research, and Service in Psychology at Viet Nam National University integrated ADPC's Mental Health and Psychosocial Support (MHPSS) program into the curriculum of the Master of Clinical Program.
- The MHPSS has also been integrated into the curriculum of the Master of Clinical Program from the Center for Information, Research and Service in Psychology at Viet Nam National University.

ADPC was also active in **Ethiopia, Nigeria, Pakistan, Papua New Guinea** and **South Korea.**

Supporting the Implementation of Global Frameworks for Disaster and Climate Risk Management

Asian Disaster Preparedness Center (ADPC) is committed to supporting the goals outlined in the global frameworks to achieve sustainable development, and address the critical challenge posed by the increasing frequency of disasters. Although collective efforts by the development sector, governments, and communities reached many milestones over the past decades in reducing disaster-related fatalities, emerging threats to lives, properties and infrastructure demand innovative solutions.

ADPC continues to align its work with the global frameworks related to sustainable development, disaster risk reduction and climate change by offering targeted and innovative solutions to disaster and climate risk.

For example, through a unique partnership between ADPC, the U.S. Agency for International Development (USAID) and the U.S. National Aeronautics and Space Agency (NASA), SERVIR-Mekong is harnessing space technology and open data to help address development and environmental challenges in the Lower Mekong region. This initiative aligns with priortiy 1 of the SFDRR - ***understand disaster risk*** - by strengthening risk governance and disaster preparedness in target countries. The tools and services developed by SERVIR-Mekong will help countries in the region meet their commitments to the Paris Agreement.

Similarly, ADPC's iPrepare Business Facility has worked to engage the private sector, especially Small and Medium Enterprises (SMEs) across the region. This work has been aligned with priority 2 of the SFDRR – ***strengthening disaster risk governance to manage disaster risk.***

ADPC also successfully hosted the 13th annual meeting of the Regional Consultative Committee (RCC) on Disaster Management attended by 13 member countries to promote regional cooperation on risk management. The Islamabad Statement, issued at the end of the meeting, emphasized the importance of maintaining the RCC as a key regional platform for the development and sharing of good practices, leveraging science, innovations, and technology as applicable to key global frameworks, which act as guides for organizations and practitioners working in the field of disaster risk reduction.

The following pages highlight ADPC's contribution under different areas of disaster and climate risk management in the Asia-Pacific region.

Local level flood early warning: a tricolored water gauge informs people about the degree of hazard they are exposed to.

Photo by ADPC/ Dr. Rishiraj Dutta

Strengthening Risk-Resilient Development in Asia

Asian Disaster Preparedness Center (ADPC) has taken a number of initiatives aimed at enhancing the technical capacities of Myanmar, Viet Nam, Bangladesh, and India to create an enabling environment for disaster risk reduction and risk-resilient development. This work incorporates priorities outlined in both the SFDRR and the SDGs.

Enhancing the capabilities of experts and national organizations

Supported by the Royal Norwegian Ministry of Foreign Affairs since 2009, ADPC has been implementing a flagship program on 'Disaster Risk Reduction Initiatives on the National and Regional Level in Asia'. This initiative strives to enhance the capabilities of experts and national organizations in Bangladesh, Myanmar, and Viet Nam. A methodical approach was taken to develop the work plan in 2016, prioritizing the needs of target countries in alignment with the SFDRR.

Over 610 people (half of them women) developed skills on a variety of subjects related to disaster risk reduction. Hydro-meteorology departments, universities, and disaster management offices in Bangladesh, Myanmar, Viet Nam, and other countries in the region benefited from customized training courses on critical weather forecasting tools, climate services, seismic monitoring, data processing, geographic information system, gender mainstreaming, as well as mental health and psychosocial support in emergencies. The following is a summary of the key contributions of the program in 2016:

Seismic monitoring for safer development

ADPC helped improve the Myanmar government's seismic monitoring capacity to address the country's exposure to earthquakes and tsunamis. With program support, the Department of Meteorology and Hydrology (DMH) is now using publicly available earthquake analysis software, ***"SeisAn",*** to form an integrated data network between 12 seismic monitoring stations across the country. This software has helped automate the intra-station transfer of data, which was a revelation for a country that used to process data received from various stations manually. This will allow the government to better monitor seismic activity to track trends and understand the risk of earthquakes.

DMH's capacity for data processing, integration, and analysis was strengthened through advanced training programs, hands-on practical sessions, demonstrations, and research exchanges at the University of Bergen, Norway. The program continues to foster a strong working relationship between DMH seismologists and experts in Norway.

"Our next generations will benefit from the results of this program"

Mr. Tun Lin Kyaw, a seismologist at DMH, Myanmar, welcomed the opportunity to learn modern data processing techniques from experts at the University of Bergen, Norway, during his one-month fellowship funded by ADPC. According to Mr. Tun Lin Kyaw, DMH did not previously have a digital data catalog and relied on paper-based datasets to analyze seismic and tsunami risks.

The primary function of the DMH is to analyze seismic data in order to issue earthquake bulletins and help development agencies assess earthquake risk for resilient development. The limited availability of digitizers, modern technology and essential software to process information was a major impediment in providing accurate data to other agencies.

Mr. Tun Lin Kyaw believes that lacking a digital database is a life-threatening issue. Myanmar, he says, is developing rapidly; therefore, institutions need accurate and actionable information for long-term national and sub-national development planning.

"Unfortunately, we do not have reliable historical data on earthquakes to feed into land use planning and conduct sector-specific risk assessment," he said, and added: "it is exciting to think that our next generation will benefit from the results of this program as they will have a treasure of digital data at their disposal to make decisions."

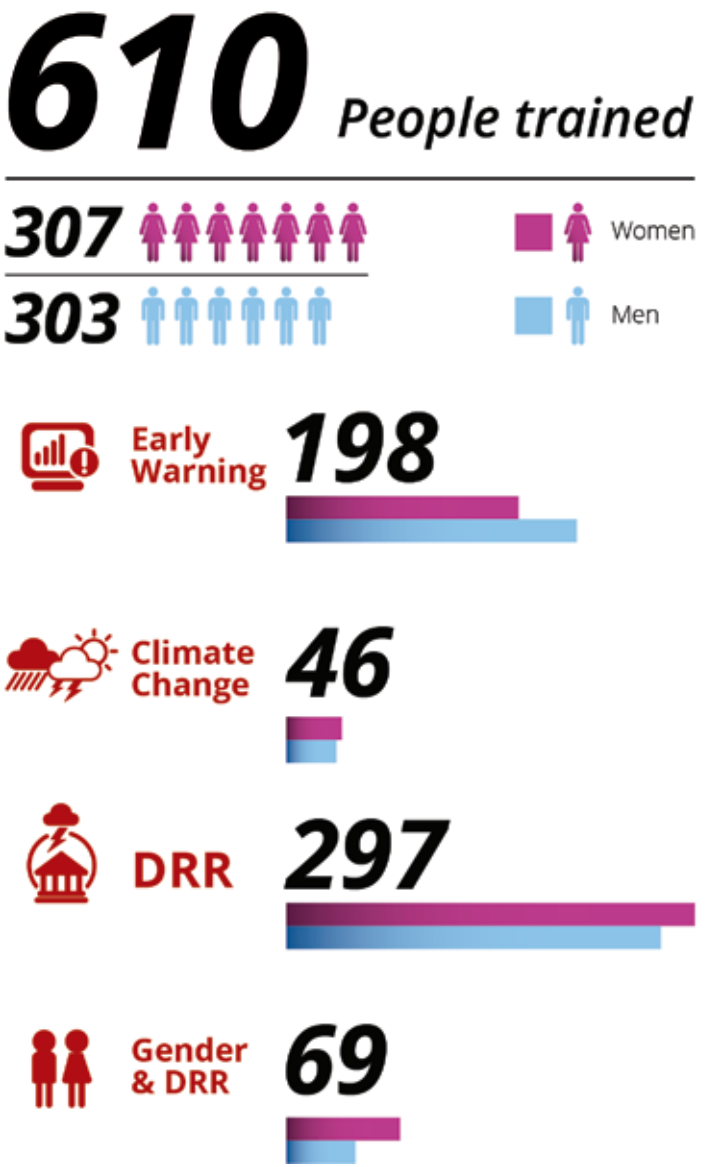
Strengthening weather and climate services

Professionals from the hydro-meteorological departments in Myanmar, Bangladesh and Viet Nam have broadened their understanding of generating reliable and accurate weather and climate predictions.

ADPC organized a training workshop for the Department of Meteorology and Hydrology in Myanmar, the National Hydro Meteorological Service in Viet Nam, and the Thai Meteorology Department on the North American Multi-Model Ensemble (NMME) forecasting systems. This training helped professionals learn how to make more accurate seasonal forecasts for their countries and acquire the skills to generate more accurate drought forecasts.

The Weather Research & Forecasting Model (WRF) set up at DMH, Myanmar, has substantially enhanced its forecasting lead time from 2–3 to 8–10 days for cyclones, heavy precipitation events, high winds and other extreme weather phenomena. The DMH's ability to provide this critical information helps communities and other sectors to better prepare for any looming hazard. ADPC also worked with DMH to upgrade its river flow monitoring system, flood modeling and flood risk mapping, which are helpful in assessing the magnitude of potential risks to people's lives and livelihoods due to floods in the Kalay area.

