

## **International Training Program on Total Disaster Risk Management**

Kobe, Japan  
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### **I. Background and rationale**

In today's fast changing global environment, the detrimental consequences of disasters on society, economy, natural environment, and even politics, cannot be overemphasized. More so in developing countries, the impact of disasters inevitably goes beyond their immediate devastation, as the perennial toll on human lives, properties and resources exacerbates poverty and setbacks economic development.

Global disaster statistics for 1996-2000 revealed staggering economic costs estimated at US\$ 235 billion and 425,000 lives lost (CRED International Disaster Database). Asia bears much of the brunt. Nearly half of the world's major natural disasters, recorded over more than three decades, occurred in the region. As a result, Asia has become the world's most disaster-prone region, absorbing 80 percent of the total affected populations, 40 percent of the total deaths, and 46 percent of the total economic losses (CRED statistics for 1997-2001).

Notwithstanding the fact that the United Nations, national governments and non-governmental organizations have made significant strides in promoting and establishing programs and strategies for disaster reduction and response, many countries and local communities, especially in Asia, are becoming increasingly vulnerable to disasters as technological, environmental, political and economic change combine to increase disaster risks. Moreover, socio-economic studies have revealed that the secondary effects and indirect costs of disasters have long-term effects on societies, regardless of their level of development.

UN ISDR reported that the number of people at risk has been growing by 70 to 80 million per year, and more than 90 percent of population growth is in the developing world. Accordingly, the populations vulnerable to disaster risks are increasing in Asia. While Asian countries have developed at varying levels their respective capacities and capabilities in disaster reduction and response, many communities remain vulnerable to disasters as poverty prevails and populations and population densities grow rapidly. Unfortunately, the increasing prevalence of disaster risks and the growing vulnerability of communities to disasters tend to reduce the effectiveness of local capacities and coping mechanisms.

The enormity of the disaster problem at the global, sub-regional and local levels, including its detrimental impact on poverty and socio-economic development and security, and the growing vulnerability of communities, continues to challenge the effectiveness of existing approaches, strategies and mechanisms for disaster reduction and response. While contemporary disaster management promotes the comprehensive approach that embraces all the phases of the disaster management cycle, in actuality, much focus has been on disaster response and relatively lesser activities have been undertaken on disaster prevention and mitigation. Moreover, the constant challenge to translate effectively disaster reduction policies and approaches into concrete program strategies and activities at the community and local levels still remains.

The foregoing context has characterized disasters as an important development issue and as a long-

term problem that requires government priority attention and action. Particularly in Asia, the current situation has presented the critical need for a holistic and proactive approach to disaster reduction which focuses on disaster risks and the vulnerability of communities, and emphasizes multi-level, multi-dimensional, and multi-disciplinary approach in coordination and collaboration among all stakeholders in addressing gaps in the disaster management cycle. This approach has now evolved to be called the Total Disaster Risk Management Approach or TDRM Approach.

The TDRM Approach has been developed jointly by the Asian Disaster Reduction Center and UN OCHA Asian Disaster Reduction Unit through a series of consultative forum and workshops in the region. Since its inception as a course of action at the First Consultative Meeting on Regional Cooperation in Disasters held in Katmandu, Nepal, in July 2001, the initial concept of TDRM had been developed and presented to various organizations, academicians and disaster management practitioners, generating myriad comments and appreciation.

Moreover, the approach was received positively during the conferences of representatives of Asian governments held in January 2002 in New Delhi, India, and by non-government organizations from Asian countries held in February 2002 in Kobe, Japan. It was also shared to important regional organizations in June 2002 in Bangkok, Thailand. In pursuit of TDRM, a regional workshop participated in by government delegates, was held in August 2002 in Kobe, Japan, which explored possible ways of piloting TDRM at the local level. More recently, TDRM, exemplified by best practices in Asia, was discussed extensively in the Asian Conference on Disaster Reduction: Contribution to the Review of the Yokohama Strategy and Plan of Action held in January 2003 in Kobe, Japan. The strengthened cooperation and collaboration among governments, international and regional organizations, and NGOs in the region effectively facilitate the promotion and adoption of the TDRM Approach at various levels.

The TDRM Approach builds on the gains of the International Decade for Natural Disaster Reduction (IDNDR), subsequently, the International Strategy for Disaster Reduction, and other related endeavors. It integrates existing knowledge and techniques on disaster reduction and response, and risk management. Inherent to this approach is effectively communicating these knowledge and techniques at all levels and facilitating the appreciation of governments of the relevance of disaster risk management in achieving sustainable development objectives.

