

# 2018

## ANNUAL REPORT

adpc

Asian Disaster  
Preparedness Center



# *Building Capacity for Resilience*



**Asian Disaster  
Preparedness Center**

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# ADPC Board

ADPC is governed by the Board that is responsible for policy-setting and oversight of the organization's operations according to its objectives and under its charter and bylaws. Under the Chairship of Prof. Dr. Krasae Chanawongse, the Board guides ADPC to respond to the needs of countries in Asia and the Pacific to building safer communities and supporting resilient development.



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# Foreword



Dear readers,

I am pleased to present to you ADPC's Annual Report 2018 which summarizes another year of our initiatives on building resilience in Asia and the Pacific through Disaster Risk Reduction (DRR) and Climate Resilience (CR).

Each year, we work to better understand the different ways disasters affect women, girls, boys and men. This ensures we are able to implement customized capacities that equip various groups with the ability to prepare for and respond to disasters. With support from the Stockholm Environment Institute (SEI), ADPC took practical action to conduct a comprehensive gender-sensitive user's needs assessment that will support in the design of a gender-sensitive and user-friendly drought forecasting service.

In 2018, among other initiatives we focused on community-based disaster risk management; engaged with the youth to build their confidence in undertaking the role of advocates of change; and supported child-centered disaster risk reduction through implementing the Comprehensive School Safety Framework.

This year, ADPC entered into force as an intergovernmental organization. As we transition to our new status, we look forward to strengthening our collaboration with member countries through developing long-term approaches and strategies to better serve their needs on disaster resilience.

Under the guidance of Mr. Hans Guttman, Executive Director, ADPC looks forward to advancing the agenda of DRR and CR through enhanced networking, knowledge exchange and collaboration.

I would like to extend my gratitude to our partners for their continued support throughout the year.

Sincerely,

Prof. Dr. Krasae Chanawongse  
Chairman  
Asian Disaster Preparedness Center



Dear readers,

The signs of climate change are clear; the evidence of its impact on the frequency of disasters is compelling; and efforts are underway to combat its fury. The increasing frequency of disasters, however, is outpacing most countries' ability to manage emerging threats.

In 2018, disasters hit Asia and the Pacific hardest yet again. From deadly heat waves to devastating hurricanes, cyclones, floods, droughts, landslides, earthquakes, and tsunamis, seven of the 10 worst disasters in the world occurred in this region. Over 11 million people were affected by floods alone. For Indonesia, 2018 was the deadliest year

in over a decade with over 4,200 people dead or missing due to a Tsunami.

A key lesson learned in 2018 is that the Disaster Risk Management (DRM) capacity of countries and communities should match the magnitude of hazards and the vagaries of nature to substantially reduce disaster-related mortality.

For ADPC, 2018 was a year of building the capacities of governments, local humanitarian networks, academia, civil society organizations, media and the private sector especially focusing on preparedness and response for resilience.

A major crisis was averted in 2018 due to a timely flood and landslide risk assessment of the Rohingya refugee camp in Cox's Bazar, Bangladesh. Based on the risk assessment carried out by ADPC and partners, concerned authorities relocated over 25,000 most vulnerable Rohingya refugees to safer places, prior to a landslide, demolished at least five shelters and damaged 30 more.

We worked across different thematic areas in 2018 by aligning our efforts with the Sendai Framework for Disaster Risk Reduction (SFDRR) and the Agenda 2030 for Sustainable Development. A range of activities were implemented in this regard, including localizing disaster response, mainstreaming gender into drought forecasting, empowering women through smart agriculture, supporting

crisis information management systems, developing flood modeling and early warning systems, and building the capacities of hospitals to respond swiftly in the aftermath of a disaster.

In July 2018, Lao PDR woke up to a devastating flood caused by heavy rainfall and the collapse of a Dam in Attapeu province. ADPC, with support from its partners, provided real time information to the government of Lao PDR that was helpful in response and relief activities.

ADPC became an intergovernmental organization in 2018 and we stepped up our efforts to promote multi-stakeholder collaboration through different regional fora, including the Regional Consultative Committee on Disaster Management (RCC). The 14<sup>th</sup> meeting of the RCC was held in December, in Kathmandu, Nepal which brought 18 countries together who shared best practices, exchanged knowledge, and enhanced synergies for DRR. The Kathmandu Statement adopted by RCC member countries calls for coherence between global frameworks for disaster risk reduction and national policies.

On behalf of ADPC, I would like to thank national governments and development partners for supporting ADPC. We commit to continue working towards achieving our vision—safer communities and sustainable development through disaster risk reduction—in 2019.

Sincerely,

A handwritten signature in blue ink that reads "Hans Guttman". The signature is fluid and cursive, written on a white background.

Hans Guttman  
Executive Director  
Asian Disaster Preparedness Center

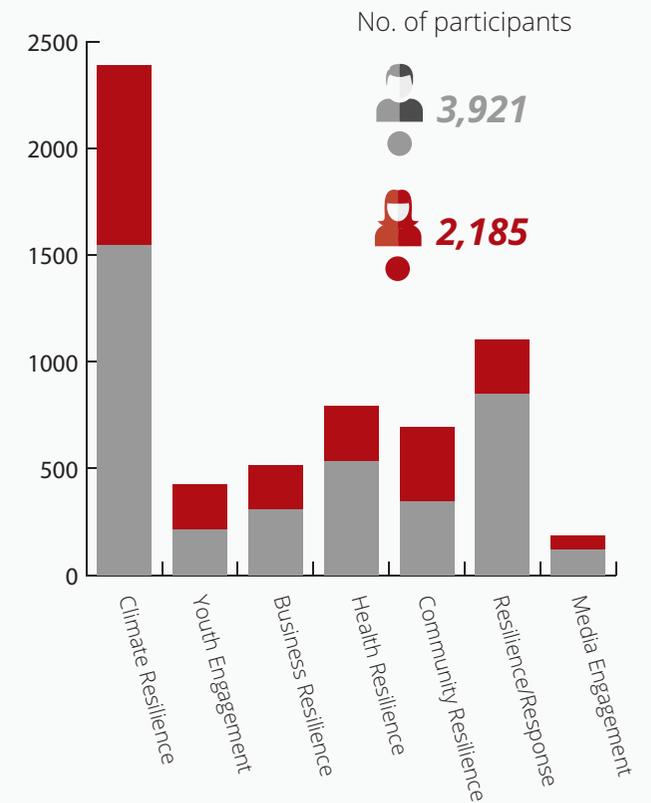
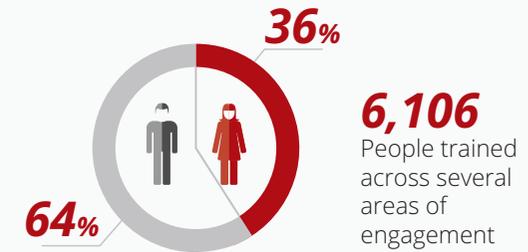
# ADPC in 2018

## 21 countries 53 cities reached

Afghanistan, Bangladesh, Cambodia, China, Ethiopia, India, Indonesia, Iraq, Kazakhstan, Lao PDR, Mongolia, Myanmar, Nepal, Pakistan, Papua New Guinea, the Philippines, South Korea, Sri Lanka, Tajikistan, Thailand and Viet Nam.



