

# **Sharing Knowledge on Disaster Risk Reduction in the Himalayan Region**

**Proceedings from two workshops on  
planning processes, social inclusion, and  
local knowledge for disaster preparedness**

# About the Organisations

## International Centre for Integrated Mountain Development

The International Centre for Integrated Mountain Development (ICIMOD) is an independent 'Mountain Learning and Knowledge Centre' serving the eight countries of the Hindu Kush-Himalayas – Afghanistan 🇦🇫, Bangladesh 🇬🇧, Bhutan 🇧🇹, China 🇨🇳, India 🇮🇳, Myanmar 🇲🇲, Nepal 🇳🇵, and Pakistan 🇵🇰 – and the global mountain community. Founded in 1983, ICIMOD is based in Kathmandu, Nepal, and brings together a partnership of regional member countries, partner institutions, and donors with a commitment for development action to secure a better future for the people and environment of the extended Himalayan region. ICIMOD's activities are supported by its core programme donors: the governments of Austria, Denmark, Germany, Netherlands, Norway, Switzerland, and its regional member countries, along with over thirty project co-financing donors. 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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DIPECHO stands for disaster preparedness in ECHO. It supports projects aimed at increasing the resilience of communities at risk of natural disasters by funding training, capacity building, awareness raising, early warning systems, and advocacy activities in the field of disaster risk reduction.

# Sharing Knowledge on Disaster Risk Reduction in the Himalayan Region

**Proceedings from two workshops on planning processes,  
social inclusion, and local knowledge for disaster preparedness**

- a) **Regional Workshop on Disaster Preparedness Plans for Natural Hazards, Kathmandu, 7-9 August, 2006**
- b) **Regional Workshop on Social Inclusion in Disaster Risk Reduction in the Himalayan Region – Sharing Knowledge and Bridging Gaps, Kathmandu, 9-11 May, 2007**

**Editors**

**Julie Dekens, Mats Eriksson, Vijay Khadgi, and Kesang Renchen**

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Mats G. Eriksson (Series Coordinator)  
Greta M. Rana (Consultant Editor)  
A. Beatrice Murray (Senior Editor)  
Dharma R. Maharjan (Layout Design)

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Agendas and lists of participants available at [www.disasterpreparedness.icimod.org](http://www.disasterpreparedness.icimod.org)

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### Workshop on Disaster Preparedness Plans for Natural Hazards, 7-9 August, 2006

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Excursion presentation: Bungamati Landslide

### Workshop on Social Inclusion in Disaster Risk Reduction in the Himalayan Region – Sharing Knowledge and Bridging Gaps, 9-11 May, 2007

Agenda

List of participants

### Other project publications

# Preface

Inhabitants in the Himalayan region are exposed to many natural hazards. The mountain ranges are young with an unstable geology, steep slopes, and a climate that is difficult to predict. As a result, the region is highly susceptible to natural hazards such as floods and flash floods, landslides, and earthquakes. In populated areas, these can lead to disaster. Vulnerable groups – the poor, women, and children – are often hit hardest.

Since its establishment in 1983, ICIMOD has dedicated much of its work to examining ways to reduce the risk of disasters from natural hazards, thereby working towards the decreased physical vulnerability of the people in the Hindu Kush–Himalayas. This work has encompassed training courses, hazard mapping, landslide mitigation and control, mountain risk engineering, watershed management, vulnerability assessment, and much more. ICIMOD has also fostered regional and transboundary dialogue for improved management of both the resources provided and the risks threatened by the big rivers in the Himalayan region. In this respect, sharing hydro-meteorological data and information among the countries in the region is of particular importance for mitigating the risk of riverine and flash floods in the major river basins.

These proceedings emanate out of two linked workshops organised as part of the project ‘Living with risk – sharing knowledge on disaster preparedness in the Himalayan region’, implemented by ICIMOD during a 15-month period in 2006 and 2007. The project was funded by the European Commission through their Humanitarian Aid department (DG ECHO) as part of the Disaster Preparedness ECHO programme (DIPECHO) in South Asia, and by ICIMOD. Through this project, ICIMOD has endeavoured to encourage knowledge sharing and to strengthen capacity among key practitioners in the field of disaster preparedness and management. This has been done through training courses, workshops, and knowledge compilation and dissemination, as well as through the establishment of a website ([www.disasterpreparedness.icimod.org](http://www.disasterpreparedness.icimod.org)).

