## The Primer on Disaster Risk Management in Asia Mr. Aloysius J. Rego

Director of Knowledge Sharing and Partnerships and Co-Team Leader of Disastru Management System

team

Asian Disaster Preparedness Center (ADPC)

# Support

Office of the Foreign Disaster Assistance/United States Agency for International Development (OFDA/USAID) under the implementation of the Asian Urban Disaster Mitigation Program (AUDMP) of the Asian Disaster Preparedness Center (ADPC) and United Nations Development Programme (UNDP)

# Background

There have been substantial achievements, outputs, and lessons learned from the projects implemented by ADPC in the past and the experiences of the project partners of ADPC.

These achievements and lessons learned have been shared and showcased by ADPC at a variety of live forums in the past. Some of such events are:

- The Regional consultative Meetings of ADPC in year 2000, 2001;
- The Regional Lessons Learned Workshop Bangkok, 1999;
- The Regional Workshop on Best Practices in Disaster Mitigation, Bali, 2002;
- Various ADPC- and partner-sponsored training courses,
  e.g. the Earthquake Vulnerability Reduction for Cities course, Urban Disaster Mitigation and Flood Disaster Mitigation courses, DMC, CBDM courses;
- Various international symposia and workshops

#### What is a PRIMER?

Primer is defined by Oxford Dictionary as:

- 1. elementary textbook for teaching children to read.
- 2. introductory book. [Latin: related to primus, first]" (Pocket Oxford Dictionary).

Thus, a primer is a first or introductory text, but it also carries the connotation of a primary, fundamental, most important, and first-rate book.

## **Need for the Primer**

Most of the introductory books on disaster mitigation and/or management are rather outdated, representing the thinking and experience of over ten years ago. Since 1990, we have seen significant increases in vulnerability and risk, but we also have gained useful experience in hazards forecasting and awareness. We have made major advances in such areas as risk assessment, information management, understanding sustainability, and integrating risk reduction into urban development. The Primer may be needed to serve practitioners as a state-of-the-art guide and reference on good practices in urban disaster mitigation in Asia.

## Purpose

The Primer is expected to serve as a practitioner's manual for urban disaster mitigation by analyzing and presenting information on effective strategies, good practices, and current initiatives in disaster risk mitigation in Asia.

## Target audience

Disaster management practitioners

- Professionals in relevant subject areas such as urban planning, structural engineering, etc.
- Development workers

• Policy-makers and government administrators

These potential users may be working in a local, national, and/or international context.

#### Three volumes

General : Volume 1 - Disaster Risk Management Hazard specific: Volume 2 - Holistic Flood Risk Management Volume 3 - Earthquake Risk Management

## **Potential models**

Six major publications on disaster reduction:

1. Primer on Natural Hazard Management in Integrated Regional Development Planning, Organization of American States, Washington D.C., 1990.

2. Disaster Mitigation in Asian and the Pacific, Asian Development Bank, Manila, Philippines, 1991. 392 pages. And its companion publication, Disaster Management: A Disaster Manager's Handbook by W. Nick Carter, Asian Development Bank, Manila, Philippines, 1992.

3. Emergency Management: Principles and Practice for Local Government, Thomas E. Drabek and Gerald J. Hoetmer, Editors, International City Management Association, Washington D.C., 1991.

4. Natural Disaster Management (A presentation to commemorate the International Decade for Natural Disaster Reduction (IDNDR) 1990-2000), Jon Ingleton, Editor, Tudor Rose, Leicester, England, 1999.

5 .Disasters by Design: A Reassessment of Natural Hazards in the United States, by Dennis S. Mileti, National Academy of Sciences, Joseph Henry Press, Washington, D.C., 1999.

6. Living with Risk: A Global Review of Disaster Reduction Initiatives, preliminary version, prepared as an inter-agency effort coordinated by the ISDR Secretariat, Geneva, July 2002.

Three from the early 1990s, two from 1999, and one first published in July 2002 have been reviewed as predecessors related to this current effort. Each offers something content, a viewpoint or approach which can be taken into consideration in designing the Primer.