Summary of training conducted by ADPC under the Norway program in 2016



The Climate Data Portal installed at DMH Myanmar (also being developed in Bangladesh), provides users with information on different climatic scenarios that can be used for planning and development in climate-sensitive sectors such as agriculture, water, energy, and forestry. Following extensive training sessions, experts in Myanmar and Bangladesh are also using NASA Earth Exchange (NEX) climate projection datasets, which are helpful in carrying out accurate impact vulnerability assessments of climate-sensitive sectors in their respective countries. The NEX datasets offer downscaled future climate scenarios from 1950 through 2100.

The El Niño Outlook Forums established in Viet Nam and Myanmar serve as platforms for dialogue between weather forecasting agencies and those applying the available knowledge to design and implement effective preparedness measures to mitigate the impacts of weather and climate phenomena. Similarly, a participatory community risk assessment enhanced the ability of local stakeholders to respond effectively and to create a better understanding in using early warning information for coastal hazards in Nha Trang, Viet Nam.

Putting gender on the map

ADPC understands that resilience cannot be achieved unless all genders and social groups are able to participate and benefit from risk reduction. Our commitment to gender equality is in line with the 2030 Agenda for Sustainable Development priority on removing the root causes of gender discrimination and unlocking the power of the underprivileged.

ADPC promoted gender mainstreaming into humanitarian action and disaster risk reduction by facilitating capacity building training workshops in Bangladesh and Myanmar. Government officials, who shape gender sensitive policies, attended these training sessions and made commitments to promote gender diversity in their respective areas.

A two-day knowledge exchange "Power, vulnerability and agency in disaster risk reduction in Asia" brought together stakeholders from eight countries to discuss how geospatial information systems (GIS) can integrate gender issues into disaster risk management, climate change adaptation, and humanitarian action. Participants committed to establishing communities of practice to link GIS applications to gender data collection and analysis for risk reduction.

Focusing on advocacy and gender responsive approach: As the co-chair of the Inter-Agency Standing Committee Working Group on Gender in Humanitarian Action (GiHA), ADPC, together with UN agencies, persuaded stakeholders to accelerate momentum for gender responsive disaster risk management. Subsequently, 'The Asia Regional Plan for Implementation of the Sendai Framework for Disaster Risk Reduction' adopted at the 7th Asian Ministerial Conference on Disaster Risk Reduction (AMCDRR) reiterates the importance of gender-responsive measures in risk reduction initiatives.

A gender, age and disability inclusive cyclone preparedness plan developed by participants of ADPC/UN Women/GenCap gender training in Bangladesh.

Photo by ADPC

(From left) Dr. Jingjai Hanchanlash, Board member, ADPC; Shri. Vijoy Prakash, Principal Secretary, Agriculture Department, Government of Bihar India; Dr. Valerie Nkamgang Bemo, Senior Program Officer, Bill & Melinda Gates Foundation; Mr. Vyas Ji, Principal Secretary, Disaster Management Department, Government of Bihar India, pause for a photo after a meeting discussing how ADPC will support the Government of Bihar through a project supported by the Bill & Melinda Gates Foundation.

Supporting the government's agenda of reducing disaster-related deaths at the sub-national level in India

Well-equipped and skilled institutions are required to address the frequency and magnitude of disasters in the densely-populated Asian region. Through a project supported by the Bill & Melinda Gates Foundation, ADPC is working with the Government of Bihar State of India for reducing disaster-related deaths by 75 percent by 2030 through capacity building activities identified in the Bihar Roadmap for Disaster Risk Reduction 2015–2030.

Beyond strengthening institutional leadership capacity for disaster preparedness and response, ADPC worked with the Bihar Government to identify priority actions to mainstream disaster risk reduction in the health, agriculture and energy sectors.

Eighteen engineers along with senior officials from the Department of Energy in Bihar became master trainers for mainstreaming disaster risk reduction (DRR) into the energy sector in 2016.

Development of post-disaster loss and needs assessment, Sri Lanka

Under a World Bank funded project, ADPC, together with the Disaster Management Center of Sri Lanka, provided technical support to line ministries and departments to develop a Post-Disaster Damage and Loss (DaLA) Reporting System. The DaLA is a critical tool that can identify the impact of disasters and allows both public and private sectors to plan and implement recovery and reconstruction activities more efficiently.

ADPC has trained government officials on the new reporting system with guidelines and standard operating procedures for offline damage and loss assessment. These government officials are well equipped to undertake DaLA in the future without external assistance.

Developing climate inclusive loss and damage assessment methodology for flood hazards

ADPC has improved flood risk assessment methods in Nepal, Sri Lanka, and Thailand to address new dimensions revealed by climate change. In partnership with the Asia-Pacific Network, the project builds on regional research to develop an econometric methodology for estimating flood economic losses and damages to the agricultural sector.

The project held a regional workshop in Colombo, where experts explored science-based DRR and CCA interventions to motivate the farming community to adapt to the changes in cropping calendar, crop varieties, and other climate-smart technological packages. Deakin University in Australia, the Department of Meteorology, Sri Lanka, and Small Earth Nepal (SEN) are technical partners in this project.

Building resilience and adaptation to climate extremes and disasters

ADPC continued to serve as a knowledge manager and policy influencer in Myanmar and Nepal through the 'Building Resilience and Adaptation to Climate Extremes and Disasters (BRACED) project. With support from the Department for International Development of the United Kingdom (DFID) and in partnership with Thomson Reuters Foundation, ADPC organized a series of media training on climate resilience reporting for journalists in project countries. The training helped journalists understand different dimensions of reporting and advocating for communities' resilience to disasters.

Understanding risk at national and sub-national levels

Addressing the SFDRR's Priority Area 1, ADPC continued to promote understanding disaster risk as a basis for effective disaster risk management and resilient development in Asia. At a national level, ADPC completed a project with the Department of Disaster Management of Bangladesh, with funding support from the World Bank, to assess and map disaster risk of common hazards in Bangladesh as well as to establish a Multi-hazard Risk, Vulnerability Assessment (MRVA) Cell within the government of Bangladesh. A series of capacity development activities were carried out to ensure knowledge transfer and sustainability of the MRVA Cell.

In Thailand, ADPC in partnership with UNDP, Department of Disaster Prevention and Mitigation (DDPM) and the National Economic and Social Development Board (NESDB) of Thailand worked with provincial governments in Songkhla and Chiang Rai to develop provincial risk assessments. These assessments quantified the possible impact of key hazards on assets of important development sectors such as education, housing, and infrastructure. Online risk data portals and associated training were delivered to sensitize provincial officers to use risk information in disaster risk management and future development planning.

Women farmers in Nepal are using climate information to ensure a sustainable livelihood.

Photo by ADPC/Don Tartaglione

Flood risk assessment for city development strategy in Sri Lanka

An economic analysis and detailed flood hazard assessment by ADPC in Metro Colombo Region, Sri Lanka, estimated the potential damages to vital infrastructure. Over 100 officials from government agencies in this region benefited from training on conducting flood hazard and risk assessments. This information is being used by the government in land use and urban development planning and risk-resilient development.

The risk assessment results will be integrated into the upcoming City Development Strategy, helping government bodies undertake flood risk reduction interventions such as improving drainage systems, creating additional storage, enlarging the conveyance and outfall capacities, and strengthening flood early warning. The World Bank has supported the project through the Ministry of Megapolis and Western Development Ministry of Sri Lanka.

A school damaged by the flood in Metro Colombo Region, Sri Lanka.

Photo by ADPC/Anisur Rahman

A fisherwoman in Cua Lo, Nghe An Province, Viet Nam, is a beneficiary of ADPC's project on coastal community resilience to climate change.

Photo by ADPC/ Matthew Sarsycki

Influencing policies for coastal resilience in Viet Nam

Around 60 people from diverse backgrounds benefited from a series of training workshops on city and coastal community resilience to climate change in Viet Nam. Together with the Viet Nam Institute of Geosciences and Mineral Resources (VIGMR), ADPC prepared safer coastal zone development guidelines to influence policy for mainstreaming DRR and climate change adaptation into development practice. A handbook has been developed to guide professionals in applying several tools for coastal hazard mitigation.

Supporting Preparedness and Response Management

This section gives a snapshot of Asian Disaster Preparedness Center's (ADPC) efforts to strengthen preparedness and response management of government institutions and capacities of non-governmental organizations, communities and civil society in 2016. These projects highlight our focus on SFDRR's priority 4: Enhancing disaster preparedness for effective response, and to "Build Back Better" in recovery, rehabilitation and reconstruction.

Strengthening emergency response capacities of local humanitarian actors

With support from the Bill and Melinda Gates Foundation, ADPC is making strides to improve emergency response capacities of national governments and local humanitarian organizations in South and Southeast Asia. The three-year project initially covers Myanmar, Cambodia, Nepal, the Philippines, Pakistan, and Sri Lanka.

Through an understanding of cross-boundary emergency response mechanisms, local humanitarian leadership teams are on the path to creating a culture of inter-organizational coordination, networking, and knowledge exchange for effective disaster response. This initiative further promotes ADPC's vision of safer communities and sustainable development through disaster risk reduction in the region.