## People trained



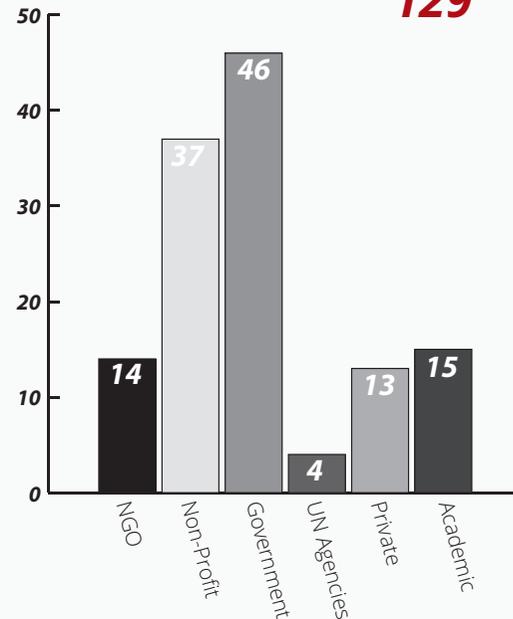
## Financial summary

**51** Projects implemented

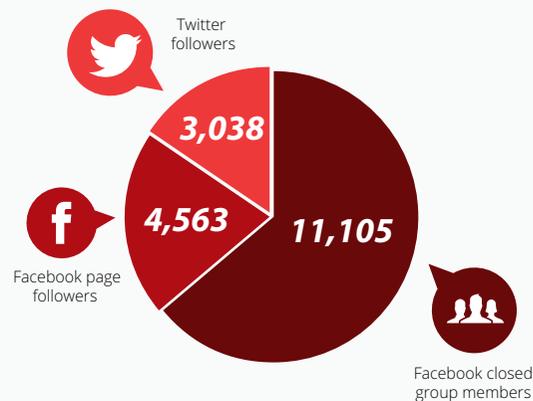


**135** Events organized across Asia and the Pacific

## Number of Partners 129



## Social Media



## Building Capacity for Resilience

Many preventable losses to lives and property occur due to the limited capacity of vulnerable communities and governments to prepare for and respond to disasters. Many countries in Asia and the Pacific lack financial as well as the technical capacity to sustainably mitigate and manage disasters.

Countries' ability in using data for making evidence-based decisions, mobilizing communities, developing coordination systems, providing early warning, formulating policies, and introducing DRR-friendly legislations can pave the way for more financial investments in DRR.

ADPC has been building the technical capacities of governments in a variety of areas to help them become resilient to disasters and climate change risk. Through capacity building initiatives and services, ADPC also supports the implementation of the SFDRR, the 2030 Agenda for Sustainable Development including Sustainable Development Goals (SDGs), the New Urban Agenda, the Paris Agreement on Climate Change, the agenda defined at the World Humanitarian Summit in 2016, and other relevant international frameworks.

ADPC's Annual Report of 2018 provides a summary of our contributions to build the capacities of governments and communities in DRR and CR in 21 countries across Asia and the Pacific.

# ADPC at its Core

Asian Disaster Preparedness Center (ADPC) is an intergovernmental organization that works to build the resilience of people and institutions to disasters and climate change impacts in Asia and the Pacific. Its founding member countries include Bangladesh, Cambodia, China, India, Nepal, Pakistan, the Philippines, Sri Lanka, and Thailand.

Established in 1986 as a technical training center, ADPC provides comprehensive technical services across social and physical sciences to support sustainable solution for risk reduction and climate resilience. Using its expertise and evidence-based knowledge, ADPC supports countries and communities in building their disaster risk reduction systems, institutional mechanisms and capacities to become resilient to numerous hazards.

ADPC develops and implements cross-sectoral projects/programs on the strategic themes of risk governance, climate resilience, resilient recovery, urban resilience, health risk management, and preparedness for response. Our strategic themes are complemented and underpinned by the cross-cutting themes of gender and diversity, regional and transboundary cooperation as well as poverty and livelihoods.

ADPC works at national and local level in partnership with governments, development partners, UN agencies, civil society, and the private sector to put resilience at the core of development.

## Where We Are

ADPC is headquartered in Bangkok, Thailand with offices/representation in many countries.

## 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 Asia and the Pacific are anchored in three principles:

### **Science. Systems. 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 Asia and the Pacific.



## Regional Consultative Committee on Disaster Management (RCC)

ADPC has been supporting the RCC since 2000 as its secretariat. Comprised of 26 countries in Asia and the Pacific, the RCC is a unique forum that brings together National Disaster Management Organizations (NDMOs) of member countries regularly. The RCC meetings serve as a platform for member countries to share good practices, to learn from each other's experiences, and to jointly explore how to transform the global frameworks into national policies and practices for equitable and resilient development outcomes. One of the key objectives of the RCC is to promote regional cooperation in disaster and climate risk management and to enhance the resilience of those most at risk.



REGIONAL  
CONSULTATIVE  
COMMITTEE on  
**DISASTER  
MANAGEMENT**



Afghanistan



Bangladesh



Bhutan



Brunei



Cambodia



China



Georgia



India



Indonesia



Iran



Jordan



Kazakhstan



Lao PDR



Malaysia



Maldives



Mongolia



Myanmar



Nepal



Pakistan



Papua New Guinea



Philippines



South Korea



Sri Lanka



Thailand



Timor-Leste



Viet Nam

# Building Geospatial Capacity:

*Connecting science, decision-makers and people*

Climate change is likely to affect biodiversity, livelihoods, and food security of the 240 million people living in five countries in the Mekong region—Cambodia, Lao PDR, Myanmar, Thailand, and Viet Nam. The region is expected to face prolonged droughts that can affect agricultural productivity, putting food security of millions of people at risk. Flooding has already become more frequent and unpredictable in the region due to changing weather patterns.

In early 2014, ADPC joined hands with the United States Agency for International Development (USAID) and the U.S. National Aeronautics and Space Administration (NASA) to implement SERVIR-Mekong to help decision makers utilize publicly available satellite imagery and geospatial technologies for improved preparedness and climate resilience in the Mekong region.

