



# WORKSHOP ON NATURAL DISASTERS AND CLIMATE CHANGE IN ASIA

5 - 7 November 2012

Equatorial Hotel, Bangi

Organised by:



In Collaboration with:

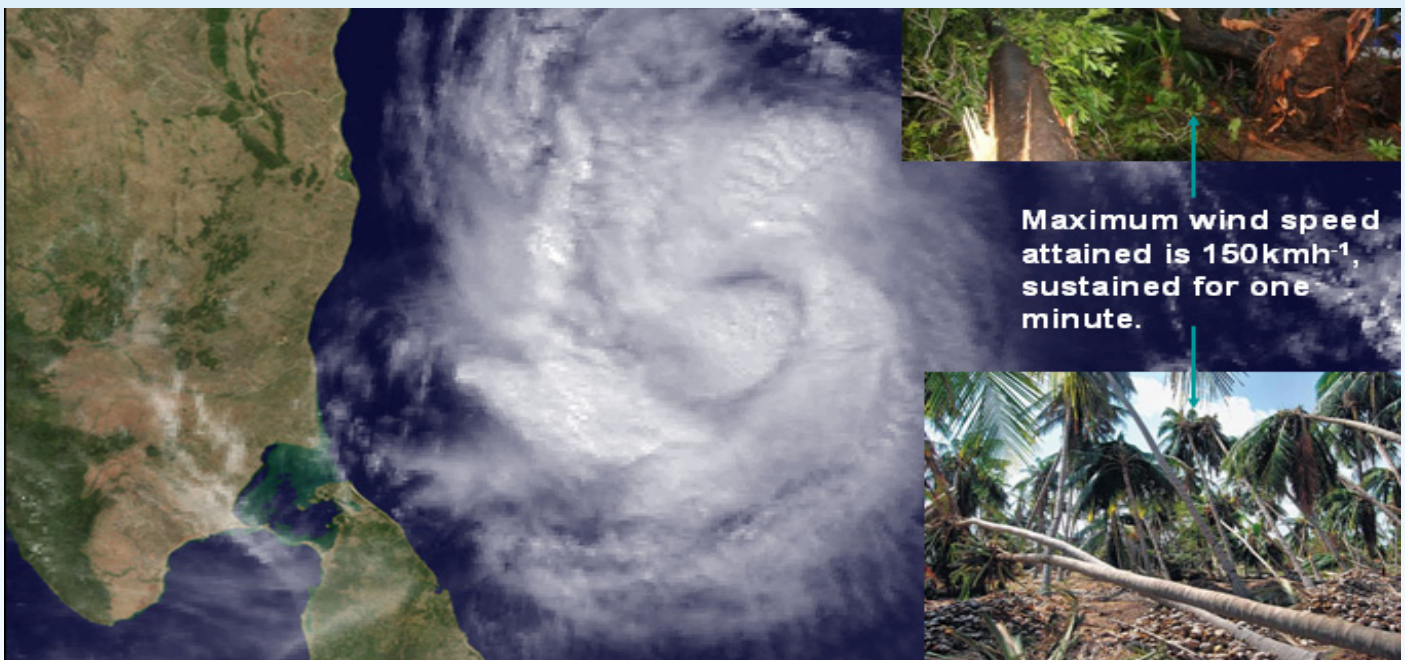


# INTRODUCTION

Natural disasters are having a large and growing impact on societies and economies in Asia. The impact of natural disasters may increase as a result of climate change and increased variability. Also the nature and extent of these hazards is changing as a result of climate change, as well as rapidly changing patterns in agriculture, loss of forest cover, rapid urbanisation and extractive industries. Many relevant aspects of this problem are characteristic to Asia, e.g. hazards of monsoon rains and tropical cyclones, and vulnerability from extensive coastal and island infrastructure.

