

**WORKSHOP ON MANAGEMENT OF NATURAL DISASTERS  
(FLOODS & CYCLONE), ASIAN INSTITUTE OF TECHNOLOGY,  
BANGKOK (THAILAND), JANUARY 24-27, 2000**

**PARTICIPATING COUNTRIES : 9 (8 FROM THE MEMBER COUNTRIES OF THE CENTRE)**

**NUMBER OF PARTICIPANTS : 10**

A natural disaster strikes without notice or warning. Although modern science has to some extent been able to give advance indication of the movement of cyclones, rains and floods, which sometimes minimizes the loss of human lives, the destruction of infrastructure and the burden of the relief and rescue operations takes a heavy toll of country's resources. For the affected people it also leads to loss of business, decline in production and loss of income. There is hardly a year when some or the other part of the 'South' does not face a severe flood, a cyclone or an earthquake. It is accepted that natural disasters cannot be prevented. However proper management of preparedness and mitigation programmes can substantially reduce their adverse societal and economic impact.

The Centre has, among others, identified Natural Hazard Mitigation as an area of priority. Being aware of the growing number of disasters in the recent past in member countries, which are effected by or are prone to these disasters, the Centre in association with the Asian Institute of Technology (AIT), Bangkok, Thailand organised a 4-days workshop on 'Management of Natural Disasters' during January 24-27, 2000 in Bangkok (Thailand), which mainly focussed on cyclones and flood disasters. The AIT is a well-known Centre of learning and postgraduate studies in science and technology and its Regional Environmental Management Centre (REMC) has a major component of its research programme devoted to natural disaster management.

The workshop was attended by one representative each from Bangladesh (Mr. Aminul Kawser Khan of Emergency Support Corps in Dhaka), India (Dr. Khem Raj Gupta of the Department of Science & Technology, Government of India), Indonesia (Ir. Wisyanto of the Agency for the Assessment and Application of Technology for Disaster Mitigation, BPPT, in Jakarta), Malaysia (Mr. Kamal Bin Hussain of the National Security Division in Selangur), Mauritius (Mr. Veersingh Boodhna from the Prime Minister's Office), Nepal (Mr. Krishna Prasad Parajuli of the Ministry of Science & Technology, Kathmandu), Syria (Dr. Abdul Kader Melhem of the University of Aleppo) and Vietnam (Mr. Daong Quang San from the Ministry of Science, Technology and Environment) and two representatives from Thailand (Ms. Pacharee Ongchotiyakul and Ms. Amraporn

Jitprapai of Bangkok Metropolitan Administration in Bangkok). Egypt and Pakistan, which had nominated their representatives, however could not participate.

Prof. (Dr.) Suphat Vongvisessomjai, Director, Regional Environmental Management Centre (REMC), Prof. (Dr.) Ashim Das Gupta, Coordinator, REMC, Dr. Lal Samnarakoon, Chairperson, GIS Application Centre (GAC), AIT, Mr. Le Huu Ti, Economic Affairs Officer, Water and Mineral Resources Section, Environment and Natural Resources Development Division of ESCAP in Bangkok, Prof (Dr.) Jamilur Reza Choudhury of the Civil Engineering Department of Bangladesh University of Engineering & Technology, and Dr. TVSR Appa Rao, Director, Structural Engineering Research Centre (SERC), Chennai, India constituted the workshop faculty.

Mr. M. Fazlur Rahman, President of the Governing Council of the NAM S&T Centre, in his inaugural address stated that due to the continuing damage caused to environment and climate, the harmony between man and nature has been disturbed. Various forms of disasters are visiting the poor and developing world including epidemics, earthquakes, floods, cyclones and even contamination of underground water by highly poisonous chemicals like arsenic compounds. There was therefore a need for intensifying R&D including study of tectonic movement, drug resistance in diseases causing epidemics and for multi-disciplinary studies in climate changes which result in floods, cyclones and rise in sea level. He complimented Prof. Maroio T. Tabucanon and Director of NAM S&T Centre for setting up an admirable South-South cooperation in S&T under their agreement for arranging the workshop.

The inaugural session was followed by an invited plenary presentation by Prof. J.R. Choudhury of Bangladesh University of Engineering and Technology. He presented a vivid picture of the frequent cyclones and floods in Bangladesh and also the steady progress made by Bangladesh in proper management of these disasters over the years which has resulted in drastic reduction of loss of human life and infrastructure in Bangladesh since then.

The technical sessions in the workshop dealt with scientific and technical aspects of cyclones and floods, mitigation of cyclones and storm surge disasters, mitigation of water related disasters, advanced technology involved in disaster management analysis and assessment, R&D for cyclone disaster mitigation and assessment and management of related social issues. The programme included presentation of country papers on state of natural disasters in participating countries, which were presented by Mr. Aminul Kawser Khan from Bangladesh, Dr. Khem Raj Gupta from India, Ir. Wisyanto from Indonesia, Mr. Kamal Bin Hussin from Malaysia, Mr. Veersingh Boodhna from Mauritius, Mr. Krishna Prasad Parajuli from Nepal, Dr. Abdul Kader Melhem from Syria and Mr. Daong

Quang San from Vietnam. The council report of Pakistan was circulated in the absence of Mr. Muhammad Munir Sheikh who could not attend.

Prof Ashim Das Gupta presided over the concluding session, where a set of recommendations as follows was adopted.

### **Vision**

By 2020, the countries of different regions will benefit from mutual co-operation in disaster management by sharing data/information, experience and resources for minimizing risk.

### **Recommended Activity**

- To bring out a publication, which will include country papers and technical presentations made at the workshop. Invited papers on the specific issues may also be included. The publication is to be materialized by the end of April 2000.
- To form a working group among the countries / organisations concerned, which will take steps to carry out necessary activities regarding natural disaster management. The group is to be coordinated by NAM S&T Centre and will also include representatives from REMC, SERC and other relevant regional research centres and donor agencies.
- To focus on risk assessment and vulnerability analysis (e.g. workshops/training courses can be organized).
- To organize workshops on arsenic contamination in groundwater, peat fire and haze in order to broaden the understanding on these comparatively less understood hazards.

### **General**

- To introduce and promote disaster management awareness from primary schooling to adult education.
- To emphasize on R&D related to disaster management.
- To promote regional and international co-operation mechanism for natural disaster management and preparedness (e.g. through existing UN and other regional organizations like ASEAN, SAARC, Arab League, OAU, OAS etc.)
- To promote exchange of information, knowledge and expertise at national and regional levels.

- To communicate hazard warnings and disaster management instructions in a people friendly language.
- To ensure continuity of the disaster management programmes as part of the national development plans.
- To create data bases at both national and regional levels to emphasize on gender issues in disaster management.