



**Water-induced Disasters  
in the Hindu Kush-Himalayan  
Region**

A Regional Workshop  
December 2001

# about ICIMOD

The International Centre for Integrated Mountain Development (ICIMOD) is an international organisation devoted to development of the Hindu Kush-Himalayan region covering all or parts of eight sovereign states. Afghanistan , Bangladesh , Bhutan , China , India , Myanmar , Nepal , and Pakistan . The Centre is located in Kathmandu, Nepal. The primary objective of the Centre is to promote the development of an economically and environmentally sound mountain ecosystem and to improve the living standards of mountain populations.

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# Water-induced Disasters in the Hindu Kush-Himalayan Region

A Regional Workshop held in Kathmandu, December 11-14, 2001



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Organised by  
**International Centre for Integrated Mountain Development**  
and  
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# Author's Preface

Disasters are having an ever-increasing impact on the lives and assets of people all over the world, and this is particularly evident in the Himalayas where the unstable geology and natural phenomena make the mountain system one of the most hazard prone areas in the world. The Hindu Kush-Himalayan Region continues to suffer from a variety of water-induced disasters that have a direct bearing on the sustainable development of the region and on the 500 million people who live there.

ICIMOD has addressed the issues of land and water-related disasters from its inception. In January 2001 a new collaborative project, the 'Participatory Disaster Management Programme' (PDMP), started between His Majesty's Government of Nepal and ICIMOD, with the financial and technical assistance of the United Nations Development Programme (UNDP) and Japan Women in Development Fund (JWIDF). The objective of the programme is to improve Nepal's capacity at local and national levels in the areas of disaster preparedness and management, and to mainstream disaster management into regular development activities at both levels. ICIMOD's main responsibility is to conduct community hazard mapping and vulnerability assessments and to organise regional exchange of information on project experiences.

After almost a year of activity, a regional workshop on 'Water-induced Disasters in the Hindu Kush-Himalayan Region' was organised jointly by ICIMOD and UNDP/Nepal, with the aim of sharing information gathered so far and exchanging other important knowledge and experiences from the region. The aim of the workshop was to help those in the region develop a shared vision of regional cooperation and lay the basis for creating an information and knowledge-sharing network. It is hoped that such a network will ensure a two-way flow of knowledge, information, and expertise from the community to the national and regional levels and vice versa.

We believe that a workshop of this type is the ideal forum for sharing information on disaster preparedness and management and developing a better understanding of the implementation of disaster mitigation activities, especially those using a community disaster management approach. Thus we were very pleased to be able to organise this meeting, and now to share the highlights of the proceedings with a wider audience. The expert participants who came together for this workshop brought with them some 300 years of acquired knowledge on disaster management from the HKH region and from as far away as Japan.

The workshop was another milestone in developing a shared vision of regional cooperation for disaster mitigation. We hope that this brief account of the results will be of interest to all those concerned with disaster mitigation in the region, and will help take forward the process of developing regional information systems and regional response mechanisms, with a view to reducing the impact of and misery caused by water-induced disasters.

Li Tianchi

# Executive Summary

The regional workshop on 'Water-Induced Disasters in the Hindu-Kush Himalayan Region' was organised jointly by ICIMOD and the Participatory Disaster Management Programme (PDMP) in December 2001 with the aim of sharing and disseminating the knowledge and information generated during the first year of the programme together with other important experience, information, and knowledge from the region. The PDMP is a collaborative project between His Majesty's Government of Nepal and ICIMOD, with the financial and technical assistance of the United Nations Development Programme (UNDP) and Japan Women in Development Fund (JWIDF).

Thirty-nine participants attended from Bangladesh, Bhutan, China, India, Myanmar, Nepal, Pakistan, Japan, the Philippines, and Thailand. They included government officers, academics, and representatives from international development organisations and universities.