## Content

Generally, the contents of the Primer will draw from recent experiences, good practices, and lessons learned in urban disaster mitigation, in particular from the experience of:

- AUDMP project partners
- Other projects within ADPC
- Other individuals and institutions dealing with aspects of urban disaster mitigation within and outside Asia

The contents will include:

- Sustainable methodologies and approaches in disaster mitigation
- Traditional coping mechanisms and local knowledge
- Proven ideas, tools, policy options, and strategies drawn from the above sources

The Primer would also include such elements as:

- Preface
- Acknowledgments
- How to use the Primer
- Executive Summary
- Introduction
- Appendices

# **Proposed outline**

VOLUME I Disaster Risk Management (DRM) (General)

- Chapter 1 Purpose and Objectives of the Primer
- Chapter 2 Sustainable Development and Concept of DRM
- Chapter 3 Risk Assessment
- Chapter 4 Mitigation Planning and Implementation
- Chapter 5 Policy, Legal and Institutional Framework
- Chapter 6 Disaster Risk Communication and Public Awareness
- Chapter 7 Community-Based Disaster Risk Management
- Chapter 8 Promoting Safer Building Construction
- Chapter 9 Techno-financial Mechanisms for Risk Management
- Chapter 10 Capacity Building
- Chapter 11 Meeting Future Challenges through DRM

VOLUME II Holistic Flood Risk Management (Hazard Specific)

- Chapter 1 Purpose and Objectives of the Primer
- Chapter 2 Introduction
- Chapter 3 Climate Forecasts
- Chapter 4 Climate Forecasts Application
- Chapter 5 Flood Mapping
- Chapter 6 Early Warning
- Chapter 7 Watershed Management
- Chapter 8 Urban Planning
- Chapter 9 Structural Interventions
- Chapter 10 Community-Based Flood Management
- Chapter 11 Flood Proofing
- Chapter 12 Search and Rescue
- Chapter 13 Flood Shelters
- Chapter 14 Relief
- Chapter 15 Insurance

VOLUME III Earthquake Risk Management (Hazard Specific)

- Chapter 1 Introduction
- Chapter 2 Earthquake (EQ) Disaster Risk Management
- Chapter 3 Living with EQ
- Chapter 4 EQ Risk Assessment
- Chapter 5 EQ Disaster Reduction
- Chapter 6 EQ Emergency Response
- Chapter 7 EQ Rehabilitation and Reconstruction
- Chapter 8 Institutionalization of EQ Disaster Management
- Chapter 9 Designing a Road Map
- Chapter 10 EQ Major Issues
- Chapter 11 Recommendations

# **Primer Advisory Committee**

List of Advisory Committee Volume 1 : Disaster Risk Management 1) Mr. Kamal Kishore - UNDP/India 2) Mr. Stephen Bender - Organization United States 3) Dr. Neil Britton - EDM/Japan 4) Mr. Saroj Jha - UNDP/India 5) Dr. Allan Lavell - FLACSO/Costa Rica 6) Ms. Shirley Mattingly - Hawaii 7) Mr. Phetsavang Sounnalath-NDMO/Lao PDR 8) Mr. Aloysius Rego - ADPC/Thailand 9) Col. Brian Ward - ADPC/Thailand

10) Dr. Ian Wilderspin - IFRC/Thailand

Volume 2 : Holistic Flood Risk Management

- 1) Mr. Tom Brennan UNDP/ Thailand
- 2) Mr. Glenn Dolcemascolo ADPC/Thailand
- 3) Dr. Michael Ernst USAID/Thailand
- 4) Mr. A.N.Akhter Hossain-Bangladesh
- 5) Prof. H.R. Khan Bangladesh
- 6) Dr. Guna Paudyal- Bangladesh
- 7) Mr. A.R. Subbiah ADPC/Bkk
- 8) Mr. Dang Quang Tinh Dike Mgt/Vietnam

Volume 3 : Earthquake Risk Management

- 1) Dr. Fouad Bendimerad EMI/USA
- 2) Mr. Teddy Boen WSSI/Indonesia
- 3) Prof. J.R. Choudhury BRAC Univ/Bangladesh
- 4) Mr. Amod Mani Dixit NSET/ Nepal
- 5) Mr. Manu Gupta SEEDS/India
- 6) Dr. Ravi Sinha-IIT/India
- 7) Prof. Haresh Shah- WSSI/ USA

## The Team

Mr. N.M.S.I Arambepola- AUDMP Program Manager Dr. Buddhi Weerasinghe- Project Manager Mr. Rajesh Sharma Ms. Clarence M. Carlos Ms. Christine Apikul