The program made much progress in 2018. A frequent and a wide range of interaction with government agencies and scientific partners enhanced the efficiency of SERVIR-Mekong's services, in addition to helping ADPC identify information and capacity needs of decision-makers across the region. The development of services and decision-support tools of the SERVIR-Mekong go hand in hand with capacity building for action and resilience. In 2018, ADPC enhanced the capacity of 384 people in remote sensing through 18 workshops held across the Mekong region. They now have a better understanding of collating data from different sources and turning it into actionable information.

Since early 2014, ADPC, together with partners, has been developing and refining tools and services to help the Mekong region use information provided by Earth-observing satellites and geospatial technologies to manage climate risks. The decision-support tools and data are now being employed by governments for land-cover monitoring, drought and flood early warning systems, water resource management, and crop yield forecasting.

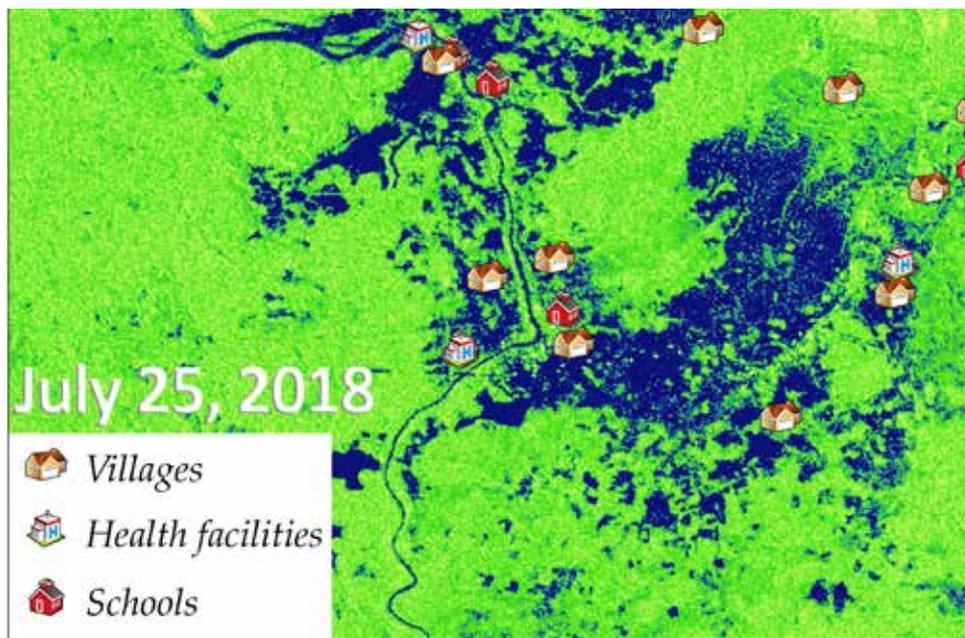
## **Aiding early warning and flood response**

Through inter-agency collaboration, SERVIR-Mekong used remote sensing and mapping technologies for early warning and flood response in the region. After the collapse of a dam in Lao PDR in 2018, for example, ADPC provided the government with satellite maps to estimate the extent of the inundation and identify the most affected areas. The information could be useful for the Government of Lao PDR and emergency response practitioners in providing flood response to the affected people. The flood maps were provided in collaboration with NASA and the Sentinel Asia initiative, with data support from the Japan Aerospace Exploration Agency (JAXA) and the European Space Agency (ESA).

Similarly, in Cambodia, a decision-support service for supporting flood forecasting was developed in collaboration with the government. The tool goes by the name of Virtual Rain and Stream Gauge Information System (VRSGIS), which contains high-resolution satellite rain and stream gauge data that will enhance the flood early warning system of Cambodia. The streams data are expected to feed into existing hydrological models and a new modelling system being developed by the Ministry of Water Resources and Meteorology (MOWRAM) in Cambodia.

## **Supporting flood and drought resilience**

The unpredictability of climate-related disasters and lack of relevant data in Myanmar challenges experts to anticipate the impacts of calamities and conduct risk assessments. Current flood preparedness decisions in Myanmar are based on incomplete information of frequency, duration, and extent of floods. ADPC through the SERVIR-Mekong project has developed a tool for Myanmar that will help them use 30 years of flood extent data instead of relying on one-to-two-year memory of inundation.



*This figure shows the flooded areas (From July 13 through 29) of Lao PDR  
Produced by Kittiphong Phongsapan/ADPC*

ADPC is working with the Department of Disaster Management (DDM), under the Ministry of Social Welfare, Relief & Resettlement to build their capacity and integrate the tool into their existing flood preparedness decision framework. This information service integrates satellite-derived flood frequency with population, socio-economic, and vulnerability data into a flood risk index. This tool gives the government additional context and insight into flood risk at the national as well as the township level. The Historical Flood Analysis tool and the DDM’s capacity to use it will benefit millions of people who are exposed to flooding every year.

The Mekong region has been a victim of too much or too little water; as one part of the region struggles with flooding, other parts can experience severe droughts in the same year. Approximately two million people were affected by a severe drought in Viet Nam from 2015-16 dry season, which was considered the worst in 90 years. Agriculture provides employment to over 40% of Viet Nam’s labor force, however, lack of adequate planning for droughts causes a significant drop in farm production, resulting in unsustainable livelihoods, less income for farmers and less food for people.

To address this challenge, SERVIR-Mekong worked with the government to develop a geospatial service which enables relevant agencies to prepare for and respond to droughts more effectively. The Vietnam Academy for Water Resources (VAWR) adopted the geospatial service for improving drought resilience and crop yield forecasting in Ninh Thuan—one of the most drought-prone provinces. Viet Nam integrated information from SERVIR-Mekong’s services such as drought indices, rainfall, and soil moisture to estimate water availability and produced monthly water resource bulletins for Ninh Thuan province.

The system is now being considered by Ninh Thuan’s Irrigation Management Company (IMC), a state agency who controls most of the water resources system in the province. The management company plans to use and constantly update information from the system for the water irrigation operation in the province. This will ultimately strengthen the capacity of reservoir operation and management for increasing resilience to drought and ensuring water and food security for Ninh Thuan.



Photo by ADPC

# Communities First

## *Localizing disaster preparedness and response*

Challenging terrains, climate change, unpredictable seas, torrential rains, and dry spells affect thousands of people every year in Cambodia, Myanmar, Nepal, Pakistan, the Philippines, and Sri Lanka. In 2018 alone, these countries suffered from disasters ranging from cyclones to floods, landslides, droughts, heatwaves, volcanic eruptions, and lightning, etc. Too much rain often triggers floods which set off landslides; and too little causes droughts.

### **Grassroots solutions: localizing disaster preparedness for response**

Floods displaced 2.7 million people in Myanmar and 1.5 million in Sri Lanka while eight tropical cyclones submerged 38 provinces in the Philippines in 2018. As the variety of hazards in Cambodia, Myanmar, Nepal, Pakistan, the Philippines, and Sri Lanka grows and their likely impact on the lives and livelihoods of people intensifies, more efforts are required to improve disaster preparedness at the local level.

