

accepted, on a case by case and first-come first-served basis. Participants who have a considerable measure of responsibility in the area of disaster mitigation, preparedness, response, recovery and disaster management policy will gain the most from the curriculum. Some climate background is desirable, but not required for participating in the course.

#### Language

All teaching and course materials are in English. It is essential that participants are fully conversant in English.

#### Resource persons

International experienced practitioners and experts from different organizations will complement ADPC's in-house expertise to conduct and facilitate the Climate Risk Management course. ADPC has a diverse and dedicated team of professionals with expertise in areas ranging from climatology to forecast applications.

#### Course Fee

The course fee is US \$ 2,000.00 per participant, which includes the cost of course materials (CD, handouts, and other course materials) and refreshments. An additional amount of US\$ 40 is payable as Admission Fee. Learners have easy access to Internet and email during the entire duration of the course, and computers and printers are provided to participants for easier compliance with course requirements. Note that the fee covers tuition and materials only. Board and lodging, although arranged by ADPC, is to be paid by participants. Travel is to be arranged and paid directly by participants.

#### Discounts

ADPC has established an arrangement which recognizes the special needs of sponsoring organizations who wish to send large groups to the course. When one single organization decides to send a group of five persons to the course, it may send a sixth participant free of charge.

#### Payment

The fee should be paid in advance by bank transfer to ADPC account or deposited at the time of course registration in cash or cheque payable to the Asian Disaster Preparedness Center. Kindly confirm your mode of payment in the application form. A deposit of 15 percent is required from individual participants without a sponsoring organization who are planning to make payment at the time of registration. Registration will be made on the first day of the course. The tuition fee deposit should be paid at least three weeks before the training to cover the cancellation fee in case of withdrawal from the course

#### Board and lodging expenses

Food is reasonably priced in Thailand at about US\$ 3-5 per meal. All participants will be accommodated at the AIT Conference Center. The room rate is about US\$40 per night for single room and about US\$25 per person for shared accommodation. Participants who prefer to stay in single rooms should inform ADPC in advance so that reservations can be made accordingly.

#### Application

Interested persons can apply directly, but preference is given to those nominated by their employer organizations/departments. Application should be made on the ADPC Application Form, which should be sent by fax to the number given at the end of this brochure. For a hard copy of the application form please write to us. If you prefer, applications can be submitted

electronically. The form for on-line applications can be found on the ADPC web site at <http://www.adpc.net/training/form.html>. For applicants being sponsored by an organization, a letter of support from the organization is required. Further pre-course information will be provided once your nomination is accepted.

#### ADPC and Climate Risk Management

Established in 1986, ADPC is the lead regional resource center dedicated to disaster reduction in Asia and the Pacific. ADPC works with governments, NGOs and communities of the Asia and Pacific region to strengthen their capacities in disaster preparedness, mitigation and response through professional training, technical assistance, regional program management and information and research.

ADPC has two decades of experience in disaster management, facilitating regional cooperation, and building capacities of disaster management institutions at all government levels, disaster management practitioners, and communities. In 1990, ADPC assisted the national meteorological services of 24 countries in the Asia-Pacific region build their capacities in tropical cyclone forecast generation, interpretation, and communication. In 1998, ADPC pioneered in the region the local application of scientific breakthroughs in seasonal climate forecasting through demonstration projects. The Extreme Climate Events Program (1998-2003) investigated long-term climate data to assess vulnerabilities of Indonesia, the Philippines, and Vietnam to El Niño and La Niña. Lessons were applied in the subsequent Climate Forecast Applications Program (2003-8), which is demonstrating how season-ahead climate forecast is used in reducing vulnerabilities of climate-dependent sectors, such as agriculture. The program on Climate Forecast Applications in Bangladesh (2000-3) generated three-tiered flood forecast products (with lead times 5-7 days, 20-25 days, and 1 month or more), which are useful in various risk reduction decision-making processes, such as in preserving livelihoods, logistics planning for flood management, and long-term agriculture and water management. The subsequent program on Flood Forecast Technology for Disaster Preparedness in Bangladesh (2006-9) would transfer the flood forecasting technology to Government of Bangladesh institutions, and demonstrate the application of flood forecasts of varying lead times to strengthen disaster risk management in the agriculture sector. This has allowed ADPC to draw experiences from these countries, to assist most needy countries in the region. Recently, three experienced climate scientists joined ADPC's team of forecast applications and disaster management experts to support the delivery of enhanced weather and climate forecast products to demonstrate their application in enhancing coastal community resilience to natural disasters in Cambodia and Vietnam (2005-8) and support the flood forecast technology transfer in Bangladesh (2006-9).

#### Inquiries

**Mr. Falak Nawaz**  
Manager, Training Resource Group

#### Asian Disaster Preparedness Center (ADPC)

P.O. Box 4, Klong Luang  
Pathumthani 12120, Thailand  
Tel: (66 2) 516 5900-10 ext. 333, 328, 153, 432  
Fax: (66 2) 524 5360, 524 5350, 524 5382  
Email: [tedadpc@adpc.net](mailto:tedadpc@adpc.net)  
Website: <http://www.adpc.net>

# CRM

## Regional Training Course on Climate Risk Management: Science, Institutions, and Society

21 April-2 May 2008  
Bangkok, Thailand



## Purpose of the course

The course aims to build the capacity of professionals to manage risks associated with climate variability, change, and extremes. It builds upon the Asian Disaster Preparedness Center's two decades of experience in disaster management, facilitating regional cooperation and building capacities of disaster management institutions at all government levels, disaster management practitioners and communities, and a decade of experience in institutionalizing climate information applications for disaster mitigation. It incorporates case studies and sectoral examples from ADPC's climate risk management programs and projects all over Asia. Upon completing the course, participants will be able to: 1) design early warning systems for climate-related risks; 2) design community-based climate risk management, climate forecast applications, and climate change adaptation projects, and 3) develop tools to mainstream climate risk management practices into development programs and policies.