The Cambodian Humanitarian Forum (CHF), funded by USAID/OFDA and coordinated by ADPC, is a common platform for national organizations and the National Committee for Disaster Management, Cambodia (NCDMP) to campaign for better emergency preparedness and a more coordinated response through capacity building knowledge exchange and coordination.

CHF achieved many milestones during 2016 with the Humanitarian Response Forum – a platform of international NGOs and UN agencies. This includes devising innovative strategies to improve coordination mechanisms among stakeholders during emergencies. As many as 168 people enhanced their capacities on emergency assessment, contingency planning, and effective communication.

By involving communities in disaster preparedness, CHF has expanded its network to the grassroots level. Following a drought impact assessment study by CHF members in 10 provinces across Cambodia, 122 villages became aware of the risk posed by drought on local water sources such as wells, tube-wells, ponds, lakes, and canals. The assessment report provides actionable information to the NCDMP, international humanitarian agencies, and the CHF to develop drought mitigation interventions. Following the report, a CHF member realigned its activity plan and diverted part of their budget from developing irrigation canals to digging deep wells and installing tube-wells to provide drinking water to the community.

Preparing communities to develop early warning systems and skills

With support from USAID/OFDA, approximately 2000 people benefited from a range of disaster preparedness events in the Rakhine State of Myanmar. Some of the key activities included strengthening end-to-end early warning systems, creating hands-on capacity for improved construction practices, and developing risk assessment and planning skills for building resilience at the sub-national level. The "Program for Improved Disaster Management and Resilience Against Natural Disaster (IDM-RAND)" is being implemented in the Rakhine State and the Chin State and Sagaing Region. The project is being implemented by ADPC in partnership with the International Organization for Migration (IOM) to form the IDM-RAND consortium and aims to enhance people's resilience through disaster preparedness.

Promoting the 'One ASEAN, One Response' approach

High-ranking officials of national disaster management agencies from eight ASEAN countries came together to attend a five-day training course on 'Disaster Resilience Leadership'. DRR managers from Singapore, Thailand, the Philippines, Lao PDR, Cambodia, Viet Nam, Myanmar and Indonesia learned about various decision-making tools and discussed how collective action from all ASEAN countries could help achieve regional disaster resilience.

"After engaging in the training, I now realize the complexities faced by emergency managers in our cities. With our finite resources and expansion of population, we need innovation not only for our success but also more importantly for our survival. I am glad that from the training I have learned innovative measures implemented by my colleagues from the other ASEAN Member States," reflected Mr. Bambang Surya Putra, BNPB Deputy Director for Early Warning System.

Disaster risk reduction managers from 8 ASEAN countries attended Disaster Resilience Leadership Training Course in Bogor, Indonesia.

Photo by ADPC

Conducted in partnership with the ASEAN Secretariat and the AHA Center, the "Disaster Resilience Leadership Training Course for the ASEAN Member States" was supported by the Royal Government of Norway and ADPC's USAID-funded project in Indonesia.

ADPC revitalized the knowledge and practical skills of senior city managers in emergency response through the 'Senior Management Training for Disaster Management Leadership' in Manado, North Sulawesi with the National Agency for Disaster Management (BNPB). With support from USAID, leaders of provincial and city disaster management agencies came together to discuss how they can make their communities more resilient through better response preparedness planning.

In partnership with a consortium of non-governmental and inter-governmental organizations, ADPC has mapped out the disaster preparedness capacity of the Relief and Resettlement Department (RRD) of Myanmar. Based on this mapping, ADPC and partners organized several needs-based training courses for government officials at the Disaster Management Training Center (DMTC) on topics that include community based disaster risk management, post disaster needs assessment, early warning, and geographic information systems.

Additionally, ADPC mentored 45 youths from 15 states in Myanmar to learn leadership skills to become change agents for disaster resilience and preparedness in their respective communities. The youth leaders familiarized themselves with the use of new information technology, social media, and other practical skills useful for making their families, villages, and towns safer. ADPC, the AHA Centre, and the RRD organized the five-day training course with financial support from the Royal Norwegian Ministry of Foreign Affairs.

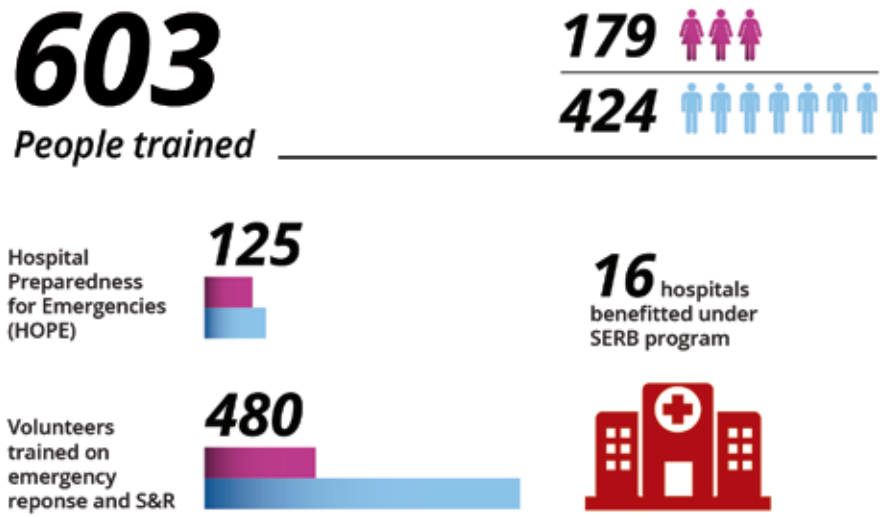
Promoting Mental Health and Psychosocial Support (MHPSS) in emergencies

ADPC continued to create a pool of experts in mental health and psychosocial support in emergencies in 2016. Beginning in 2010 as a pilot program in Bangladesh, ADPC's Mental Health and Psychosocial Support (MHPSS) program continued its roll out in Viet Nam to help women, children and their families recover from disasters both mentally and psychologically with funding support from the Royal Norwegian Ministry of Foreign Affairs. The focus on child survivors continues in Myanmar with an emphasis on the critical nature of psychological first aid in emergencies, and child-friendly spaces.

Country rollout, adaptation, and institutionalization: Local master trainers trained by ADPC worked to build the skills of social workers, educators, Red Cross staff, and health professionals in 15 provinces in central Viet Nam. Rapid assessment guidelines developed by the Ministry of Health in Viet Nam and other partners allow medical staff to support mental health and psychological first aid in emergencies. Integration of the MHPSS program in social work guidelines of the Khanh Hoa Province, Department of Labor, and Invalids and Social Affairs, is a step forward that the local government took together with its partners to mainstream MHPSS considerations into relevant sectoral plans and policies as a result of the project.

Collaboration with academia: ADPC worked with academia throughout the year to establish a sustainable flow of knowledge on MHPSS for students. For example, the Viet Nam National University's Center for Information, Research and Service in Psychology now offers a yearly in-service course for professional psychologists, teachers, and social workers. The MHPSS has also been integrated into the curriculum of the Master of Clinical Program from the Center for Information, Research and Service in Psychology at Viet Nam National University. The Bachelor Program in Public Health at Hanoi University of Public Health also offers students courses on MHPSS.

Strengthening Earthquake Resilience in Bangadesh



In 2016, ADPC continued to implement USAID's 'Strengthening Earthquake Resilience in Bangladesh' (SERB) program to build the capacity of hospitals and volunteers to respond to emergencies and manage mass casualty incidents.

ADPC has been helping hospitals across the country since 2013 to conduct hospital risk assessments to manage mass casualty incidents and establish hospital emergency response plans. In 2016, these hospital risk assessments, as well as the training of 125 hospital staff in managing mass casualty incidents, benefitted 16 hospitals in six municipalities (Dhaka, Chittagong, Sylhet, Gazipur, Mymensingh and Tangail). Another seven hospitals developed emergency response plans to manage disasters under this initiative.

Building on this response capacity, 480 volunteers of the Bangladesh Fire Service and Civil Defense received training on collapsed structure search & rescue, firefighting and first aid. This training was reinforced through simulations.

Volunteers during an earthquake search and rescue operation simulation in Dhaka, Bangladesh.

Photo by ADPC

Major General Asghar Nawaz, Chairman, National Disaster Management Authority (NDMA), Pakistan, at the inauguration of the RCC.

Photo by ADPC

Enhancing Regional Cooperation for Disaster and Climate Risk Management

Disaster losses are not natural, rather, a product of policies, plans and decisions taken or not taken to build disaster resilience. Asian Disaster Preparedness Center (ADPC) is at the center of supporting governments and communities to invest more in risk governance, to make evidence based decisions, and to enable better strategies and tools to avoid disaster losses and damages. Through the Regional Consultative Committee (RCC) on Disaster Management and a series of regional forums, ADPC has been contributing to the SFDRR's priorities for action.

13th meeting of the Regional Consultative Committee (RCC) on Disaster Management

ADPC organized the 13th meeting of the RCC in Pakistan ahead of the Asian Ministerial Conference on Disaster Risk Reduction (AMCDRR) with a focus on operationalizing the post-2015 development frameworks and creating synergy for better implementation.