The Agenda for Humanity and the Grand Bargain call for investing in local capacities to build people's resilience to disasters on a global scale. To take this agenda to the next level, ADPC and the Bill & Melinda Gates Foundation came together in 2016 to strengthen the emergency response capacity of local humanitarian organizations in Asia and later formed the Asian Preparedness Partnership (APP)—a unique regional multi-stakeholder network of National Disaster Management Offices (NDMOs), local humanitarian organization networks and the private sector from Cambodia, Myanmar, Nepal, Pakistan, the Philippines, and Sri Lanka.

In 2018, national preparedness partnerships rolled out a series of capacity building workshops, organized consultations, and formed synergies on a variety of locally identified disaster-related issues. A total of 1534 people learned about the status of sector-

specific disaster preparedness and worked towards finding the way forward through 48 events held across six countries. These events were unique in bringing together the three most important stakeholders in preparedness planning to guide informed discussions and deliberate on solutions led and owned by local leadership. By developing synergies, devising plans and putting a pool of local experts together ahead of any disaster, these national chapters are helpful in avoiding miscommunication and duplication during the response and relief phase.

The Sri Lanka Preparedness Partnership (SLPP), for example, engaged with experts from the Sri Lanka Atomic Energy Regulatory Council (SLAERC) and other departments to discuss whether they have preparedness plans in place. The SLAERC shared its plan with other stakeholders to take protective actions based on the amount of radioactive exposure and waste a disaster may cause. It was also observed that a vast majority of government departments lack preparedness plans, thus limiting the capacity for localized response to a disaster. This knowledge provided the SLPP with an opportunity to focus more on the process of inter-departmental experience-sharing. In addition, it paved way for the national chapter of APP to review guidelines developed by the government of Sri Lanka in 2015 to inform sector-specific disaster management plans.

### **Planning for emergency response**

Local actors can guide international response towards the most vulnerable and areas where it is needed the most. Similarly, experts equipped with local knowledge are in a better position to evaluate needs, estimate funding requirements, highlight issues, and provide recommendations. For the benefit of vulnerable communities, ADPC continued to strengthen the capacities of governments and other stakeholders in all key areas of emergency response. Comprised of key stakeholders, the Nepal Preparedness



Photo by ADPC

Partnership (NPP) focused on improving the level of preparedness planning at different levels. Floods and landslides often isolate affected areas posing major logistical challenges in providing help to affected communities in Nepal. Against this backdrop, personnel from government agencies, local organizations, and the private sector sharpened their skills in setting up coordination mechanisms, improving post-disaster needs assessments, addressing operational challenges, and sharing real-time information to reach out to people from remote areas before, during and after an emergency.

Lightning is the second biggest cause, after earthquakes, of human casualties in Nepal. Since the 2015 Nepal earthquake, 840 people have been killed due to lightning in different parts of the country. ADPC has organized several lightning protection training and NPP is developing strategies to raise awareness of Protection against Lightning (PaL) in consultation with Tribhuvan University (TU) and Nepal Academy for Science and Technology (NAST).

### **Mobilizing the business community**

The public and private sectors are interdependent. It becomes more important during a disaster as damage to public infrastructure affects supply chains, often resulting in a price hike and unavailability of essential goods in disaster-hit areas and beyond. Considering business continuity during disasters serves all, ADPC worked with the private sector in all APP countries on business resilience in addition to its role in supporting humanitarian response.

For example, in 2018, the Pakistan Resilience Partnership (PRP) arranged in-depth discussions on the private sector engagement in the overall humanitarian response system of the country. Information exchange between government agencies, local organizations, and the private sector motivated all the stakeholders to pool their resources and expertise to achieve the common objective of safety. Pakistan's private sector has increasingly allocated its resources to their business continuity plans while playing its role in emergency response by helping communities in need.

Similarly, through the Preparedness Partnership of Cambodia (PPC) and the Philippines Preparedness Partnership (PhilPrep), ADPC continued to engage with the private sector to enhance its resilience to disaster. In Cambodia, around 70 participants from the private sector, governments, civil society organizations and development partners came together to explore effective ways of engaging in disaster preparedness and business resilience initiatives. The government offered Small and Medium Enterprises (SMEs) its full support



Photo by ADPC



to ensure business continuity during a disaster. The government also shared information on the legislative arrangements in Cambodia that encourage the private sector to participate fully in preparedness for disaster response in the country.

## Introducing local solutions at regional level

Regional meetings of the APP brought together NDMOs, civil society and the private sector from all the six selected countries to stimulate new ways of thinking and sharing of local experiences and replicable initiatives. ADPC organized the “Innovations Forum for Safer Asia”, attended by DRR practitioners, development partners and APP member countries - who represented governments, local NGOs, academia, as well as the private sector networks. Participants presented best practices and innovative solutions for reducing disaster risks at local level.

## Building community resilience in China

In 2017 alone, flooding in southern and central China affected more than 14 million people and submerged 880,000 hectares of crops. ADPC's ongoing efforts to build the capacity of disaster-prone communities in China continued throughout 2018. Our community-based disaster risk management (CBDRM) program was able to reach Hunan Province for the first time, with support from the government of China.

The initiative ensured support in building the individual resilience of various stakeholders as well as establishing a supportive social context to strengthen the community's collective approach to prepare for disasters. The project brought together local communities, governments, and non-government organizations to strengthen their capacity in building the community's resilience to disasters and to promote coordination in disaster preparedness and mitigation.

To ensure CBDRM initiatives are sustainable, local actors must take on a central role in the process of resilience building. In this regard, 30 participants built their capacity in CBDRM as trainers. The training of trainers (ToT) course played a crucial role in providing more guidance to participants and improving the quality of their knowledge sharing techniques.

ADPC also developed and translated two case studies from English to the Chinese language.

To promote the culture of learning from the experience of other countries, an exposure visit was organized for a delegation from the Fuzhou University, China, to Thailand. The delegation gained perspective on Thailand's overall progress towards resilience and learned about the experience, knowledge, and understanding necessary for moving towards disaster resilience.

## Evacuation planning in Thailand

To further protect communities from flood risks in Thailand, ADPC worked closely alongside PTT Public Company Limited to facilitate a CBDRM training course across two communities in Prachinburi and Nakhon Panom province. The community came together to map out flood hazard-prone areas and safety points to provide an evacuation route away from affected areas. They further learned the concept of basic site selection and shelter management to complete the evacuation route in case of emergencies.



Photo by ADPC

# Gender Matters

## *Mainstreaming gender and diversity in DRR and CR*

Disasters are not gender neutral. Women and other vulnerable groups have different vulnerabilities and capacities during disasters, thus, they suffer disproportionately. Along with many other international mandates that address reducing inequalities as a method for building resilience, the SDGs recognize enhancing gender equality as a core function.