### ADPC's Key Climate Risk Management Programs and Projects

- Extreme Climate Events Program: Indonesia, Philippines, and Vietnam (1998-2003)
- Climate Forecast Applications in Bangladesh (2000-3)
- Climate Forecast Applications for Disaster Mitigation in Indonesia, Philippines, (2003-8), and East Timor (2007-9)
- Climate change impact assessment and livelihood adaptation options in drought-prone areas (2004-5)
- Enhancing early warning system through application of climate and flood forecast information for disaster preparedness and mitigation in Bangladesh agriculture sector (2004-5)
- Flood forecast technology for disaster preparedness in Bangladesh (2006-9)
- Enhancing community resilience to natural disasters in Vietnam and Cambodia (2005-2008)
- Climate Change Adaptation Targets in Mongolia (2007-8)

## Objectives

Upon completion of the CRM training, participants will learn how to:

- interpret weather and climate forecast products and climate change scenarios issued by national meteorological agencies and global forecasting centers
- develop weather and climate impact outlooks based on climate information
- develop effective strategies for climate risk prevention and mitigation at different timescales
- communicate probabilistic climate forecast information to users
- apply risk management processes in order to identify, assess and deal with climate-related risks
- develop strategies to mainstream climate risk management into development planning
- develop livelihood adaptation options and good practice menus to deal with climate change, variability, and extremes.
- apply participatory community-based decision making principles in climate risk management

## Training strategy

The course will promote participatory learning and encourage participants to think creatively. It will utilize contemporary adult learning methodologies, including:

- Interactive and participative lectures
- Group discussions
- Classroom exercises
- Work sheets
- Climate risk mapping
- Discussions
- Presentation
- Case studies
- Research
- Instructional games

Certificates will be awarded to participants on successful completion of the training programme.

## Course curriculum

### Module 1: Introduction to climate risk management

This introductory module is designed to inform participants of the:

1. Science of climate change, variability, and predictability
2. Global climate risk situation
3. Regional climate risk situation
4. Local and location-specific climate risk
5. Terminologies used in climate risk management
6. Climate and society
7. Climate impacts
8. Development of climate risk management programs
8. Climate risk management processes
9. Climate risk analysis

### Module 2: Understanding climate forecast products

This module will introduce forecast products, tools and methods. This includes

1. Drivers of weather and climate
2. Types of weather and climate forecasts
3. Forecast lead time
4. Forecast reliability
5. Relevance of forecast products to disaster prevention
6. Probabilistic forecast products
7. Global Climate Model-based ensemble forecasts
8. National, regional and international forecasting systems and organizations

### Module 3: Understanding climate risk management process

This module will discuss the steps involved in climate risk management and disaster preparedness:

1. User need assessment
2. Assessing the relevance of forecast products
3. Interpretation of forecast products
4. Preparing impact outlooks
5. Preparation of alternative management plans, prevention and mitigation strategies
6. Communicating weather and climate information
7. Economic value of forecast products

### Module 4: Sectoral examples of climate risk management

Key elements, issues and challenges in climate risk management in various sectors are discussed in this module. A series of case studies and methodologies, developed from ADPC's regional and national programs in the past 10 years, will be presented:

1. Agriculture and allied sectors
2. Water resources management
3. Food security
4. Urban climate risk management

5. Country examples on drought, flood, flash flood, cyclone disaster management
6. Disaster damage and loss assessment
7. Climate and health
8. Tourism
9. Environment
10. Energy
11. Transport

### Module 5: Climate change, variability, and extremes

This module will discuss a range of skills necessary to understand and manage future climate change impacts. The module includes:

1. Science of climate change
2. Climate change scenarios
3. Climate change, variability, extremes, and disaster linkages
4. Climate change and risk environments (coastal, small islands, floodplains, arid and semi arid zones, highlands, glaciers, and high mountains)
5. Institutional adaptation to climate change (national, sub-national, and local)
6. Mainstreaming climate change risk concerns into developmental planning

### Module 6: Community-based participatory climate risk management

The module will highlight the challenges and issues which may be encountered in community-based climate risk management. The module introduces case studies and success stories in several countries of this region. It will cover the following:

1. Community risk perception analysis
2. Community driven risk management processes
3. Participatory decision-making with stakeholders
4. Climate risk communication process
5. Climate Field Schools
6. Climate Forecast Producer and User Forums

### Module 7: Institutionalization and mainstreaming considerations

This concluding module will discuss the key considerations for integrating climate risk management strategies into development programs. It will cover:

1. Decision making environment and climate risk management
2. Relevance of climate change in sectoral decision making and programs
3. Assessing economic value
4. Incorporating differential and equity considerations into climate risk management
5. Institutionalization processes
6. Program targets and indicators

### Matching participant needs

Participants will be asked to send details of their climate risk and disaster management responsibilities to ADPC as part of the course expression of interest and application process. This information will be utilized by presenters and resource persons prior to and during the course to ensure that course materials and activities are tailored to participants' needs.

### Participants

The course is tailored for senior level disaster managers and development workers from the Asian and Pacific regions, including officials of national and provincial governments, extension officers, defense forces, and emergency services, staff of training institutes, institutions of public administration, national and international NGOs, IFRC/ICRC, UN agencies and the private sector. A limited number of participants from other regions will also be