

FACTSHEET

Climate Change and Climate Risk Management

Building capacity to develop and strengthen climate resilience

Super-storm Haiyan and Typhoon Ketsana in the Philippines, droughts in Sri Lanka, and massive flooding in Pakistan and Thailand have confirmed that there is an urgent need to develop and strengthen national and local capacities for early warning and adaptation action.

Climate variability and climate change are altering the frequency, timing and intensity of weather and climate events.

To tackle the challenges of climate change, ADPC enhances the capacity of communities and countries to adapt to climate change and manage climate risks. ADPC assists in the development of future climate change scenarios, customized weather forecasting systems, stronger end-to-end early warning systems and sector-specific adaptation measures.

We emphasize building community resilience to climate-related hazards, and provide training and technical advice to put people-centered early warning systems in place, and facilitate regional and national dialogues for effective utilization of early warning information by the at-risk communities and responding organizations.

Our Impact

• ADPC provides technical assistance to the National Committee for Disaster Management in Cambodia for establishing a Disaster Management Information Center and an end-to-end multi-hazard early warning system.

• We provide focused capacity building for the hydro-meteorological services of Bangladesh, Myanmar, Philippines, Sri Lanka and Vietnam in specific atmospheric and ocean modeling techniques and help establish end-to-end early warning systems for flash floods, storm surge and drought.

• We support the design and conduct multi-stakeholder early warning and seasonal preparedness forums at regional and national levels to feed into decision-making processes of sector ministries and disaster risk management agencies.

• We support Semarang city's local authorities in Indonesia to develop a flood early warning system and integrate it with community-level disaster preparedness initiatives in order to be climate resilient against the changing risks to flood.

• We develop analyses of the impacts of climate change upon the resilience of coastal communities in Rakhine State in Myanmar, and design community-level training materials that promote climate resilience.

• We provided climate change projections for cities in Thailand, fine-tuned to local scales to support work towards urban climate resilience.

• We develop online climate portals to make climate data and projections available to planners and scientists, such as the portal on Nepal at www.dhm.gov.np/dpc.



Asian Disaster Preparedness Center



Raising national capacities for modelling weather and climate

Our work focuses on the development of climate risk information, tools, techniques, and systems to be used in disaster risk management and climate change adaptation processes.

We utilize climate models and analyze historical climate data to support preparedness for shocks such as short-term shifts in seasons, variations in temperature and precipitation, and anomalies such as ENSO (El Niño-Southern Oscillation). We also support adaptation planning for long-term climate change.

ADPC helps strengthen early warning systems that are currently in place, fill the gaps in policy and institutional arrangements of national disaster management organizations and other agencies who carry the task of providing early warning, and build their capacity for the effective application of early warning information.

ADPC supports national hydro-meteorological services to build meteorological forecasting and climate change modeling capacities. We have designed and executed several modalities for capacity building of meteorologists, climatologists and hydrologists; these include in-country training and secondment into ADPC.

Our Services

• Needs and gaps assessment: We review existing systems and identify needs in terms of policy, institutional requirements, technical capacity, and strategy development for effective warning dissemination and response.

• Technical assistance: We support meteorology and hydrology services to increase their human and technical capacity for modeling, forecasting, interpretation and early warning. We help raise capacities of disaster management agencies to be more effective at disseminating early warning information to the public.

• Customized training courses: We offer tailor-made courses to strengthen technical skills development.

• Climate modeling products: We have the capacity to perform climate modeling and analysis of climate data to be used in climate risk management and adaptation planning by sectors such as agriculture and water resource management.

• Demonstration projects for resilience and adaptation: These projects are developed to link early warning that originate from hydro-meteorological services to the communities exposed to oncoming hazards.