### **Promoting gender-equal and rights-based approaches in DRR**

ADPC continued working on promoting gender and diversity in DRR throughout 2018. Through a scoping study, ADPC was able to understand the current practices as well as the state of gender equality and human rights in DRR in Papua New Guinea, Nepal, and the Philippines. The research was carried out under the program Building resilience through inclusive and climate-adaptive disaster risk reduction in Asia-Pacific (BRDR)—a five-year program that aims to protect development gains and to enhance regional cooperation on inclusive and gender-equal risk reduction approaches.

The BRDR program focuses on developing tools and promoting evidence-based decision-making and practices to reduce disaster risk in three pilot countries. To replicate DRR good practices, inclusive measures, and innovative solutions at national levels, the program benefits from the RCC (see box on page 11), which regularly brings together NDMOs from across Asia and the Pacific for knowledge exchange, collaboration, and coordination.

The inception phase of the program identified entry points for promoting and integrating gender-equal and rights-based approaches in various aspects of DRR including risk assessment at the municipality level.

### **Women, girls, and the victims versus agent paradigm**

The inception report noted that current policies for DRR and CR addressing women are often about conceptualizing their identities as “fixed, centered and uniform, and tied to nature” which contribute to singling women and girls as victims of disasters and climate change. The program is adopting approaches that are focused on highlighting women as agents of change and are already playing a great role in disaster preparedness and response, albeit unrecognized.

### **Mainstreaming gender in ADPC’s programs**

Gender and diversity is one of ADPC’s three cross-cutting themes. The BRDR program is instrumental in integrating gender in all programs being implemented by ADPC. For example, the regional sensitization workshop on “Integrating Gender-Equal and Rights-Based Approaches in APP Action Plans” was a step forward towards helping the six APP countries benefit from BRDR.

The workshop brought together government officials, local humanitarian networks, the private sector, and development partners in Bangkok to discuss the upscaling of gender integration into preparedness for response plans in Asia.

## Mainstreaming gender in drought forecasting

ADPC promotes the use of geographic information system and other scientific tools to look at climate change, water resource management, and resilience through the gender lens.

With 80% of women (compared to the 60% men) involved in agriculture in Viet Nam, it is important to mainstream their information needs in the overall design of drought resilience and water resource management initiatives. To take practical actions, ADPC, together with the government and Stockholm Environment Institute (SEI), conducted a comprehensive gender-sensitive user's needs assessment which aims to support the design of a gender-sensitive and user-friendly drought forecasting service. The assessment identified opportunities and constraints for women and men of different ethnic groups in accessing and using the drought information for agricultural planning. The findings of the study are being incorporated into the SERVIR-Mekong service to reduce the gender gap.

## Bringing clean water and climate-smart agriculture to Dadeldhula, Nepal

Women's income from freshly-picked green leafy organic vegetables in Dadeldhula village in Nepal is hard-earned and utilized to send their children to school. But the situation was different only a few years ago. Following the 2015 earthquake, Parku Tole village in Dadeldhula, Nepal, was suffering from water shortage. Clean drinking water for all, livelihood opportunities for women, and school for children had become a luxury available only to a few in the village comprised of 25 households and surrounded by hills.

ADPC introduced a simple and economical solution by installing Multiple Use Water System (MUS) in the village. By using gravity, water flows into water collection tanks through pipes and becomes safe to drink after going through a water filter.

To save and store the overflow, ADPC built two additional water collection tanks for irrigation purposes. Women are the principal beneficiaries of this initiatives as they now have surplus water to grow organic vegetables to be sold out in a local market.



# Educational Resilience

## *Promoting school safety*

ADPC has been working on school safety since 1995. It has addressed school safety under six programs in 11 countries. ADPC provided technical support to Sri Lanka to develop “National Guidelines for School Disaster Safety” in 2008 to promote preparedness of teachers and students. This was followed by developing a guidebook on Child-Centered Disaster Risk Reduction (CCDRR) in 2010 for organizations working in Bangladesh.

### **School safety through emergency response planning**

In 2018, we joined hands with the Department of Probation and Child Care Services of Sri Lanka to introduce the CCDRR framework to its training pool and explore ways to increase children’s participation in DRR and CR. A total of 264 probation officers, who work for the promotion of child rights and their protection, learned how to develop a school emergency plan and make them resilient to disasters.

Using past experiences, ADPC has also been supporting the implementation of a Comprehensive School Safety Framework 2017 (CSS) which is an important policy design framework to help reduce disaster impacts in the education sector. The CSS corresponds with the SDGs and the SFDRR’s priorities for action and indicators for educational resilience.

Working together with the Ministry of Education and Disaster Management Centre of Sri Lanka in 2018, we engaged with 45 teachers and school staff to build their capacity in using the CSS framework. As master trainers, they learned how DRR and child protection strategies can be incorporated into school disaster management plans. Practical skills on firefighting have enabled them to adopt proactive approaches and use fire extinguishers in case of any emergency. These master trainers are expected to reach out to thousands of school children in Sri Lanka.

### **Preparing schools to be used as shelters**

Schools are often used as shelters during disasters. Surrounded by the Indian Ocean, Sri Lanka suffers from cyclones, floods and landslides, etc. every year. In 2018, over 1.5 million people in 19 districts were affected due to heavy rains, strong winds, lightning, and landslides according to the Disaster Management Centre (DMC) of Sri Lanka.

In collaboration with the Provincial Directorate of Education, we identified four schools in Rathnapura district that could also serve as shelters for disaster-affected people. A total of 39 people including school principals, staff/volunteers and a group of students learned to identify major hazards, and assessed the need for more facilities to be able to assist displaced persons and ensure educational continuity after a disaster.

The selected schools were visited individually to guide the process of formulating disaster management plans. A nodal group under the leadership of the principal was established.

The initiative ensured that knowledge is also transferred to other schools to enable information and experience exchange between one another. While four schools are able to prepare for hosting disaster-affected people and resume educational activities afterward, 34 nominees from the Provincial Education Directorate were trained as master trainers to replicate the model to other schools.

## Empowering the youth towards resilience

Encouraging the youth to become advocates of change will ensure inclusion of over 2 billion stakeholders, under the age of 18, in taking actions towards DRR and CR initiatives that will shape their future.

In 2018, over 200 students learned vital skills needed to mitigate risks when faced with both man-made and natural hazards. Lessons learned in school are often a topic of discussion outside of the classroom, which enhances the powerful impact of engaging with the youth and encouraging them to become leaders of change among their communities.