During this project, eight publications have also been produced by ICIMOD: Two important workshops – one on disaster preparedness plans which looked at the status of disaster preparedness planning in the region and one at the end of the project which looked at social inclusion in disaster preparedness plans; baseline assessments of the disaster preparedness status in the four target countries, viz., Bangladesh, India, Nepal, and Pakistan; two case studies and a framework on local knowledge for disaster preparedness; and gender and vulnerability aspects in disaster risk reduction. The present and final publication documents the results of two important workshops – one early in the project which looked at the status of disaster preparedness planning in the region and one at the end of the project which looked at social inclusion in disaster preparedness plans. The publications, training sessions, and workshops were undertaken in the context of the ‘Hyogo Framework for Action 2005-2015’ which recommends that regional organisations should promote sharing of information; undertake and publish baseline assessments of disaster risk reduction status; and undertake research, training, education, and capacity building in the field of disaster risk reduction.

The long term mission to bring the Himalayan region to levels of acceptable disaster risk has only just begun. Most countries in the region are among the most disaster prone in the world, counting number and severity of disasters, casualties, and impact on the national economy. Only by strong commitment, hard work, and joint efforts can this situation be improved. It is ICIMOD’s hope that our collective endeavours will help improve disaster risk reduction in the mountain region we are committed to serve.

Mats G. Eriksson  
Integrated Water and Hazards Management  
ICIMOD

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The organisers would like to thank all the participants for their valuable contributions to making the two workshops successful events. For the first workshop, thanks go to the authors of the national status reports on Disaster Preparedness Plans: Masroor-ul Haq Siddiqi for Bangladesh, Chandrani Bandyopadhyay for India, Bhubanesh Kumar Pradhan for Nepal, and Asif Khan for Pakistan. These reports introduced a platform for discussion during the workshop. We thank the Department of Water Induced Disaster Prevention (DWIDP) and Nepal Society for Earthquake Technology (NSET) for their collaboration and guidance during the field visits. We also thank Practical Action for its valuable collaboration in group work activities.

For the second workshop, the organisers are indebted to Pratap Kumar Pathak for graciously launching three of the project books; to Xu Jianchu, Manjari Mehta, Dechenla Sherpa, and Brigitte Leduc for contributing to the group work; and to all the presenters for sharing their experiences.

# Acronyms and Abbreviations

ADPC	Asian Disaster Preparedness Centre, Bangkok
AIDMI	All India Disaster Mitigation Institute
BUP	Bangladesh Unnayan Parishad
CBDP	Community Based Disaster Preparedness Plans
CDMP	Comprehensive Disaster Management Programme
CEGIS	Centre for Environmental and Geographic Information Services
DM	disaster management
DMC	Disaster Management Centre
DRM	Disaster Risk Management
DP	disaster preparedness
DRR	disaster risk reduction
ERRA	Earthquake Reconstruction and Rehabilitation Authority, Pakistan
HFA	Hyogo Framework for Action
HKH	Hindu Kush-Himalayas
ICIMOD	International Centre for Integrated Mountain Development
IDNDR	International Decade for Natural Disaster Reduction
MoHA	Ministry of Home Affairs
NGO	non-government organisation
PRA	participatory rural appraisal
PVA	Participatory Vulnerability Analysis
RMC	Regional member country
SAARC	South Asian Association for Regional Cooperation
SOD	Standing Orders on Disaster



# Introduction to the Workshops

## Background

Through the project 'Living with Risk – Sharing Knowledge on Disaster Preparedness in the Himalayan Region', ICIMOD supported key practitioners with current knowledge in the field of disaster preparedness – mainly about floods, landslides, and earthquakes – and facilitated capacity-building in multi-hazard risk assessment, as well as providing a platform for interaction and exchange of experience. The prime target countries for the project are Bangladesh, India, Nepal, and Pakistan, with a focus on mountain regions within these countries.

The project was prepared according to the 'Hyogo Framework for Action 2005-2015', which says that "there is a need to enhance international and regional cooperation and assistance in the field of disaster risk reduction" through "use of knowledge, innovation, and education to build a culture of safety and resilience at all levels". The project was supported financially by the European Commission Humanitarian Aid department (DG ECHO) and implemented between 1 April 2006 and 30 June 2007.

Two workshops were held as part of the project: In August 2006, 60 key practitioners in the field of disaster risk reduction from Bangladesh, India, Nepal, and Pakistan met to discuss the status of 'Disaster Preparedness Plans for Natural Hazards'. The current status of disaster preparedness plans in the four target countries was reviewed to identify gaps and shortcomings in the policies and their implementation. The discussion highlighted the urgent need for communication, cooperation, and coordination among key actors in order to overcome gaps and shortcomings.