The 13th RCC gathered representatives of the national disaster management organizations (NDMOs) of Afghanistan, Bhutan, China, Indonesia, Maldives, Mongolia, Myanmar, Nepal, Pakistan, Philippines, Sri Lanka, Thailand, Viet Nam, and Turkey, along with development partners and officials from sub-regional organizations.

The meeting was organized jointly by the National Disaster Management Authority of Paskistan, ADPC, the German Government's Global Initiative on Disaster Risk Management (GIDRM), the Asia Foundation, and Oxfam Pakistan.

Photo by ADPC

A forum for regional cooperation: Established in 2000, the Regional Consultative Committee (RCC) on Disaster Management encourages peer advocacy and the exchange of experiences in disaster risk reduction in the Asia-Pacific region. ADPC, the secretariat for the Committee, initiated the mechanism to bring countries in the Asia-Pacific region together to achieve common goals in disaster risk reduction, to explore ways to transform policies into practice, and to promote cross-boundary cooperation. With 26 member countries, the RCC meets annually.

In the Islamabad Statement, issued at the end of the 3-day RCC meeting, countries called for the following measures to be taken to operationalize the SFDRR at regional, national, and local levels:

- Maintain the RCC as a regional platform for the development and sharing of best practices, leveraging science, innovation, and technology such as e-Resilience initiatives, as applicable to the different global frameworks;
- Support the RCC countries in developing synergies on early warning systems from trans-boundary, national and sub-national to community levels;
- Identify the needs and program under SFDRR's priority areas;
- Intensify the development of climate change mitigation and adaptation strategies;
- Derive from the broader context of the SDGs the approaches and practices pertaining to DRM;
- Facilitate the application of disaster data management including disaster related statistics, where appropriate, as the basis for progress monitoring and result reporting of the SFDRR implementation.

Asian business forum on risk reduction and resilience building

In April 2016, over 200 business leaders, government representatives, and disaster risk reduction experts convened at the Asian Business Forum on Risk Reduction and Resilience Building. The purpose of this event was to identify ways to protect financial assets from increasing disaster risks.

The forum highlighted the role of small and medium-sized enterprises (SMEs) as an integral part of the economic landscape in the Asia-Pacific region and the need to engage these businesses in risk reduction efforts. Various topics relevant to business resilience ranging from business continuity, community resilience, and risk financing to tourism sector resilience were discussed at the high-level forum.

The event was also an opportunity for stocktaking amongst policymakers, governments, businesses and development partners almost one year after the agreement of the SFDRR. The forum was organized in collaboration with Asian Development Bank (ADB), Deutsche Gesellschaft fur Internationale Zusammenarbeit (GIZ), the Global Disaster Preparedness Center (GDPC) and the Asia Foundation.

ADPC's representation at the Asian Ministerial Conference on Disaster Risk Reduction (AMCDRR-2016), India

ADPC's delegation represented the organization during a variety of sessions and through the official ADPC booth at the AMCDRR marketplace. Technical experts from ADPC contributed to: Enabling Governance for Coherence in Disaster Risk Reduction, Sustainable Development, and Climate Change; Disaster Loss Accounting and Data: Partnerships and Innovations for Improving Disaster Loss Accounting; and Disaster Preparedness, Response, and Recovery.

ADPC also participated in several pre-conference events including Engendering the Implementation of the Sendai Framework in Asia, a consultation with stakeholder groups comprised of individuals and organizations concerned with gender issues. ADPC staff also attended the Media Stakeholders Pre-Meeting to discuss the media's role in disaster risk reduction and fulfilling priority 1 of the SFDRR.

Photo by ADPC


Photo by ADPC

Disaster Risk Reduction through Gender, Science and Partnerships

Asian Disaster Preparedness Center (ADPC) hosted 'Power, vulnerability and agency in disaster risk reduction: A knowledge exchange for sustainable development in Asia' in September 2016 in Bangkok. The event brought together a wide spectrum of actors across the region to build links between geospatial technology and gender issues. The exchange resulted in a community of practice network to build on connections made and deepen the link between gender and geospatial issues.

SERVIR-Mekong complemented this initiative with its small grants program launched at the event, which aims to promote the research of climate change, gender and GIS in the Lower Mekong Region.

The knowledge exchange was organized with support from the Stockholm Environment Institute (SEI) through the Swedish International Development Cooperation Agency (Sida), Royal Norwegian Ministry of Foreign Affairs, SERVIR-Mekong through the United States Agency for International Development (USAID) and NASA.

Closing ceremony: participants share final thoughts about the event.

Photo by ADPC

Strengthening Community-Based Disaster Risk Management

Community-Based-Disaster Risk Management (CBDRM) is one of Asian Disaster Preparedness Center's (ADPC) focus areas. In 2016, we continued to focus on the SFDRR's priority 4, which highlights the value of enhancing disaster preparedness for effective response and to "Build Back Better" in recovery, rehabilitation and reconstruction.

Community-based flood risk reduction in Thailand

ADPC collaborated with local and national authorities as well as the private sector in the Chao Phraya River Basin to equip local communities, the private sector, schools, and places of worship with flood preparedness and response knowledge and tools.

Through a series of training sessions on community based disaster risk reduction (CBDRR), over 900 people in two villages in Ayutthaya Province, in central Thailand, enhanced their skills and knowledge on flood risk assessment, medical first aid, and establishing early warning systems. A CBDRR committee established under the project has designed the community shelter plan using a manual for Safe Site Selection and Flood Shelter Management.

During the 2016 rainy season, the project community in Ayutthaya used mobile phones to update the provincial flood early warning agencies who helped them develop an informed response plan. Due to the awareness raised by the project, vulnerable groups hoisted flags in front of their houses to guide responders after assessing the flood level.

A significant achievement for the project was the development of Vulnerability Assessment Tools for Schools. Save the Children (Thailand) selected Wat Thanon School in Angthong province as an example of best practice for its initiative to integrate flood preparedness into its curriculum and operational plan.

The establishment of a public-private partnership committee further enhanced the community's resilience by providing a common platform for stakeholders to discuss and design flood risk reduction measures.

The project is being implemented with support from the United States Agency for International Development (USAID/OFDA) in collaboration with the Department of Disaster Prevention and Mitigation (DDPM), Royal Irrigation Department (RID), Department of Water Resources (DWR), and Thai Meteorological Department (TMD).

Preparation starts early: school children getting ready for an evacuation drill in Angthong province, Thailand.

Photo by ADPC

Community-Based Flood Management in Thailand and Lao PDR

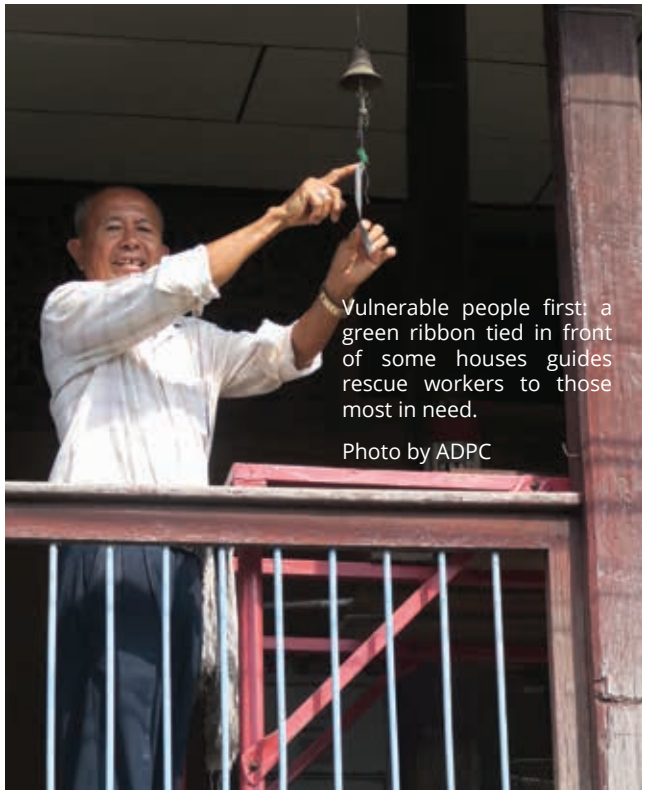
Supported by the World Meteorological Organization (WMO), the project 'Community-Based Approaches to Flood Management in Thailand and Lao PDR' ended in 2016, after developing sustainable community mechanisms to monitor and deal with floods using minimum external support. ADPC takes pride in campaigning for safer communities and sustainable development through disaster risk reduction. Community-based approaches to flood management embody this vision.

The project brought communities, national disaster management agencies and technical experts from WMO onto a common platform to identify the best strategies for communities to understand, monitor, get ready for and respond to flooding related emergencies.

The project employed both modern and indigenous methods to help communities become proactive in preparing for flooding. In coordination with meteorological and hydrological departments in Lao PDR, rain gauges were installed at appropriate locations in selected communities.

Mr. Bounphan Vongpanhya, Director of Meteorological and Hydrological Section, Provincial Office of Natural Resources and Environment, Lao PDR, is excited about the community's ability to independently measure rainfall levels. "Earlier we had one rain gauge installed in each district. The installation of additional rain gauges helped improve flood forecasting and early warning systems in Luang Prabang," he said.