ADPC further worked to encourage them to use lessons learned as a stepping stone towards taking on their role in building resilience among their communities and beyond. The iPrepare student video competition introduced students to basic concepts of DRR. Students were then encouraged to use their videography and story-making skills to create captivating videos that incorporate both lessons learned as well as their perspectives in effectively mitigating disaster risks.



This campaign embraced and encouraged students' open-mindedness, an important step in building their confidence for sharing ideas and highlighting concerns. The competition also guided students towards exploring and interacting with their communities to understand hazards and alternative perspectives.

Through these initiatives, students were able to recognize the current gaps in their community's approach to disaster preparedness as well as the measures necessary to better face hazards.

# Resilient Hospitals

*Preparing medical professionals for the worst*

Hundreds of hospitals and health facilities are destroyed or damaged by disasters every year in Asia. Millions of people are left without emergency care during and after disasters when hospitals and health facilities fail to function.

## HOPE in South Asia

To address this need, ADPC, together with partners, continued to build hospital disaster resilience across South Asia in 2018 through the Strengthening Hospital Preparedness for Emergencies (HOPE) training program in 6 countries and Strengthening Earthquake Resilience in Bangladesh (SERB) program.

The HOPE training in South Asia is designed to assist healthcare facilities, medical personnel, managers

and administrators who are responsible for hospital emergency planning, or any emergency involving mass casualties.

The implementation of HOPE in Bangladesh, India, Nepal, Pakistan and Sri Lanka brought about a new level of confidence to 556 medical professionals as it was evident during their response to several emergencies. HOPE graduates can now design appropriate facility-specific plans to increase their ability to effectively manage internal and community-level medical emergencies that involve large numbers of casualties. Based on the HOPE modules, graduates have contributed to the development of protocols for their hospitals and are equipped with the skillset to conduct regular simulation exercises.



Photo by ADPC



## Institutionalizing HOPE

The National Institute of Preventive and Social Medicine (NIPSOM), Bangladesh, used its resources to organize a HOPE course for healthcare providers. The Gujarat Institute of Disaster Management (GIDM), India, has fully embraced HOPE and has integrated its content and training methodology as a regular course that will be offered in the State of Gujarat.

The Ministry of Health in Sri Lanka allocated funds to implement HOPE in the next fiscal work program within its Disaster Preparedness & Response Division (DPRD)—a division responsible for strengthening the health sector's preparedness on disaster management.

## Upscaling HOPE

The HOPE activities contribute to the national government's priorities under the SFDRR that call for developing the skills of health-care professionals to respond to mass casualty incidents. There is a pressing need to reach out to 10,762 tertiary level hospitals in Afghanistan, Bangladesh, India, Nepal, Pakistan, and Sri Lanka which will ensure preparation of a minimum of 64,572 medical staff to be able to respond to disaster-related emergencies. ADPC has been implementing this initiative for the past 14 years and will continue to upgrade and upscale HOPE to meet the needs across the region.

## Strengthening Earthquake Resilience in Bangladesh (SERB)

In 2018, SERB helped Fire Service and Civil Defense Department (FSCD), Bangladesh with training 326 urban community volunteers on search and rescue, firefighting and first aid techniques to be used in the aftermath of collapsed structures or landslides. The number of volunteers trained in 2018 brought the total number to 1,676 added to the FSCD's pool of 32,000 urban community volunteers. These volunteers are now able to serve as frontline first responders and help professional search & rescue forces during an emergency. Building on past experiences, ADPC is planning to train volunteers in Rangamati, Chittagong and Bandarban districts of Bangladesh to respond to any emergency triggered by landslide, flood, and fire incidents.

## Building capacities for psychosocial trauma care and mass casualty management in Afghanistan

Currently, around 4.5 million Afghans are living in conflict-affected areas. Due to the decades-long conflict, a greater population of Afghanistan is in need of severe injuries and psychosocial trauma care. ADPC brought together 24 Afghan medical doctors from 8 provincial hospitals in 2018 who learned necessary skills and knowledge on up-to-date trauma care and mass casualty management.

The training has been effective in developing a network of doctors on trauma management in Afghanistan. The network is a valuable component in supporting the development and implementation of the National and Provincial Emergency Preparedness and Response (EPR) strategies and plans.

Though there has been a significant increase in the number of female health providers in the health sector of Afghanistan, access to public health services and career opportunities for women are still limited. This network will be utilized as a platform to bring forward female health providers to build their capacity and become leaders in trauma care and mass casualty management.

The course was organized in Bangkok in collaboration with MoPH of Afghanistan, World Health Organization (WHO) Afghanistan country office, Republic of Korea, and the Royal College of Surgeons Thailand (RCST) to support capacity development of Afghan medical doctors through a specialized and accredited training program in 2018.

# Strengthening Regional Cooperation to Implement Global Frameworks for DRR



Photo by ADPC

Consultations, collaboration, knowledge-exchange, and the replication of good practices in DRR and CR are key elements to achieving global targets set by SFDRR, the SDGs, the New Urban Agenda, the Paris Agreement and the World Humanitarian Summit. Corresponding objectives of global frameworks for DRR and CR require greater coherence between policies and plans to be implemented at regional, national and local levels.

In addition to other key issues, ADPC contributed to policy discussions on coherence at different fora including the Asian Ministerial Conference on Disaster Risk Reduction (AMCDRR) held in Ulaanbaatar, Mongolia, in 2018. We also organized national and regional discussions and brought together governments, the scientific community, policy makers, humanitarian networks, media and the private sector, etc. from across Asia and the Pacific. These efforts contributed to mutual learning between governments and other key stakeholders.

## **14<sup>th</sup> Meeting of the Regional Consultative Committee on Disaster Management (RCC)**

The 14<sup>th</sup> RCC meeting was held on 3-5 December in Kathmandu, Nepal, on the theme of “Policies and Practices for Coherence between Global Frameworks.” The meeting was concluded with the adoption of the Kathmandu Statement by the delegates from 18 member countries.

The Kathmandu Statement calls for enhancing coherence across policies, institutions, goals, indicators, and monitoring systems for implementing key global frameworks for DRR and sustainable development.

Member countries agreed to following up on the commitments made at the AMCDRR 2018 and the RCC’s future contribution to the 2019 Global Platform on Disaster Risk Reduction to be held in Geneva in 2019.

The participants agreed that technical support should be provided to RCC member countries to ensure coherence in the implementation of relevant policies, plans, and practices as outlined in key global frameworks ensuring gender-equal, pro-poor, rights-based, and inclusive approaches.

During the three-day meeting, the delegates exchanged experiences, discussed challenges, and explored practical approaches and options to further improve disaster mainstreaming into development.

The 14<sup>th</sup> RCC was represented by government officials from Afghanistan, Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Jordan, Maldives, Mongolia, Myanmar, Nepal, Pakistan, the Philippines, Sri Lanka, Thailand, Timor-Leste, and Viet Nam, along with observers from UN agencies and international NGOs.