In May 2007, 60 key practitioners met again to discuss the importance of 'Social Inclusion in Disaster Risk Reduction in the Himalayan Region'. This workshop built on the outcome of the first workshop with the aim of promoting interaction and sharing knowledge among key practitioners in disaster preparedness and management, especially between institutions working at the community and central levels. It examined how to improve coverage of gender, equity, and vulnerability issues in and how to incorporate these in the work of disaster management and explored opportunities to include local knowledge, innovations, and practices in the disaster management process.

The proceedings from the two workshops are presented in this report.

## Social Exclusion, Vulnerability and Disaster

*"Disasters work like the magnifying glass of a society. They magnify what is good and what needs sincere help. Disasters do not affect everyone equally. Who you are and what you do determine your fate. The strong and the weak stand out. This is true for gender issues as much as for other issues."*  
(Civil servant, India)

The tsunami on 26th December 2004, triggered by an earthquake, caused hundreds of thousands of deaths, millions were affected, and it caused massive destruction to livelihoods and infrastructure. Five times as many women as men are believed to have died, highlighting the important gender aspect of disasters. On October 8th 2005, the mountains in Kashmir were shaken by a high magnitude earthquake causing more than 73,000 deaths and affecting more than half a million people. The death toll among women and children was disproportionately high. In addition, numerous other disasters, with wind storms, floods and flash floods being the biggest killers, strike the region every year.

The frontline victims of and respondents to natural disasters are the local people and mostly marginalised and vulnerable groups. They have been experiencing and coping with natural hazards for hundreds of years. They possess experiential knowledge based on the local context, yet, in the context of disaster management, it is

only recently that implementing organisations have begun to acknowledge, theoretically, the existence of local knowledge and practices related to disaster preparedness. In practice, the biases and constraints at all levels result in local knowledge and practices being overlooked. More importantly, the lack of legitimacy attributed to local and indigenous knowledge is as much a problem within the communities themselves, and they need to be convinced that they have knowledge and that some of it can be useful. If people in a community perceive the 'external agents' as the ones who 'know-it-all' and they lose confidence in their own abilities and knowledge, it places communities in a compromising position when faced with natural hazards and increases the possibility of a disaster being more devastating than necessary.

The phrase 'natural disaster' has been the subject of debate. Strictly speaking, there are no 'natural disasters', only 'natural hazards', which, when they occur in un-inhabited areas, do not cause disasters for humans. When a society or community is affected by a natural hazard, a disaster may take place if the ability of the society to cope is exceeded. The impact of a disaster is influenced by the community's vulnerability to the hazard. The vulnerability aspect is important. Vulnerable and marginalised people – e.g., women, elders, the poor, the disabled, and Dalits ('low caste') – are more affected than others. Hence, disaster risk reduction is of great importance from the perspective of development and poverty alleviation.

The traditional idea of disasters was that they were temporary interruptions to a linear development process that was leading to ever-improved standards of living. The task of humanitarian aid was to patch things up so that the process of development could recommence. The past decade has witnessed a paradigm shift in thinking about and responding to disasters. There is a growing concern that the social and economic costs of disasters are not only holding back the processes of sustainable development, but are also major obstacles to achieving the Millennium Development Goals (MDGs). Contemporary thinking places hazard and vulnerability reduction within the broader context of the development process, focusing as much on long-term development needs as on obvious short-term, life-saving goals. The focus has thereby gradually shifted towards 'disaster risk reduction', meaning the broad development and application of policies, strategies, and practices to minimise vulnerability and risk of disaster throughout society by avoiding (prevention) or limiting (mitigation and preparedness) the adverse impacts of hazards.

The Hyogo Framework for Action (HFA) 2005-2015 (United Nations 2006) provides the main guiding instrument for national measures for risk reduction and post-disaster recovery and rehabilitation processes. The HFA also provides guidance for regional organisations and will be the obvious entry point for ICIMOD's work in disaster risk reduction.

Asia is the most disaster-prone continent in the world with more than 2,000 disasters of various kinds occurring from 1994-2003. They caused nearly half a million casualties and 2.3 million people were affected. Hydro-meteorological hazards, such as floods, flash floods, droughts, debris flows, and cyclones, account for the highest number of disasters by far in terms of casualties, people affected, and cost of damage. Although earthquakes are not very common, they do cause severe loss of lives, livelihoods, and infrastructure when they do happen. Looking at the ICIMOD regional member countries (RMC) (Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal, and Pakistan), more than 15,000 people lose their lives to disasters annually, with Bangladesh and India being the most disaster-prone countries. Looking at flood vulnerability we will find six of the RMCs in the absolute highest positions in terms of people exposed to and killed by floods.