Recently the Intergovernmental Panel on Climate Change (IPCC) has issued a summary report on Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation. The report focuses on the relationship between climate change and extreme weather and climate events, and also the impacts of these events on vulnerable societies. The long term implications for sustainable development are also emphasized. The report integrates perspectives from several historically distinct research groups studying climate science, climate impacts, adaptation to climate change, and disaster risk management.

A high level workshop for researchers, practitioners and policy makers in Asia is to be held in order to review these findings, and to consider action plans for their implementation. These should include stronger interactions in future at a regional level (*Srinivasan and Hunt, 2011, Current Science, Vol. 101, No. 10, 1269-1270*). This will be an important feature of the discussions at the Workshop.



NASA Satellite Image of Cyclone Thane on Dec 28<sup>th</sup>, 2011

## OBJECTIVES

The Workshop aims to review and publicise progress in Asia regarding research on natural disasters and climate change, and policy implications. The specific objectives are as follows:-

1. Provide a platform to bring together researchers, practitioners and policy makers from the natural disasters and climate change communities;
2. Review the role of science and technology in collaboration with policy makers for managing the risks of natural disasters and climate change especially for vulnerable communities; and
3. Explore the establishment of an affiliation of networks and institutions working on issues related to natural disasters and climate change in Asia, especially better exchange of information and collaboration between operational and research centres.



# PROGRAMME OUTLINE

Prominent scientists, researchers, practitioners and policy makers from the natural disasters and climate change communities have been invited to present papers. Thematic panel sessions are planned at the end of each day.

## DAY 1

Day 1 will commence with a high level introduction of the IPCC summary report on Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation. Subsequent presentations will highlight developments in climate change science and prediction in Asia. The Panel discussion will concentrate on how advanced the science is and what progress is needed, as well as identify knowledge gaps in the region. Experts from major climate centres in China, Korea, Japan, Australia and Malaysia have been invited to present papers in addition to the following:-

### **Variations of Typhoon Activity: From Annual to Centennial**

*Prof. Johnny Chan, Hong Kong City University*

### **Multi-scale Multi-physics Simulations for Natural Disasters under Climate Change**

*Dr. Keiko Takahashi, Japan*

### **Introduction of CORDEX-East Asia Databank**

*Dr. Kyungsuk Cho, Korea*

### **Development in the Operational Forecasting of Severe Weather Events in the Context of a Changing Climate**

*Dr. Chris Gordon, Meteorological Office, United Kingdom*

### **Current understanding of climate change and knowledge gaps in Malaysia**

*Prof. Fredolin Tangang, Universiti Kebangsaan Malaysia & IPCC Working Group I Vice-Chair*

### **Climate Change and Weather Extremes in Malaysia**

*Dr. Wan Azli Wan Hasan, Malaysian Meteorological Department*

### **Droughts and Its Impacts in China**

*Prof. Zhuguo Ma, China*

## DAY 2

Day 2 will show-case a collection of presentations on natural disasters, impacts and climate change in Asia. The science and practice of disaster preparedness for vulnerable communities in the advent of climate change will be highlighted. The Panel discussion will concentrate on how to harmonise disaster risk management and adaptation approaches for a changing climate. Experts from Thailand, The Philippines, Indonesia and Pakistan have been invited to present papers in addition to the following:-

### **Exploring Aerosol-cloud Links in Droughts and Floods over Southern India**

*Prof. Sat Ghosh, Velore Institute of Technology, India*

### **Geohazards in a Changing Climate**

*Prof. Joy Jacqueline Pereira, Universiti Kebangsaan Malaysia*

### **Beyond Greenhouse Gases: Direct Hydroclimatic Consequences of Megapolitan Expansion**

*Dr. Matei Georgescu, Arizona State University, USA*

### **The Effect of Climate Change on Long Waves Propagating Onshore**

*Mr. Christian Klettner, Singapore*

### **On the Use of High Resolution Lidar Data in Accurate Flood Forecasting**

*Prof. Guss Stelling, Netherlands*

### **The Impacts of Climate Change in Lao PDR**

*Ms. Ella Marley-Zagar, Laos*

### **Disaster Mapping in the Advent of Climate Change**

*Prof. Alfredo Mahar Francisco A. Lagmay, Philippines*

### **Meteorological Hazard Risk Reduction on Agricultural Production of Sikep Samin Communities, in District Sukolilo, Pati Regency, Central Java Province, Indonesia**