The meeting was co-hosted by the Ministry of Home Affairs (MoHA), Government of Nepal and ADPC, with financial support from the Swedish and German Governments.



### The Kathmandu Statement calls for:

- enabling coherence through the provision of technical support to member countries in the implementation of relevant policies, plans, and practices of the global and regional DRR, CCA, and resilient development frameworks at national, sub-national and local levels ensuring gender-equal, pro-poor, rights-based, and inclusive approaches;
- promoting regional cooperation for coherence and inclusiveness to achieve the targets of the SFDRR and SDGs at national, sub-national and local levels; encouraging the RCC member countries to actively promote women leadership in DRR and CCA including women's representation at the RCC and other regional and global fora;
- encouraging governments and development partners to strengthen tools, methods, and processes for measuring the impact of DRR and CCA investments at regional, national, sub-national, and local levels.

# Media Engagement

*Reporting for resilience*



Photo by ADPC



## Reporting on Disaster Mitigation and Preparedness (RedMap) in Mongolia and Nepal

ADPC started engaging with journalists on pre-disaster reporting in 2016 by organizing orientation workshops in Bangladesh, Viet Nam, Myanmar, and Malaysia. The orientation workshops were later upgraded to hands-on training through a “Reporting on Disaster Mitigation and Preparedness (RedMap)” initiative for journalists.

In 2018, ADPC partnered with United Nations Office for Disaster Risk Reduction (UNISDR) and the Thai Public Broadcasting Service (Thai PBS) and organized RedMap media training workshops in Mongolia. The One-Person Journalist concept was incorporated into the training design to test if journalists were able to conceive disaster-related story ideas based on the theoretical understanding of DRR. This concept also encouraged journalists to use minimal equipment while expanding their coverage to remote areas.

In addition, ADPC and the Thai PBS offered a two-week scholarship for three journalists from Mongolia. As part of the training, journalists were provided with an opportunity to cover the impact of disasters and the actions taken by the local coastal communities in Thailand 14 years after the the 2004 Indian Ocean earthquake and tsunami.



News packages developed during their training in Thailand have subsequently inspired other journalists in Mongolia to report on hazards responsibly. The capacity-building initiative for the Mongolian media has effectively changed the reporting patterns of many journalists who have participated in these events. They are convinced that in addition to providing correct information and the right message at the right time, media should also create an environment for solidarity and trust. This will help in augmenting the collective responsibility of all segments of society to tackle the challenges posed by any disaster.

Another similar activity was organized for journalists in Nepal in partnership with the Bill & Melinda Gates Foundation. Overall, ADPC has been able to reach out to 109 journalists from Nepal and Mongolia.

For its design and potential to upscaling the role of media in disaster reporting, RedMap received regional recognition in the Media Stakeholders Statement at the AMCDRR held in Mongolia in 2018. ADPC plans to continue its efforts to engage with media by imparting technical skills to journalists on disaster reporting.

# Development **Partners**

Anglo Singapore International School

ARCASIA

Asian Development Bank (ADB)

Asia-Pacific Network for Global Change Research (APN)

Bill & Melinda Gates Foundation (BMGF)

Deltares

Government of Bangladesh

Government of China

Government of Norway

Department of International Development, United Kingdom (DFID)

Department of Foreign Affairs and Trade, Australian High Commission (DFAT-AHC)

Food and Agriculture Organization of the United Nations (FAO)

The Global Network of Civil Society Organizations for Disaster Reduction (GNDR)

Gujarat Institute of Disaster Management (GIDM)

Humanity & Inclusion (HI)

Isuzu

JTI Foundation

Japan-ASEAN Integration Fund

PASCO Corporation

PTT Public Limited Company (PTT)

RMSI Private Limited

Save the Children, Bangladesh (STC)

Swedish International Development Cooperation Agency (Sida)

Swarovski AG

Tamil Nadu Disaster Risk Reduction Agency (TNDRR)

United Nations Development Program (UNDP)

United Nations International Children's Emergency Fund (UNICEF)

United Nations Institute for Training and Research (UNR)

The UN Refugee Agency (UNHCR)

United States Agency for International Development (USAID)

Office of the U.S. Foreign Disaster Assistance (USAID/OFDA)

World Bank (WB)

World Health Organization (WHO)

# ADPC Projects in 2018

## **3-day Training Course on Disaster Risk Reduction and Emergency Response in Asia and the Pacific Region for Architect belong to ARCASIA**

2018  
**Development Partner:** ARCASIA  
**Country:** Indonesia

## **Accelerating the Implementation and Monitoring of Sendai Framework for Disaster Risk Reduction**

2018 – 2019  
**Development Partner:** UNISDR  
**Region:** Asia and the Pacific

## **Advancement of Recovery Initiatives for Safer Ethiopia**

2018 – 2019  
**Development Partner:** BMGF  
**Country:** Ethiopia

## **Applying Bihar Recommendations: Building Stage Level Emergency Response Capacity**

2015-2018  
**Development Partner:** BMGF  
**Country:** India

## **Baseline Analysis of Urban Flood Risks and High Priority Investment Gaps in Indonesian Cities**

2016 – 2018  
**Development Partner:** Deltares  
**Country:** Indonesia

## **Building Climate Change Resilience in Asia's Critical Infrastructure**

2017-2018  
**Development Partner:** ADB  
**Countries:** Sri Lanka, Viet Nam, Indonesia

## **Building resilience through inclusive and climate-adaptive disaster risk reduction in Asia-Pacific**

2018 - 2022  
**Development Partner:** Sida  
**Countries:** Nepal, Philippines, Papua New Guinea

## **Capacity building of volunteer and communities for Landslide Risk Management in Cox's Bazar**

2018  
**Development Partner:** UNR  
**Country:** Bangladesh

## **Child-centered Disaster Risk Reduction in Sri Lanka**

2017 – 2018  
**Development Partner:** UNICEF  
**Country:** Sri Lanka

## **Community Based Disaster Risk Management and Development Project in Thailand**

2018 – 2018  
**Development Partner:** PTT  
**Country:** Thailand

## **Community Resilience and Response Capacity in South Korea**

2016 – 2019  
**Development Partner:** JTI Foundation  
**Country:** South Korea

## **Conducting of Business Continuity Awareness and Capacity Building Activities for Suppliers of Isuzu Motors Co. (Thailand) - Phase 1**

2016-2018  
**Development Partner:** Isuzu  
**Country:** Thailand

## **Connecting Community Preparedness and Business Resilience for Environmental Sustainability**

2018 – 2019  
**Development Partner:** Swarovski  
**Country:** Thailand

## **Developing a Climate-Inclusive Potential Loss and Damage Assessment Methodology for Flood Hazards**

2014-2018  
**Development Partner:** APN  
**Countries:** Nepal, Sri Lanka, Thailand