**Synthesis of the  
Proceedings and Outcomes  
of the Workshops**

# Synthesis of the Workshop Proceedings

## Introduction

The project 'Living with Risk – Sharing Knowledge on Disaster Preparedness in the Himalayan Region' brought together disaster management practitioners from the four South Asian countries of Bangladesh, India, Nepal, and Pakistan. Through these practitioners learning, knowledge sharing, and exchange of experiences took place. During the workshops, as well as during other activities, it was reiterated that no one knows everything, but everyone knows something, and, therefore, by sharing knowledge and experiences we have all become slightly wiser.

During the project, an inventory of disaster preparedness plans, policies, and institutions highlighted that there is paradigm shift going on within the field of disaster management from a predominantly relief and recovery approach to a focus on disaster preparedness. Recent mega-disasters with massive loss of lives, livelihoods, and infrastructure have contributed to this paradigm shift. The heavy social and economic costs of the prevailing post-disaster response and recovery approach have raised concerns. It is becoming clear that disasters are not only holding back the processes of sustainable development but are also major obstacles to achieving the Millennium Development Goals (MDG). The focus, therefore, has gradually shifted towards 'disaster risk reduction' which includes minimising vulnerabilities and disaster risks throughout society by emphasising prevention of, mitigation of, and preparedness for adverse impacts of hazards.

The HKH region has very new disaster preparedness and management (DP/M) plans. The triggering factor for the development of these DP plans was in many cases the occurrence of unprecedented disasters in terms of frequency, magnitude, impacts, and location. Among these were the 1986-1987 floods in Bangladesh, which initiated the Flood Action Plan for Bangladesh; the Latur and Bhuj earthquakes and the Orissa cyclone in India; the 1988 earthquake in Nepal; the 2004 South Asian tsunami; and the 2005 Kashmir earthquake. The UN International Decade for Natural Disaster Reduction (IDNDR), proclaimed for the 1990s, was also instrumental in triggering the shift in disaster management from relief to prevention. Most countries in the region are now well on the way to endorsing DP/M policies, strategies, plans, and acts at the national level, thereby reflecting the shift from a relief-driven approach to a preparedness-driven approach in line with the recommendations of the Hyogo Framework for Action 2005-2015 (HFA).

Most of the greater Himalayan region shares similar natural hazards, although each country sets different priorities. So far, Bangladesh has primarily focused on floods, India on earthquakes and floods, Nepal on landslides and floods, and Pakistan on floods. That said, and following unprecedented disasters, Bangladesh and Pakistan are also gradually focusing on earthquakes following the 2004 South Asian tsunami and the 2005 Kashmir earthquake.

## Disaster Preparedness Planning at National Level

In **Bangladesh**, the four main factors accounting for the vulnerability of the country and its population are its location downstream of two of the world's largest rivers and a cyclone-prone coast, increased threats from a changing climate, lack of efficient governance, and people's vulnerability. Currently, Bangladesh is in the process of improving its already fairly comprehensive arsenal of guiding documents for disaster preparedness. The main document, the Standing Orders on Disaster (SOD), outlines the roles and responsibilities of every relevant agency and responsible person. A Disaster Management Act, which will provide the legal basis for the SOD and communities to mitigate disaster risk, response and recovery, is in the process of being finalised. Another strategic provision, the National Disaster Management Plan, which will serve as the umbrella for plans at local level, is about to be approved by the Cabinet.

Although the institutional set-up required for effective disaster preparedness and response is currently receiving adequate attention at the national level, almost all the plans have been developed through techno-bureaucratic exercises. Therefore, linkages between poverty, gender, and the environment are often missing. Some critical gaps in existing plans and policies are attributed to lack of legal entitlements to the people affected following disasters and unclear accountability mechanisms. There is also a lack of provision for coordination mechanisms

between different stakeholders and the absolutely necessary focus on community empowerment is often inadequate. There is already a relatively good early warning system for cyclones and flooding. Investment in public health and safety nets has reduced disaster-related mortalities to a remarkable extent.

In **India**, the process of institutionalising disaster preparedness gained speed in the late 1990s and early 2000s, following the IDNDR, and has taken the shape of a National Disaster Management Framework. As part of this, the National Disaster Management Act was put into place in 2005, providing a legal framework for disaster preparedness in India. It also provides for the establishment of disaster management authorities at the state, district, and village committee levels. One such key institution is the National Disaster Management Authority (NDMA). The NDMA is responsible for formulating policies, plans, and guidelines to ensure timely and effective responses to disasters. A National Institute of Disaster Management (NIDM) has also been established to provide training and carry out research, assist in policy formulation, and support other institutions nationwide.