Essentially, the TDRM Approach is a purposive viewpoint that addresses holistically and comprehensively the various concerns and gaps in the disaster management cycle. In this regard, it necessarily focuses on the underlying causes of disasters, the conditions of disaster risks and the vulnerability of the community. It also emphasizes multi-level, multi-dimensional and multi-disciplinary cooperation and collaboration, in achieving effective disaster reduction and response. This approach intends to integrate, complement, and enhance existing disaster reduction and response strategies.

Consequently, the approach promotes effective integration of stakeholders' action through multi-level, multi-dimensional and multi-disciplinary coordination and collaboration, a critical strategy toward improving disaster reduction and response. Also, it facilitates broad-based participation in policy and program development in disaster reduction and response as they relate with other development concerns, such as poverty reduction, land use planning, environmental protection, and food security. However, in adopting the TDRM Approach, accurate and reliable hazard, vulnerability and disaster risk information is vital. The approach attaches great importance to hazard mapping and vulnerability and risk assessments as a fundamental tool for good decision-making and efficient sharing of disaster risk information.

Considering the immediate and long-term benefits of human resource development in disaster reduction, the ADRC and UN OCHA/ADRU have collaborated to conduct the International Training on Total Disaster Risk Management in June 2003. This international training programme intends to train trainers and to facilitate the promotion and adoption of the TDRM approach in Asian countries. It shall allow the sharing of country experiences and best practices that exemplify the TDRM Approach. It shall also focus on marginalized yet critical issues in disaster reduction, particularly hazard mapping, and vulnerability and risk assessments, and disaster damage and needs assessment.

Moreover, it is desired that the propagation of the TDRM Approach through training effectively enhances coordination and integration of stakeholders' action in disaster reduction, thereby enabling national and local governments to develop relevant policies and programmes, and to reduce effectively local vulnerabilities to disasters.

## **II. Development objective**

This international training programme aims to enhance and institutionalize the capacity and proficiency enhancement in the TDRM Approach in Asian countries, particularly in the marginalized yet critical issues of hazard mapping, vulnerability and risk assessment, and disaster damage and needs assessment, among others. It endeavours to demonstrate the importance of disaster reduction to the pursuit of sustainable development through examples of best practice in Asian countries.

For its initial target beneficiaries, the training focuses on government officials and focal persons in national disaster coordinating bodies, national government agencies, and/or provincial governments, especially those willing to take leadership challenges and able to commit to implementing the same training in their respective country.

## **III. Expected outputs**

The expected outputs of this international training programme are the following:

1. A set of reference training manuals and materials on TDRM, including the proceedings of the training sessions; and
2. A total of 45 country representatives (with at least two from each Asian country) and participants from UN/international non-governmental organizations have participated and their understanding, knowledge and skills on TDRM are enhanced.
3. At least 10 echo-training programmes are organized in the participating countries within 2003-2004.
4. Establishment of a collaborative network of advocates and practitioners of the TDRM Approach.

## **IV. International training programme design**

The international training programme combines two component training activities: modular training sessions and a planning activity.

*Modular Training Sessions.* This component is intended to introduce the concepts and essentials of the Total Disaster Risk Management Approach and the importance and relevance of hazard mapping, vulnerability and risk assessment, and disaster damage and needs assessment. It shall

also present the current best practices, including standards, systems and technology, and effective programme activities in disaster reduction in Asian countries. Moreover, this training component facilitates the sharing of country experiences and conveys to the participants important knowledge and practical skills in undertaking and applying hazard mapping, vulnerability and risk assessments, and damage and needs assessments in disaster reduction and response efforts.

*Planning Activity.* This activity is designed to facilitate the preparation of an echo-training program on TDRM and networking among the participants. It also facilitates the sharing of current training initiatives, identifying existing training gaps and needs, and recommending strategies for adoption of the TDRM approach at the country level.

## **V. Training methodology**

The training methodology shall combine different effective teaching and learning techniques, including lectures and presentations on best practices and country experiences, field exercise, group work and institutional visits. The medium of instruction is English.

## **VI. Standard training modules**

### **Module 1: Total Disaster Risk Management Approach: country experiences and best practices in Asia**

This module introduces the TDRM Approach, particularly its rationale and essential strategies. Through the presentation of best practices and practical applications at the national and local levels, this module demonstrates the importance of a holistic and proactive approach to disaster reduction and response, addressing existing gaps, and its relevance to the pursuit of sustainable development. It also conveys the need to focus on and understand the underlying causes of disasters through hazard mapping and vulnerability assessment, and the advantages of multi-disciplinary and multi-sectoral collaboration and cooperation in disaster reduction and response efforts.