In Talad Kao and Ban Buphram, Prachinburi province, Thailand, the project fostered relationships between the Community-Based Flood Management Committees (CBFMCs) and relevant district and national institutions. Significantly, this interaction assisted communities to mainstream flood plans into existing local development plans.



Vulnerable people first: a green ribbon tied in front of some houses guides rescue workers to those most in need.

Photo by ADPC

Mr. Sira Sirisoongnern, Director, Prachinburi Provincial Disaster Prevention and Mitigation, Thailand, believes that this approach helped the government protect communities as well as save financial resources.
"The community-based DRR approach is helpful in reducing the impacts of a disaster at the local level, as well as potentially saving costs for relief assistance."

Employing indigenous approaches: Local people in Ban Suan Luang, Lao PDR, benefited from the installation of tri-colored poles to assess rain risk levels. The project also taught communities to carry out risk assessments and make detailed flood risk management plans.

Communities in Ban Keo Manee were supported to establish a systematic local communication mechanism during the rainy season. Using upgraded equipment, the community can now issue early warning messages more effectively across a wider area.

A green ribbon is tied in front of residences of the most vulnerable community members so that relief assistance can reach them first. "After our training last year, I still tie the green ribbon in front of my house. I think before flood season I should change the ribbon so that everybody can see it." said 70-year old Mr. Pinit Nimchareonsuk.

Project: Community-Based Approaches to Flood Management in Thailand and Lao PDR

Duration: 2013-2016
Supported by: World Meteorological Organization (WMO)

Key Activities in Thailand and Lao PDR
- Rapid flood assessment carried out in the target communities
- Community-based flood management committees formed
- Community flood management plans developed and simulations carried out
- Linkages between community-based organizations and local authorities for improved weather forecasting and early warning established
- Rain gauges in the targeted community installed
- Amplifier and 600-meter wire provided to the community to ensure flood early warning

Human Impact Story

Do you call it a speed bump?

A tale of a small initiative with a larger impact

Zuunmod, Mongolia - Installing a traffic signal at a deserted crossroad; paving a dirt road to an isolated dwelling; putting up a fence or constructing a speed bump; these all seem like insignificant initiatives at the outset. However, a road accident because there isn't a speed bump where it is required, or the loss of life because an ambulance couldn't pass along a muddy track, are significant enough incidents to motivate communities to take action.

The Zuunmod district is around 40 kilometers from Ulaanbaatar. As the principal transportation route for people and goods, the main road runs through rolling steppes where herds of sheep and horses graze until the sun sets. Many unaccompanied schoolchildren cross here, as well as young girls and women who go back and forth across the road several times a day to fetch water from a water source located on the other side of the road. Cattle and livestock herds also need to cross the road to and from the grazing fields.

There is one particular point where it was hard for children to judge the speed of a vehicle because even though the road looks flat, in reality it is a long, subtle slope. Vehicles traveling towards the capital actually pick up a little speed while descending, says Mr. N. Nyambayar, a Traffic Police Officer in Zuunmod district, who has been serving in the area for more than 15 years.

"This used to be a dangerous point for pedestrians and our herds before we installed a speed bump, with support from Asian Disaster Preparedness Center and the Mongolian Red Cross Society," he explains.

Police had recorded many incidents of road accidents occurring at that particular point, and requested that measures be taken to enhance road safety during a survey to assess the disaster risk situation of the community. Given the behavior of road users and pedestrians in the community, it was deemed that merely painting a zebra crossing on the surface of the road would not yield results. Since a minimum of 10 vehicles pass by that area per minute, the community and local police suggested installing a speed bump at the most dangerous point to ensure drivers slow down for everyone's protection.

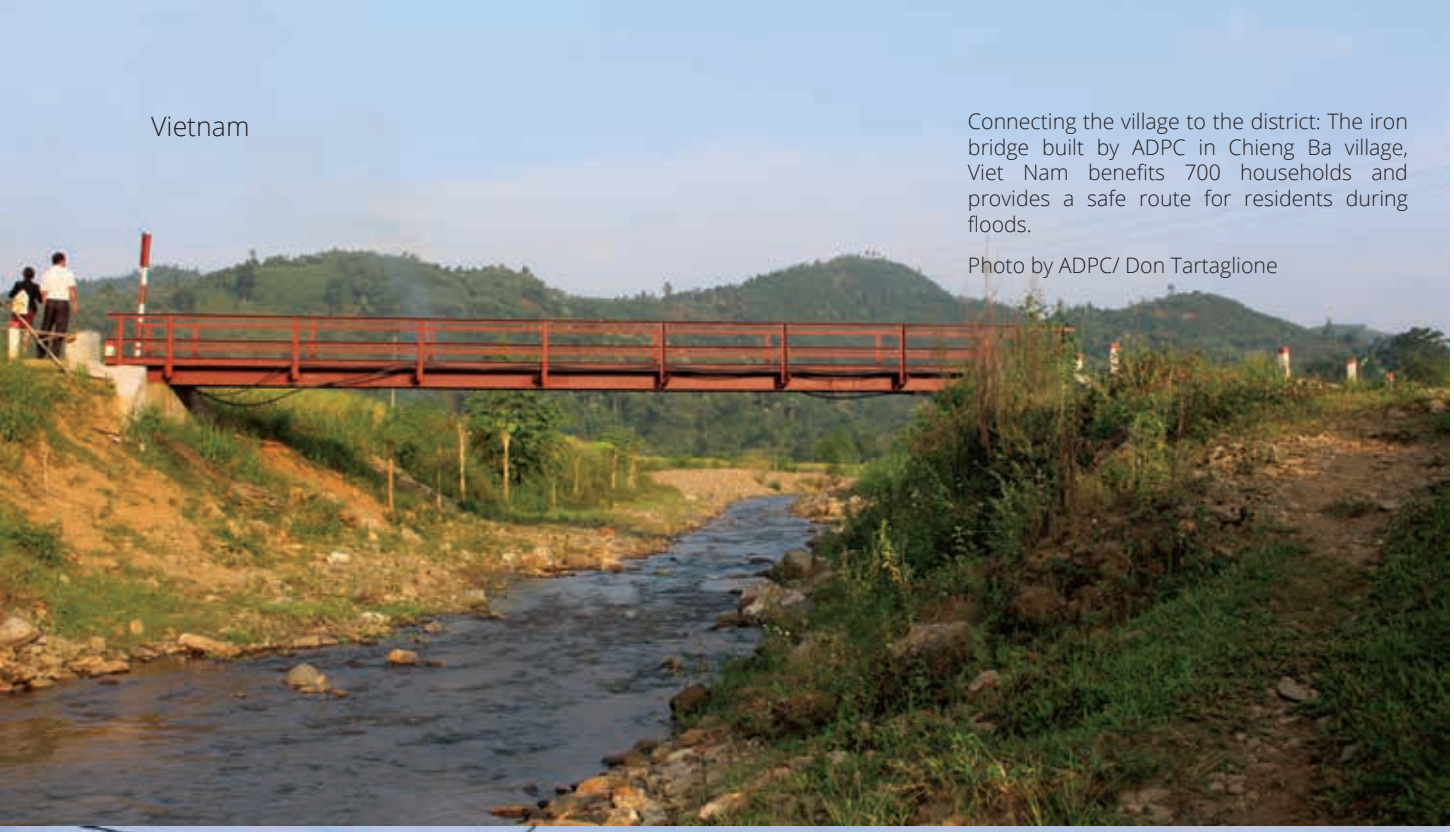
Asian Disaster Preparedness Center (ADPC) also conducted public training, organized road safety campaigns, and distributed informative materials throughout local communities to directly raise the awareness of vulnerable families. Construction of the speed bump was part of an initiative by both ADPC and Mongolian Red Cross Society (MRCS), implemented with financial support from the JTI Foundation in Mongolia, to assess hazards, vulnerabilities, exposure, and capacities of communities to disasters in seven different areas of the country.

As part of the project, other community infrastructure such as water kiosks, pedestrian bridges, and fly-proof latrines were also developed in Mongolia, Thailand, Myanmar, and Viet Nam.

"Installing the speed bump is the best example of community-based disaster management, as 100 families randomly selected from five Baghs – small towns - prioritized road safety as their immediate concern. Local traffic police, private contractors and MRCS worked together to make the project a success," says S. Tsermaa, Director of MRCS, Tuv Province branch.

Interestingly, while many local people have not noticed the presence of the speed bump on the road, they have noticed the considerable reduction in the speed of vehicles.

"I cross this road a minimum of ten times a day to go to fetch water from a nearby water channel, and sometimes I wondered why the vehicles are slower than they used to be. I just noticed these lines painted in white and a bump in the road," Mungunzaya, an 18-year-old local Mongolian girl, shared.
"Do you call it a speed bump?" she asked thoughtfully, and then said,
"It is a good initiative, and I truly appreciate it."



Vietnam

Connecting the village to the district: The iron bridge built by ADPC in Chieng Ba village, Viet Nam benefits 700 households and provides a safe route for residents during floods.

Photo by ADPC/ Don Tartaglione

Mongolia

The installation of a speed bump on the main road in Zuunmod district, Mongolia, has enhanced the safety of road users.

