Improving flood forecasting in Myanmar

October 2015 – December 2017

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Myanmar is exposed to recurrent riverine floods that affect nearly two million people annually. Flash floods wreak havoc in the mountainous upper reaches during the southwest monsoon season between June and October, and cities are affected by occasional local flooding. The country has an urgent need for a reliable and accurate flood forecasting system to ensure timely warnings of floods to communities at risk.

Since 2009, Asian Disaster Preparedness Center has worked with the Department of Meteorology and Hydrology of Myanmar to mitigate the impact of flooding on communities. With funding from the Royal Norwegian Ministry of Foreign Affairs, ADPC and the Norwegian Water Resources and Energy Directorate (NVE) have been able to build the country's capacity in river flow monitoring and data recording, resulting in more accurate and timely alerts and forecasts of upcoming flooding.

ADPC has identified a need to strengthen the capacity of the Department of Meteorology and Hydrology in hydrological modeling to provide reliable flood forecasts. During the third phase of the program in 2015–2017, ADPC will focus its efforts on providing the officials with comprehensive capacity building in hydrological modeling to maximize the benefits of the enhanced data coverage that was gained during the previous phase. ADPC will also help the department to improve the dissemination of flood alerts at the sub-national level by supporting the development of flood hazard maps and the building of institutional linkages.

Focus country

Myanmar

Objectives

- Institutionalizing a hydrological modeling system for flood forecasting
- Increasing lead-time of early warnings for riverine floods
- Accurately identifying inundation areas during riverine floods
- Developing a training module on hydrological modeling and integrating it into the Department of Meteorology and Hydrology's training curriculum

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Project activities

- Adopting and calibrating a numerical hydrological model for selected river basins in Myanmar as pilot studies
- Developing a flood hazard map for a selected river basin in Myanmar
- Improving the end-to-end flood early warning system in Myanmar

Project partners

Department of Meteorology and Hydrology (DMH), Myanmar
The Royal Norwegian Ministry of Foreign Affairs (financial support)

Contact information

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About ADPC

As the most hazard-prone region in the world, Asia-Pacific must proactively manage its disaster risk. For nearly 30 years, Asian Disaster Preparedness Center (ADPC) has been contributing in making Asia-Pacific safer by strengthening disaster resilience at all levels.

ADPC deploys disaster risk management information and systems to reduce local, national and regional risk across Asia-Pacific. Its portfolio focuses on disaster risk management capacity building, improving disaster risk management for cities and climate change, mainstreaming DRM into national and local development, improving disaster risk management systems and undertaking disaster risk assessments. To achieve its aims in disaster risk reduction, ADPC works closely with local, national and regional governments, governmental and non-governmental organizations, donors and development partners.

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