## **Developing a regional drought risk management programme in the Greater Mekong Sub-region**

2016 – 2019  
**Development Partner:** FAO  
**Region:** Greater-Mekong Sub-Region

## **Developing Disaster Risk Reduction Related Capacities in Chennai, India**

2018  
**Development Partner:** TNDRA  
**Country:** India

## **Developing Flood Hazard maps for Kutupalong and Balukhali Makeshift settlements**

2018  
**Development Partner:** UNHCR  
**Country:** Bangladesh

## **Disaster Risk Reduction by Integration Climate Change Projection into Flood and Landslide Risk Assessment**

2016 – 2020  
**Development Partner:** Japan-ASEAN Integration Fund  
**Country:** Japan

## **DRR Camp for Anglo Singapore International School**

2018  
**Development Partner:** Anglo Singapore International School  
**Country:** Thailand

## **Expansion Module Training Course on China's National Disaster Management (CNDMC-week1)**

2014-2018  
**Development Partner:** Chinese Government  
**Country:** China

## **Host Nation Support Guidelines Pakistan (Heart of Asia: Disaster Management Confidence Building Measure)**

2016 – 2018  
**Development Partner:** DFAT-AHC  
**Country:** Pakistan

**Hospital Preparedness for Emergencies (HOPE) training course for Gujarat Institute of Disaster Management**

2016 - 2018

**Development Partner:** GIDM

**Country:** India

**Institutionalizing Sustainable Community Based Disaster Risk Management**

2016 – 2020

**Development Partner:** GNDR

**Countries:** Philippines, India, Cambodia, Viet Nam

**Integrated Programme Development to Enhance Disaster and Climate Resilience of the Rural Sectors in Sri Lanka**

2017 – 2018

**Development Partner:** FAO

**Country:** Sri Lanka

**Knowledge Manager of Building Resilience and Adapting to Climate Extremes and Disasters Programme (BRACED)**

2014-2018

**Development Partner:** DFID

**Countries:** Nepal, Myanmar

**Mainstreaming Weather and Climate Information Application for Agro-Ecosystem Resilience in a Changing Climate**

2016-2018

**Development Partner:** APN

**Countries:** Sri Lanka, Viet Nam, Nepal, Thailand

**Module Training course on China's National Disaster Management (CNDMC-week 2)**

2014-2018

**Development Partner:** Chinese Government

**Country:** China

**Multi Hazard Contingency Plan for Narayanganj City Corporation**

2018

**Development Partner:** STC

**Country:** Bangladesh

**Multi Hazard Risk Assessment for the State of Jammu and Kashmir**

2016 – 2020

**Development Partner:** RMSI Private Limited

**Country:** India

**Production of Satellite-derived Time-series Land Cover Maps**

2016 – 2019

**Development Partner:** PASCO Corporation

**Country:** Japan

**Program for Improved Disaster Management and Resilience against Natural Disasters in Rakhine State, Chin State and Kalay Township in Sagaing Region, Myanmar**

2014-2018

**Development Partner:** USAID/OFDA

**Country:** Myanmar

**Program for Strengthening Integrated Incident Management System in Bangladesh**

2018 – 2021

**Development Partner:** BMGF

**Country:** Bangladesh

**Program for Strengthening Preparedness for Emergency Response Recovery in India (PROSPER-India)**

2018 - 2021

**Development Partner:** BMGF

**Country:** India

**Program on Strengthening Preparedness for Emergency Response through Multi-Stakeholders Cooperation in Myanmar**

2018 – 2019

**Development Partner:** USAID

**Country:** Myanmar

**Revision of Functional Master Plan and Detailed Area Plan to make Rajshahi Metropolitan Development Plan (RMDP) Disaster Risk Sensitive**

2018 – 2019

**Development Partner:** Government of Bangladesh

**Country:** Bangladesh

**SERVIR-Mekong**

2014-2019

**Development Partner:** USAID

**Countries:** Myanmar, Thailand, Lao PDR, Cambodia, Viet Nam

**Strengthening Capacity Building and Training Management System of the Indonesia Disaster Relief Training Ground (INA-DRTG)**

2018 – 2019

**Development Partner:** USAID/OFDA

**Country:** Indonesia

**Strengthening Capacity of Government and Local Humanitarian Organizations on Preparedness for Response in Asia**

2016 – 2019

**Development Partner:** BMGF

**Countries:** Cambodia, Myanmar, Sri Lanka, Philippines, Pakistan, Nepal

**Strengthening Earthquake Resilience in Bangladesh (SERB1)**

2013-2018

**Development Partner:** USAID/OFDA

**Country:** Bangladesh

**Strengthening Emergency Response Capacity of Humanitarian NGOs in Cambodia**

2012-2018

**Development Partner:** USAID/OFDA

**Country:** Cambodia

**Strengthening Emergency Response Capacity of Local Humanitarian NGOs in Asia**

2016-2019

**Development Partner:** BMGF

**Countries:** Nepal, Pakistan, Sri Lanka, Myanmar, Philippines, Cambodia

**Strengthening Hospital Preparedness for Emergencies in South Asian Countries (HOPE-SA)**

2016-2018

**Development Partner:** USAID/OFDA

**Countries:** Afghanistan, Bangladesh, India, Nepal, Pakistan, Sri Lanka

**Strengthening Institutional Capacity and Preparedness for Emergency Response in Ethiopia Program**

2016-2019

**Development Partner:** BMGF

**Country:** Ethiopia

**Strengthening Institutional Capacity Building for the Department of Disaster Management Affairs (DoDMA), Malawi**

2018 – 2019

**Development Partner:** Government of Malawi

**Country:** Malawi

**Strengthening Institutions for Developing Resilience in Pakistan**

2017-2018

**Development Partner:** WB

**Country:** Pakistan

**Strengthening School Disaster Preparedness (SLCDR)**

2017-2018

**Development Partner:** UNICEF

**Country:** Sri Lanka

**Supporting capacity building activity in disaster management for delegation for Fuzhou University, China**

2018 – 2018

**Development Partner:** Government of China

**Country:** China

**Training on DRR and Resiliency for Small and Medium Enterprises in Sri Lanka**

2018 – 2018

**Development Partner:** HI

**Country:** Sri Lanka

**Training Program to the Joint Crisis Coordination Center ICRRP – Component 1-Government Crisis Response Coordination**

2016 – 2019

**Development Partner:** UNDP

**Country:** Iraq

**Trauma Care and Mass Casualty Management Training – WHO Afghanistan**

2018 – 2019

**Development Partner:** WHO

**Country:** Afghanistan

**Urban Resilience to Climate Extremes**

2018 – 2023

**Development Partner:** Government of Norway

**Countries:** Myanmar, Viet Nam



Photo by ADPC



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