Photo by ADPC/ Don Tartaglione

Project: Strengthening Community Based Disaster Risk Management in Mongolia, Viet Nam, Thailand and Myanmar

Duration: 2014 – 2016

Supported by: JTI Foundation, Switzerland

Partners: Local Governments; Communities; Mongolian Red Cross Society; Vietnam Red Cross Society

Key Activities:

Mongolia - Water distribution kiosk, a community culvert and a speed bump constructed

Light search and rescue equipment distributed, and local government authorities as well as communities trained on disaster risk management

Viet Nam – An iron bridge constructed to build community resilience to floods, and disaster risk management training organized for the local government as well as communities

Thailand – Light search and rescue equipment distributed and disaster risk management training provided to volunteers, local governments as well as communities for efficient response

Myanmar – Damaged bridges and emergency shelters repaired, fly-proof latrines constructed, and water wells protected.

Promoting Disaster and Climate Risk Management through Training and Capacity Building

Asian Disaster Preparedness Center (ADPC) is a premier source for training and capacity building in disaster and climate risk management in the Asia-Pacific region and beyond. A broad spectrum of people from government, intergovernmental and non-governmental 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. During the past three decades, ADPC has taught over 14,000 alumni the knowledge necessary to become skilled disaster risk reduction practitioners in their respective fields.

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.

Urban Community Volunteers in Dhaka preparing for a fire drill.

Photo by ADPC

In 2016

115 people

from 32 countries

participated in our regional training courses.

Participants exchange knowledge during ADPC's flagship regional course on 'Managing Risk in the Face of Climate Change' (MRFCC) held in Bangkok, Thailand.

Photo by ADPC/ Apibarl Bunchongraksa

ADPC training portfolio

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)
- Managing Risk in the Face of Climate Change (MRFCC)
- Gender Equality and Disaster Risk Reduction (GEDRR)

Specialized 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)
- Emergency Exercise Management
- Emergency Response Management
- End-to-End Multi-Hazard Early Warning Systems (EWS)
- Damage Assessment & Need Analysis (DANA)
- GIS for Disaster Risk Management (GIS4DRM)
- Incident Command System (ICS)/ Incident Management System (IMS)
- Collapsed Structure Search and Rescue (CSSR)
- Basic Emergency Response (BERC)
- Management of the Dead and Missing in Disasters
- Hospital Emergency Preparedness and Response
- Hospital Preparedness for Emergencies (HOPE)
- Medical First Responders
- Mental Health and Psychosocial Support
- Nutrition in Emergencies
- Public Health in Complex Emergencies
- Public Health and Emergency Management in Asia and the Pacific
- Minimum Initial Service Package for Sexual and Reproductive Health

Engaging with the Private Sector through the iPrepare Business Facility

Aligning with the SFDRR's priority 2 - strengthening disaster risk governance to manage disaster risk - Asian Disaster Preparedness Center's (ADPC) iPrepare Business Facility has taken steps to strengthen private sector resilience with a focus on small and medium-sized enterprises (SMEs). This includes working with governments to create an enabling environment that promotes risk-informed investments by the private sector, and facilitating knowledge sharing at regional and national levels.

Following the Thai floods of 2011, which caused significant damage to the business sector, the establishment of the iPrepare Business Facility as ADPC's dedicated unit coincided with the emergence of business resilience as a pertinent concern in global and regional DRM discourses. The facility has contributed to enhancing awareness of private sector engagement in DRM amongst governments, businesses and other stakeholders. This work is aligned with the SFDRR's Asia Regional Plan as well as the AADMER Work Programme.

Regional initiative on strengthening SME's resilience in Thailand, Indonesia, Viet Nam and the Philippines

ADPC built a conducive environment for SME resilience through a regional and several national business forums convened as part of the "Strengthening the Disaster Resilience of SMEs in Asia" project. These forums brought together over 600 participants from the public and private sectors with development partners for concerted efforts on risk sensitive business approaches.

The financial support was channeled through the Asian Development Bank's Integrated Disaster Risk Management Fund, financed by the Government of Canada, and the Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ) within the framework of the Global Initiative on Disaster Risk Management (GIDRM).

Thailand Business Forum participants after receiving disaster-resilient Small and Medium Enterprises (SMEs) Champions Trophy.

Photo by ADPC

Ms. Sujin Thamrongtheppitak, General Manager, Bangkadi Industrial Park, explains how an Area Business Continuity Plan is important for community resilience.

Photo by ADPC/ Weerapon Sripongchai

Key events included:

Resilient SME Champions Program Thailand: ADPC's iPrepare Business Facility provided direct technical support to nine selected SMEs operating in key business sectors in Thailand to build their capacity in disaster preparedness and business continuity management (BCM). The project was implemented in partnership with the Office for SME Promotion (OSMEP) under the Office of the Prime Minister and Department of Disaster Prevention and Mitigation (DDPM), Thailand.

Strengthening private sector resilience through Area BCM: ADPC and Thailand's National Economic and Social Development Board (NESDB), with financial and technical support from the Japan International Cooperation Agency (JICA), carried out a pilot initiative for "Formulation of Area Business Continuity Plan (Area BCP)" in Bangkadi Industrial Park (BIP) Pathumthani Province in Thailand.

This was the first project in Southeast Asia to complete every step of the Area BCM cycle conceptualized by JICA. The project facilitated collaboration between neighboring businesses, local authorities, technical agencies and communities to develop holistic strategies for addressing flood risks. The initiative represents a model strategy for maintaining and resuming business operations in cooperation with various stakeholders at the time of disruptive events for other industrial areas in the country and the region.

Connecting 'Space to Village': SERVIR-MEKONG in 2016

Through a unique partnership between the U.S. Agency for International Development (USAID) and the U.S. National Aeronautics and Space Agency (NASA), SERVIR-Mekong is harnessing space technology and open data to help address developmental and environmental challenges in the Lower Mekong region.

SERVIR-Mekong's second year of implementation was successful in building on the groundwork set in 2015. The understanding and use of earth observation data by scientists and decision makers has strengthened, with over 200 people engaged in scientific exchanges and training organized by SERVIR-Mekong. General awareness about SERVIR-Mekong and the value of its work has increased with the launch of a new website that surpassed user engagement targets. A key achievement in 2016 has been the release of four geospatial products, which are publicly accessible through the SERVIR-Mekong website.

- **The Surface Water Mapping tool** provides an extensive archive of geospatial data to calculate past patterns of surface water extent. The ability to identify historical surface water patterns will help in the assessment of flood prone areas as well as changes in river courses. The Ministry of Water Resources and Meteorology (Cambodia) and the Directorate of Water Resources and Improvement of River Systems (Myanmar) will be able to use this tool for water resource management while the Relief and Resettlement Department (Myanmar) can use the tool to assist in flood preparedness activities.

- **Eco-Dash** helps managers monitor their interventions to maintain biological productivity in a specific area in the Lower Mekong region. Ongoing monitoring of efforts to improve ecological health will allow users to identify good practice and course correct when needed. The Viet Nam Forest and Deltas Project and USAID projects are using Eco-Dash for their project monitoring and evaluation.

- **The Dam Inundation Tool** allows users to identify the inundation impact of existing or planned dam construction in the region. Measuring dam inundation provides critical information for stakeholders to ensure dam construction maximizes its benefits in energy production and drought/flood risk reduction while minimizing the impacts on environmental degradation, displacement and the quality of soil and water.

- **The Satellite-derived Virtual Rain and Stream Gauge Data Service** provides near real-time rainfall and stream height data, supplementing ground-observed rainfall data, which is particularly useful in areas with a sparse network of ground stations. Information provided through this service can play a key and cost effective role in flood and landslide early warning. The Department of Meteorology and Hydrology (Myanmar), Viet Nam Academy of Water Resource (VARW), as well as agencies under the Ministry of Water Resources and Meteorology (Cambodia) have expressed willingness to work with ADPC and its SERVIR-Mekong team to use the tool in their meteorological work.

Changing the Reality for Scientists in the Lower Mekong Region

SERVIR-Mekong has been working with partners and institutions across the region to build capacity in the use of earth observation data for better environmental management, disaster risk reduction and sustainable development. A unique public-private partnership with Google has played an important role in these capacity building efforts. SERVIR-Mekong has conducted Google Earth Engine (GEE) training in Bangkok, Hanoi and Phnom Penh to build partner skills in using GEE technology, which will be critical for the use of tools developed by SERVIR-Mekong.

As a demand-driven project, SERVIR-Mekong has taken great effort during its first two years of implementation to ensure that its initiatives meet the ongoing needs of the region in a way that is reflective of the changing environment. A technical request mechanism has been established, allowing users to engage with SERVIR-Mekong and request support relevant to the use of earth observation technology. The openness of SERVIR-Mekong in taking requests has resulted in the development of new tools, such as the Dam Inundation Tool, and the organization of GEE training for stakeholders in the region.

Photo by Cristi Matei / Shutterstock.com

Partnerships

In 2016, Asian Disaster Preparedness Center (ADPC) formed 65 partnerships by signing numerous Memorandums of Understanding (MoUs) with governments and non-government institutions as well as private sector organizations on building disaster resilience in the region. The following is a summary of some of the key partnerships:

- **ADPC and UN-SPIDER to boost space based technology in Asia-Pacific**

ADPC and UN-SPIDER signed an agreement to assist governments and international partners in taking advantage of the opportunities offered by space-based information to support disaster management. This agreement formally recognizes ADPC as the Regional Support Office (RSO) to work with UN-SPIDER in enhancing awareness and capacity of space based information in the region. There are 20 RSOs worldwide, ranging from government agencies and academic institutions to regional organizations.