*Dr. Eko Paripurno Teguh, Universiti Pembangunan Nasional, Indonesia*

### **Thailand Floods 2011: Causes and Long Term Measures**

*Prof. Sucharit Koontanakulvong, Thailand*

## DAY 3

Day 3 will focus on policy, social dimensions and future collaborations. The closing session is a high-level dialogue involving policy makers, practitioners, researchers, local community representatives and the corporate sector from the region. Issues to be discussed include how research and education can support the integration of disaster management and climate change adaptation in the policy domain; how science can support risk sharing and transfer mechanisms; and how to forge genuine partnerships between researchers, practitioners and policy-makers from the natural disasters and climate change communities. Experts from the ASEAN Secretariat, the Mekong River Commission and India have been invited to present papers in addition to the following:-

### **Climate-Related Disasters in South-East Asia: Natural or Human-Induced?**

*Prof. Pak Sum Low, YSD-UKM Chair of Climate Change, Universiti Kebangsaan Malaysia*

### **Does Adaptive Capacity Mean Effective Policies?**

*Dr. S.V.R.K. Prabhakar, Institute for Global Environmental Strategies (IGES), Japan*

### **Climate Disasters and Climate Change in Vietnam: Tasks, Strategies, and Action Plans.**

*Dr. Nguyen Van Thang, Institute of Meteorology, Hydrology and Environment (IMHEN), Vietnam*

### **The Grandest Challenge: Enabling Policy and Practice Through Networks and Platforms**

*Tan Sri Dr. Jemilah Mahmood, Khazanah Nasional Berhad*

### **Vulnerability Analysis of Low Income Systems to the Climate Change Threat**

*Prof. Khairulmaini Osman Salleh, University of Malaya*

### **Implementation of Global Risk Management Strategies from a Macro - Governmental Perspective**

*Prof. Mohd Rasid Hussin, Universiti Utara Malaysia*

# THEMES AND FORMAT

The Workshop on natural disasters and climate change will cover the themes of science, encompassing leading research developments on the nexus of natural hazards, extreme events and climate change; impacts and technical aspects including early warnings, emergency response, human health and well-being, livelihoods, security, vulnerability and adaptation issues; and policies, investments and international collaboration in adaptation, engineering solutions and social capacity building. Presentations, panel discussions and poster displays will be held on each of the three major themes.

## OUTCOMES & OUTPUT

The expected outcome of the Workshop is improved networking of scientists from the natural disasters and climate change communities as well as heightened awareness of regional activities and expertise. The proposed Asian Climate Change Research Initiative (ACRI) will be promoted. A further plan for ACRI will also be constructed. Press reports and reports to scientific journals based on the content of the Workshop will be published.

## REGISTRATION

There is no registration fee but participation is on a first come-first-served basis because places are limited. Interested parties are required to fax the enclosed form to the Secretariat by **21 October 2012**.

**(Fax: +603-8927 5629; Email: [seadpri@ukm.my](mailto:seadpri@ukm.my))**

**Please contact SEADPRI-UKM for further information. (Tel : +603-8921 4852/4855/4858)**



Photo by SEADPRI-UKM

## TARGET AUDIENCE

Scientists, researchers, practitioners, policy makers and representatives from non-governmental, community based and business organisations from the natural disasters and climate change communities as well as policy networks active in Asia. **Graduate students and young researchers are welcome to display posters at the event.** Please contact SEADPRI-UKM for further information.



Photo by SEADPRI-UKM

## CONTACTS FOR FURTHER INFORMATION

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