



## Building resilience now for better adaptation to changing climate

The climate is already changing and adaptation to these changes in the long term starts with improved current disaster risk reduction capacity. From shifting seasonal patterns of precipitation and extreme weather events to unprecedented floods, droughts, and heat waves, growing climate variability and extremes increase developing countries' exposure to natural disaster risks, with the least developed countries being affected disproportionately strong.

*From a development perspective, integrating CCA analysis and measures in DRR interventions is increasingly becoming a basic issue of due diligence, while CCA investments that do not simultaneously address current climate risks could fall short of meeting countries' development needs*

Partner developing countries consider **disaster risk reduction (DRR) and climate change adaptation (CCA)**, including their social dimension, as an integrated **climate risk management continuum (CRM)** spanning across multiple time scales:

- A 2 C° warmer world faces more intense rainfall and more frequent extreme events. Communities are in need of measures to reduce vulnerability to actual and expected climate change effects now.
- Effective CRM actions now can make a huge difference in reducing vulnerability even given similar levels of exposure to natural hazards (ex-ante risk management in Bangladesh reducing cyclone casualties from 500,000 in 1970 (Cyclone Bhola) to 3,406 in 2007(Cyclone Sidr).
- DRR is the most common entry point to address

adaptation at the national and regional level by building and reinforcing existing CRM institutions to better resist, and recover from today's climate risks while anticipating the impacts of climate change:

- Strengthening hydro-meteorological services and data and improving risk analysis and management capacity as a common foundation for basic adaptation action;
- Building national and regional DRR institutions to identify and respond to projected changes in the frequency and severity of extreme climate events
- Promoting risk reduction and transfer options as integral to national adaptation programs;
- Integrating CCA and DRM planning in post-disaster needs assessments and reconstruction, a major window of opportunity for improving adaptive capacity.

Since its inception in 2006, GFDRR's country work has consistently—and successfully—followed such **integrated CRM approach**, fostering DRR and CCA linkages both at the country level, within the World Bank, and with external partners by strategically leveraging just-in-time seed funding, targeted investments, and global expertise.

**GFDRR continues to evolve as an integral part of the emerging global adaptation financing system—a stable and efficient global humanitarian and adaptation grant financing mechanism** with active field presence and unique operational capabilities to strategically mobilize and allocate expert and financial resources in real time.

## Addressing the *climate risk management* in an integrated and strategic manner to meet the needs of partner developing countries

### Focus Areas

- Upstream integration of CRM in assistance strategies and national development plans, investment programs, and post-disaster recovery
- Capacity building for weather and climate services (improving National Hydro-Meteorological Services, NHMS) and early warning systems, as critical for core climate adaptation analysis and planning
- Multi-hazard vulnerability and risk assessment and probabilistic economic modeling
- Innovative climate and disaster risk financing and transfer

### Results

- CRM integrated in national development and assistance programs in a manner that brings together DRR & CCA programming/ management and recognizes the social dimensions of adaptation
- Solid geospatial, vulnerability, and climate risk information architecture in place and strengthened climate and weather services as cornerstone for adaptation planning and programming
- Advanced capacity for urban CRM and adequate early warning capabilities in place
- Integrated national climate risk financing strategies and mechanisms in place