- **ADPC reaffirms its commitment to support SME resilience in Thailand**

ADPC in collaboration with the Office of Small and Medium Enterprises Promotion (OSMEP) and other relevant agencies signed an MoU to build the capacity and competency of Thailand's Small and Medium Enterprises (SMEs) in disaster risk management.

- **ADPC to collaborate with International Medical Crisis Response Alliance**

ADPC and the International Medical Crisis Response Alliance (IMCRA) signed an MoU to build the capacity of medical caregivers in disaster preparedness and response in the Asia-Pacific region. An online education portal on this is planned to be established by both the parties for China, Thailand, Indonesia, the Philippines and Viet Nam.

- **MoU with the State Government of Bihar, India**

ADPC signed an MoU with the Government of Bihar in India to provide technical support during the implementation of the Bihar Roadmap for Disaster Risk Reduction (2015–2030). The roadmap targets the causes of disaster impacts and aims to lessen disaster-related deaths by 75 percent by 2030.

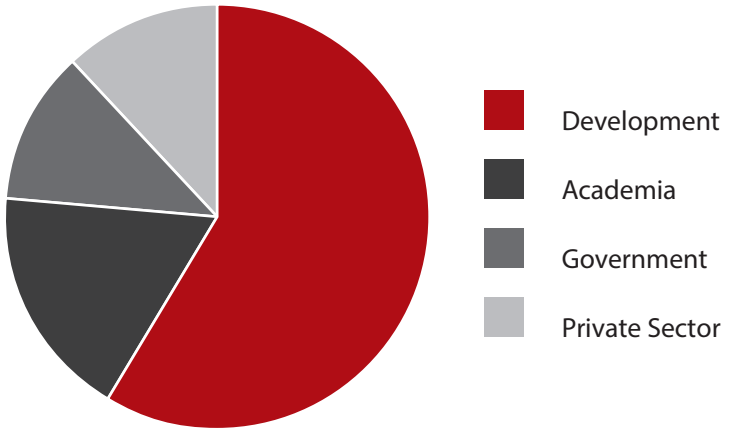
- **ADPC to collaborate with the Republic of Korea National Red Cross**

ADPC and the Republic of Korea National Red Cross (KNRC) signed an MoU to collaborate for strengthening disaster risk reduction systems in the Asia-Pacific region. The organizations will work together to advance the utilization of information technology solutions for effective disaster management.

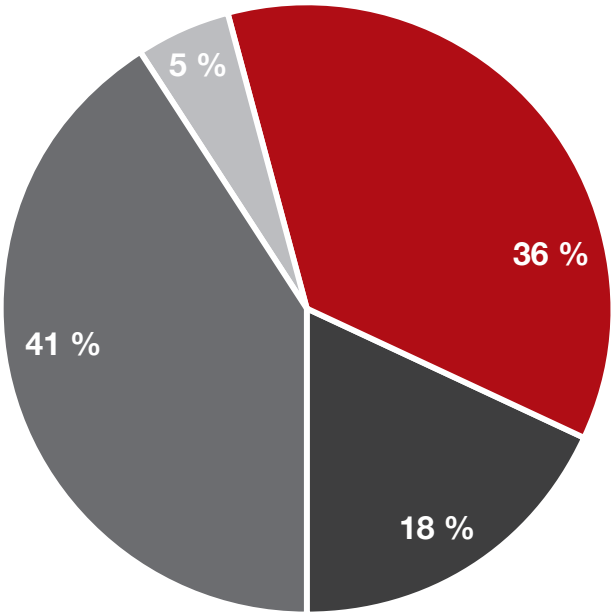
- **MoU with the Relief and Resettlement Department, Myanmar**

ADPC and the Relief and Resettlement Department (RDD) signed an MoU to enhance cooperation in the field of disaster and climate risk management.

Overview of ADPC partnerships in 2016



Financial summary 2016



2016 Expenditure Breakdown

Science	$3,039,763
Systems	$1,503,766
Applications	$3,528,274
Regional Training	$469,529

Total 8,541,334 USD

The chart is based on provisional figures.

Development partners in 2016

American Red Cross - Viet Nam Delegation

Association of Southeast Asian Nations (ASEAN) Secretariat

Asian Development Bank (ADB)

Asia-Pacific Network for Global Change Research (APN)

Bill & Melinda Gates Foundation

Bushfire and Natural Hazards CRC, Australia

Central Engineering Consultancy Bureau (CECB), Sri Lanka

Crown Agents for Oversea Governments and Administrations

Deltares Netherlands

Department of Foreign Affairs Trade (DFAT) Australian High Commission (AHC) Government of Australia

Department for International Development, United Kingdom (DFID)

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Global Disaster Preparedness Center (GDPC)

International Organization for Migration (IOM)

International Planned Parenthood Federation (IPPF)

Japan International Cooperation Agency (JICA)

JTI Foundation

Margaret A. Cargill Foundation

Ministry of Civil Affairs, People's Republic of China

Ministry of Disaster Management and Relief of the Government of the People's Republic of Bangladesh

Royal Norwegian Ministry of Foreign Affairs

Overseas Development Institute (ODI)

Plan International

Rockefeller Foundation

Saudi Red Crescent Authority (SRCA)

Save the Children, China

Secretariat of the Pacific Community

Stockholm Environment Institute (SEI)

The Asia Foundation Oxfam International (Pakistan)

The World Bank

United Nations Development Programme (UNDP)

United Nations Human Settlements Programme (UN-HABITAT)

United Nations International Children's Emergency Fund (UNICEF), Regional Office for South Asia

United States Agency for International Development (USAID)

World Vision Foundation of Thailand

ADPC projects in 2016

Science

Comparative Review of First Aid App – Global Disaster Response Center
2015–2016
Development Partner: Global Disaster Preparedness Center (GDPC)
Countries: Myanmar and China, Hong Kong, SAR

Developing a Climate-Inclusive Potential Loss and Damage Assessment Methodology for Flood Hazards
2014–2018
Development Partner: Asia-Pacific Network for Global Change Research (APN)
Countries: Nepal, Sri Lanka, Thailand

Flood Risk Assessment for Colombo Metropolitan Region
2016–2017
Development Partners: Deltares Netherlands and Central Engineering Consultancy Bureau (CECB), Sri Lanka
Country: Sri Lanka

Improving Flood Forecasting and Monitoring Capacity of Department of Meteorology and Hydrology to Strengthen Flood Early Warning System in Myanmar
2015–2017
Development Partner: Ministry of Foreign Affairs, Norway
Country: Myanmar

Improving Seismic Monitoring and Data Integration Capability in Myanmar
2015–2017
Development Partner: Ministry of Foreign Affairs, Norway
Country: Myanmar

Increasing Technical Capacity of National and Local Governments in Utilizing Satellite Technology to Enhance Disaster Preparedness
2015–2017
Development Partner: Ministry of Foreign Affairs, Norway
Countries: Bangladesh, Myanmar, Viet Nam

Mainstreaming Climate Change Adaptation and Disaster Risk Reduction in Development Planning in Thailand (MADRiD)
2015–2016
Development Partner: United Nations Development Programme (UNDP)
Country: Thailand

Multi-Hazard Risk and Vulnerability Assessments, Modeling and Mapping in Bangladesh
2011–2016
Development Partners: Ministry of Disaster Management and Relief of the Government of the People's Republic of Bangladesh, The World Bank
Country: Bangladesh

Pre-disaster Multi Hazard Damage and Economic Loss Estimation Model (AUVRA-Bushfire)
2014–2016
Development Partner: Bushfire and Natural Hazards CRC, Australia
Country: Australia

SERVIR-Mekong
2014–2019
Development Partner: United States Agency for International Development (USAID)
Countries: Cambodia, Lao PDR, Myanmar, Thailand, Viet Nam

Strengthening and Integration of Community-Based Disaster Risk Management into Local Development Planning through Pilot Initiatives in Mongolia, Myanmar, Viet Nam and Bhutan
2014–2016
Development Partner: JTI Foundation
Countries: Mongolia, Myanmar, Viet Nam, Bhutan

Strengthening Weather and Climate Services to Deal with Hydro-Meteorological Hazards
2015–2017
Development Partner: Ministry of Foreign Affairs, Norway
Countries: Bangladesh, Myanmar, Viet Nam

Systems

Applying Bihar Recommendations: Building State-Level Emergency Response Capacity
2015–2018
Development Partner: Bill & Melinda Gates Foundation
Country: India

Building Capacity in Gender-Inclusive Disaster Risk Reduction in Policies and Practice
2015–2017
Development Partner: Ministry of Foreign Affairs, Norway
Countries: Bangladesh, Myanmar

Development of Post-Disaster Damage and Loss Reporting System for Sri Lanka
2016
Development Partner: The World Bank
Country: Sri Lanka