#### *Expected learning outcomes*

Upon completion of this module, the participants shall have enhanced their understanding of the TDRM Approach, particularly its rationale and essential strategies, as applied to their respective work in disaster reduction and response. Moreover, they shall have learned from country experiences and best practices. Also, they shall have appreciated more profoundly the importance of effective disaster reduction and response to sustainable development.

#### *Component topics*

- Total Disaster Risk Management Approach for Sustainable Development
- Multi-disciplinary and Multi-sectoral Collaboration and Cooperation in Disaster Reduction and Response
- Strengthening Disaster Reduction and Response Capacity Through Reliable Information Systems: Importance of Hazard Mapping and Vulnerability Assessments
- The Humanitarian Principles in Disaster Work and the Role of UN OCHA
- Enhancing Disaster Reduction and Response Capacity Through Legal Frameworks and Clarity of Roles and Responsibilities of Stakeholders
- Applying Risk Management Approach to Disaster Reduction and Response: Practical

Applications

- Setting the Agenda for TDRM in Asia : Future Directions and Initiatives

**Module 2: Hazard mapping and vulnerability assessment: best practices in Asia**

This module discusses the fundamentals of hazard mapping and vulnerability assessments, and demonstrates the best practice methods of data collection, organization and analysis. It also elaborates the practical uses of hazard maps and vulnerability assessments in the various phases of the disaster management cycle, including preparedness for response.

*Expected learning outcomes*

Upon completion of this module, the participants shall have appreciated the basic concepts and importance of hazard mapping and vulnerability assessments in disaster reduction. Also, they shall have understood some best practice methods and techniques for data collection, organization and analysis and their useful applications in disaster reduction and response.

*Component topics*

- Quantifying Hazards and Risks for Disaster Loss Reduction
- Geography of Social Vulnerability
- How to Prepare a Flood Hazard Map
- Introduction to Flood Hazard Map Manual
- Applications and Advantages of Hazard Maps for Flood and Landslide Disaster Scenarios in Nepal
- Applications and Advantages of Hazard Maps for Volcanic Eruptions in the Philippines
- Applications and Advantages of Hazard Maps for Sabo in Japan
- Active Fault Mapping for Earthquake Disaster Reduction in Japan
- Practicum on Hazard Mapping: Field and Table-top Exercises

**Module 3: Disaster assessments: damage and needs**

This module explains the basic concepts and practical methodologies for evaluating and assessing the damage and needs in the aftermath of a disaster, including psychosocial impact and needs. This includes practical tools for reliable assessment of the magnitude of disaster impact, the disaster relief and recovery requirements (taking into consideration the inherent capacities of the affected community), and the useful applications of disaster information, including policy actions for appropriate preventive and response measures. It also focuses on the determination of priority action and analysis of options for effective disaster reduction in the context of sustainable development.

*Expected learning outcomes*

Upon completion of this module, the participants shall have understood the basic UN disaster assessment and coordination concepts and practical methods for assessing disaster damage and needs. Also, they shall have appreciated their useful applications in disaster situations in the context of sustainable development.

### *Component topics*

- Introduction to Disaster Assessment and Assessment Methodologies
- Exercise on Application of TDRM in Disaster Assessment

### **Module 4: Planning for echo-training at country level**

This module discusses current practices and relevant issues and concerns in human resource development in disaster reduction and response as input to planning echo training programmes at the country level. It also facilitates networking and sharing of current country initiatives, identifying training gaps and needs, and recommending strategies to adopt TDRM Approach at the country level.

### *Expected learning outcomes*

Upon completion of this module, the participants shall have learned and appreciated the relevant issues and concerns that need to be addressed in developing and implementing echo-training programmes in their respective countries. Participants shall also learn from each other's experiences and recognize training initiatives and needs, and thereby recommend appropriate strategies for improvement and implementation.

### *Component topics*

- Human Resource Development in Disaster Reduction and Response: Practices, Issues and Concerns in Bangladesh
- Training Initiatives on TDRM: Experiences of UN OCHA Kobe and ADRC
- Training Initiatives on TDRM: Experiences of UNDP Nepal
- Exercise on Sharing Current Training Initiatives, Identifying Training Gaps or Needs, and Recommending Strategies for Adopting the TDRM Approach at Country Level

## **VII. Selection criteria for country participants**

The basic criteria for the selection and nomination of the country participants by the national disaster coordinating body are the following:

- Work experience on disaster-related field;
- Willing to take leadership and challenges;
- Knowledgeable and familiar with basic concepts of disaster reduction and the existing disaster problem in the country;
- Recognizes the importance of training programmes in disaster reduction; and
- Able to communicate and interact effectively with other participants.

Upon completing satisfactorily the international training programme, the participants shall receive a certificate of attendance from the organizers.