The aim was to achieve a shared vision of regional cooperation and to create the basis for an information and knowledge-sharing network for disaster mitigation in the HKH region.

Twenty-four presentations were given on the themes of risk and vulnerability analysis and hazard mapping; flash flooding, flood forecasting, and landslide hazard assessment; community awareness and disaster response preparedness; natural hazard, poverty, and development; disaster management information systems; and gender aspects of disaster management.

Intensive discussions led to the development of a set of conclusions and recommendations related to effective disaster management in the region. These were summarised in the 'Kathmandu Recommendations' as follows.

- Prepare comprehensive disaster management programmes and integrate them with national development plans
- Promote and support community-based disaster management programmes ensuring self-reliance, poverty alleviation, and women's participation in all processes
- Generate a standardised database on water-induced disasters
- Enhance regional cooperation and timely exchange of information regarding local and transboundary water-induced disasters
- Educate the public and ensure active involvement of the media in information dissemination on disaster management
- Promote basic and applied research on water-induced disasters in the region
- Support regional institutions like ICIMOD and national organisations involved in disaster management
- Continue and expand the PDMP project in the countries of the HKH region

# Acronyms and Abbreviations

ADPC	Asian Disaster Preparedness Centre
ADRC	Asian Disaster Reduction Centre
CBO	community-based organisation
DMSP	Disaster Mitigation Support Programme
DWIDP	Department of Water-induced Disaster Prevention
EU	European Union
GDP	gross domestic product
GIS	geographical information system
GLOF	glacial lake outburst flood
GNP	gross national product
GPS	geographical positioning system
HKH	Hindu Kush-Himalayas
HMG	His Majesty's Government (of Nepal)
ICIMOD	International Centre for Integrated Mountain Development
IDNDR	International Decade for Natural Disaster Reduction
IUCN	International Union for Conservation of Nature and Natural Resources
IUGS	International Union of Geological Sciences
JICA	Japan International Cooperation Agency
JWIDF	Japan Women in Development Fund
NGO	non-government organisation
NWG	national working group
PAGASA	Philippine Atmospheric Geophysical & Astronomical Services Administration
PDMP	Participatory Disaster Management Programme
RS	remote sensing
TU	Tribhuvan University
SNV	Netherlands' Development Organization
UNDP	United Nations Development Programme
USEDf	United States Environmental Diplomacy Fund
VDC	village development committee

**Group Photo:** Participants in the Regional Workshop on Water-induced Disaster Management, Hindu Kush-Himalayan Region, 11—14 December, 2001.



# Contents

Author's Preface  
Executive Summary  
Acronyms and Abbreviations  
Group Photo

<b>1 — Introduction .....</b>	<b>1</b>
Background .....	1
Objectives and Outcomes .....	2
<b>2 — The Opening Session .....</b>	<b>3</b>
The Workshop Speeches .....	3
Approach .....	4
<b>3 — The Workshop Sessions .....</b>	<b>5</b>
Session One .....	5
Session Two .....	6
Session Three .....	7
Session Four .....	8
Session Five .....	9
Session Six .....	10
Session Seven .....	11
Session Eight .....	12
<b>4 — ICIMOD Programmes on Mountain Disaster Management .....</b>	<b>15</b>
Past Activities (1995-2000) .....	15
Outputs and Publications .....	16
Summary of Past Recommendations .....	16
<b>5 — Group Work and Presentations .....</b>	<b>19</b>
Guidelines for Group Discussion .....	19
<b>6 — Kathmandu Recommendations .....</b>	<b>23</b>
The Process .....	23
The Kathmandu Recommendations .....	23
<b>Annexes</b>	
1 Opening Speech by the Honourable Minister Khum Bahadur Khadka, Minister for Home Affairs and Local Development of HMGN .....	25
2 Speech by Minister Takemichi OKABE Embassy of Japan, Kathmandu, Nepal .....	27
3 Workshop Schedule .....	29
4 List of Participants .....	31