Myanmar Consortium for Capacity Development on Disaster Management
2015–2017
Development Partner: United Nations Human Settlements Programme (UN-HABITAT)
Country: Myanmar

Preparation of Strategy Document for 100 Resilient Cities "Bangkok Resilience Strategy"
2016–2017
Development Partner: Rockefeller Foundation
Country: Thailand

Program for Improved Disaster Management and Resilience Against Natural Disaster in Rakhine State, Chin State and Kalay Township in Sagaing Region, Burma/Myanmar
2014–2018
Development Partner: USAID's Office of U.S. Foreign Disaster Assistance (USAID/OFDA) through International Organization for Migration (IOM), Myanmar
Country: Myanmar

Promotion of Area Business Continuity Management and Formulation of an Area Business Continuity Plan for Thailand
2015–2016
Development Partner: Japan International Cooperation Agency (JICA) Thailand Office
Country: Thailand

Public Health Emergency Management in Asia and the Pacific
2012–2016
Development Partner: Ministry of Foreign Affairs, Norway (fee-based course)
Countries: Regional

Strengthening Disaster Resilience of Small and Medium Enterprises in Asia
2014–2017
Development Partner: Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
Countries: Indonesia, Philippines, Thailand, Viet Nam

Strengthening Disaster Resilience of Small and Medium Enterprises in Southeast Asia
2014–2016
Development Partner: Asian Development Bank
Countries: Philippines, Thailand, Viet Nam

Strengthening Emergency Response Capacity of Local Humanitarian NGOs in Asia
2016–2019
Development Partner: Bill and Melinda Gates Foundation
Countries: Cambodia, Myanmar, Sri Lanka, Pakistan, Philippines, and Nepal

Strengthening Emergency Response Capacity of Humanitarian NGOs in Cambodia
2014–2016
Development Partner: USAID's Office of U.S. Foreign Disaster Assistance (USAID/OFDA)
Country: Cambodia

Applications

ASEAN Safe School Initiative Thailand Project with World Vision Foundation of Thailand
2016–2017
Development Partner: World Vision Foundation of Thailand
Country: Thailand

Building the Capacity of Disaster Risk Re duction, Disaster Risk Management and Climate Change Adaptation Capacity for UNICEF Staff of Pakistan, Nepal and South Asia Region
2016
Development Partner: United Nations Human Settlements Programme (UN-HABITAT)
Countries: Pakistan, Nepal and Bhutan

Child-Centered Recovery and Resilience
2014–2017
Development Partner: Margaret A. Cargill Foundation, Plan International
Countries: Bangladesh, Philippines

Child-Centered Disaster Risk Management in South Asia
2015–2016
Development Partner: United Nations International Children's Emergency Fund (UNICEF), Regional Office for South Asia
Countries: Nepal, Pakistan, India, Bangladesh, Bhutan

Coastal Community Resilience and Risk-Sensitive Land Use Planning in Viet Nam
2015–2017
Development Partner: Ministry of Foreign Affairs, Norway
Country: Viet Nam

Community Based Disaster Risk Reduction (CBDRR) in a Changing Climate – Training Course
2016
Development Partner: Secretariat of the Pacific Community
Country: Palau

Development of Emergency Preparedness and Planning a Tool on Emergency Preparedness and Planning Toolkit for Community Health Facilities in Disaster (ARCVT)
2016–2017
Development Partner: American Red Cross - Viet Nam Delegation
Country: Viet Nam

DFID Burma Humanitarian Assistance and Resilience Programme (HARP) Facility Manager
2016–2021
Development Partner: Crown Agents for Oversea Governments and Administrations and Department for International Development, United Kingdom (DFID)
Countries: Myanmar

Disaster Risk Management and Climate Change Leadership Development Training Program
2014–2016
Development Partner: United Nations Development Programme (UNDP)
Country: Ethiopia

Enhancing Adaptive Capacity of Communities to Climate Change Related to Flood in the North Coast and Islands Region of Papua New Guinea; Capacity Strengthening for Mainstreaming Climate Change Adaptation into Provincial Development Planning
2016
Development Partner: United Nations Development Programme (UNDP), Papua New Guinea
Country: Papua New Guinea

Host Nation Support Guidelines – Pakistan (Heart of Asia: Disaster Management – Confidence Building Measure with DFAT/AHC)
2016–2017
Development Partner: Department of Foreign Affairs Trade (DFAT) Australian High Commission (AHC) Government of Australia
Country: Pakistan

Knowledge Manager of the Building Resilience and Adapting to Climate Extremes and Disasters Programme (BRACED)
2015–2018
Development Partner: Department for International Development, United Kingdom (DFID), through the Overseas Development Institute (ODI)
Countries: Nepal, Myanmar

Mainstreaming Weather and Climate Information Application for Agro-ecosystem Resilience in a Changing Climate
2016–2018
Development Partner: Asia-Pacific Network for Global Change Research (APN)
Countries: Nepal, Sri Lanka, Thailand and Vietnam

Mental Health and Psychosocial Support (MHPSS) in Emergencies
2015–2017
Development Partner: Ministry of Foreign Affairs, Norway
Countries: Myanmar, Vietnam

National Inter-agency Gender in Humanitarian Action and Disaster Risk Reduction in Bangladesh and Myanmar
2016
Development Partner: Ministry of Foreign Affairs, Norway
Countries: Bangladesh, Myanmar

Organization of the 13th Meeting of the Regional Consultative Committee on Disaster Management (RCC13)
2016
Development Partner: Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, The Asia Foundation Oxfam International (Pakistan)
Country: Pakistan

Power Vulnerability and Agency in Disaster Risk Reduction: A Knowledge-Exchange for Sustainable Development in Asia
2016–2017
Development Partner: Stockholm Environment Institute (SEI)
Countries: Bangladesh, Cambodia, Lao PDR, Myanmar, Nepal, the Philippines, Thailand, Viet Nam

Program for Reduction of Vulnerability to Floods in Thailand
2012–2016
Development Partner: USAID's Office of U.S. Foreign Disaster Assistance (USAID/OFDA)
Country: Thailand

Public Health in Emergency Management in Asia and the Pacific (PHEMAP)
2015–2017
Development Partner: Ministry of Foreign Affairs, Norway
Countries: Myanmar and Vietnam

Public Policy on Disaster Risk Financing and Insurance Programme (Thailand)
2016–2017
Development Partner: Association of Southeast Asian Nations (ASEAN) Secretariat
Country: Thailand

Saudi Humanitarian Emergency Aid & Response Team (Saudi HEART)
2013–2016
Development Partner: Saudi Red Crescent Authority (SRCA)
Country: Kingdom of Saudi Arabia

Strengthening ADPC's Communication Capacity and Media Engagement
2015–2017
Development Partner: Ministry of Foreign Affairs, Norway
Region: Asia Pacific

Strengthening Hospital Preparedness for Emergencies in South Asian Countries (HOPE-SA)
2016–2018
Development Partner: United States Agency for International Development (USAID)
Countries: Afghanistan, Bangladesh, India, Nepal, Pakistan, Sri Lanka.

Strengthening of Landslide Risk Management Practices
2015–2017
Development Partner: Ministry of Foreign Affairs, Norway
Countries: Myanmar, Nepal

Strengthening the Capacity of the Government of Lao PDR to Manage and Response to Humanitarian Emergencies
2015–2016
Development Partner: International Organization for Migration (IOM)
Country: Lao PDR

Strengthening the Technical and Organizational Capacity of BNPB Training Center in Indonesia
2016–2017
Development Partner: USAID's Office of U.S. Foreign Disaster Assistance (USAID/OFDA)
Country: Indonesia

Technical Assistance and Capacity Building on Child-Centered Disaster Risk Management
2014–2016
Development Partner: Save the Children, China Program
Country: China

Technical Assistance and Capacity Building for the Ministry of Civil Affairs of China, and Other National Agencies, Government Agencies at Provincial and Local Levels, Civil Society, and Community Members on Disaster Risk Management, Community-Based Disaster Risk Management and Child-Centered Disaster Risk Management
2013–2017
Development Partner: Ministry of Civil Affairs, People's Republic of China
Country: China

Training Capacity Building Program in Myanmar
2015–2017
Development Partner: Ministry of Foreign Affairs, Norway
Country: Myanmar

Training Course on "Risk Information, Communication and Development of Public Policies"
2016
Development Partner: World Bank Group
Country: Pakistan

Training on the Minimum Initial Service Package (MISP) for Reproductive Health in Crisis Situations
2015–2016
Development Partner: International Planned Parenthood Federation
Regions: Asia, Africa, North America, Middle East

Urban Building Safety-02
2016–2017
Development Partner: Japan International Cooperation Agency (JICA)
Country: Bangladesh

USAID's Strengthening Earthquake Resilience in Bangladesh
2013–2016
Development Partner: United States Agency for International Development (USAID), Bangladesh
Country: Bangladesh

Community members evacuating due to a riverine flood in Toungoo township in Myanmar during ADPC's emergency simulation.

Photo by ADPC/ Dr. Rishiraj Dutta

Improved Disaster Management and Resilience Against Natural Disasters (IDM-RAND) in Myit Nar Village Tract, Min Hla Village, Sittwe Township, Rakhine State, Myanmar.

Photo by ADPC/ Atiq Kainan Ahmed

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