Disaster management planning in India is dynamic and is experiencing a rise in impetus at the moment. Although considerable initiatives have been taken, more effort is needed to take the entire country forward in order to realise the Indian mission 'to build disaster-resilient communities for a disaster-free nation'. Areas that need attention include concerted promotion of disaster preparedness nationwide; a closer look at urban areas and their needs; thorough integration of the implementation of DP/M plans; holding regular drills; completing DP/M plans within a specified time frame; and ensuring that their District Disaster Management Authorities are now fully notified and established. It is expected that disaster management planning in India will see many changes in the near future, particularly at the state, district, and sub-district levels.

**Nepal** is currently going through an intense phase of disaster management planning. As of this writing certain processes are ongoing: the development of a National Policy on Disaster Management in Nepal and the revision of the National Disaster Management Act. The Government of Nepal is also busy with the development of a national strategy for disaster risk management. The strategy, which is based on the HFA, will serve as a set of recommendations for an indicative framework of institutional and legal mechanisms for disaster risk management.

Nepal, similar to other countries in the region, is going through a phase of intensified preparedness for all disasters. However, it is yet to see how the instruments being put into place will result in a decrease of casualties from disasters. It implies that until there is clarity from the government about who is to do exactly what and when, relief and rescue will continue to receive more attention than preparedness. One of the main reasons for failure to improve DP/M hitherto, is the lack of political will in an unstable political climate and lack of proper coordination among key stakeholders. Policies have not addressed disaster management adequately; and responsible departments are buried inside unwieldy bureaucracies of ministries. Manpower is also extremely limited in key institutions. It will indeed be exciting to see how the current planning activities can, with time, improve the preparedness for natural disasters in Nepal.

In **Pakistan** disaster management prior to the 2005 Kashmir earthquake was focused on riverine floods. Pakistan has developed dedicated institutions which carry out flood mitigation through engineering structures and early warning systems. An efficient mechanism for rescue, relief, and short-term recovery has also been set up. The latter is mainly dependent on the Pakistan Army. The 2005 earthquake served as a severe jolt in terms of the need for preparedness for other natural disasters as well. Following the earthquake, Pakistan formulated an institution named the Earthquake Reconstruction and Rehabilitation Authority (ERRA) which is now pursuing a concerted programme of rehabilitation and reconstruction. In December 2006, the President promulgated the National Disaster Management Ordinance, paving the way for establishment of the National Disaster Management Commission (NDMC). NDMC is to encompass disaster management authorities at the federal, provincial, and district levels. The ordinance also provided for the establishment of the National Disaster Management Authority (NDMA). The NDMA will provide technical guidance for formulation of disaster management plans, strategies, and programmes, as well as work towards capacity building of stakeholders at various levels.

So far, Pakistan lacks most preparedness plans outlining responsibilities, coordination, and standard operating procedures; however, the country is currently rapidly propelling into a zone of better disaster preparedness. While Pakistan's status for management of disasters from river floods may be rated satisfactory, flash floods continue playing havoc with life and property every year and Pakistan has a long way to go to cope effectively with this disaster.

Regardless of whether the **national instruments** exist at whatever stage of preparation and whether the institutions and the infrastructure are available, the recurring reason for the failure of the countries in the region to cope with the recent mega natural hazards resulting in enormous losses of lives and damage is the gap between the policy and the implementation. At a deeper level, the common pattern that emerges is that decision-makers and technocrats have constantly failed to respect and consequently see the value of involving local communities (especially the vulnerable and marginalised groups) in the disaster preparedness process. There has been a lack of decentralisation and devolution of power and resources to the local government level to implement local plans. Government officials and politicians are still, to a great extent, in the relief and response mode; however, as indicated, a paradigm shift is currently occurring, and the region will witness great changes in the near future.

In addition to the national efforts, SAARC has recently taken a step as part of the paradigm shift. Following a decision of the 13th SAARC summit to address disasters, the SAARC Disaster Management Centre was put into place in New Delhi in October 2006, and is hosted by the NIDM. The new centre is yet to be developed and strengthened and it remains to be seen how it will coordinate with other players in the region. Undoubtedly, however, this is yet another step showing an increasing willingness among policy- and decision-makers to foster a more disaster-resilient region.

## Disaster Preparedness Planning and Social Inclusion

The tsunami on 26th December 2004, triggered by an earthquake, caused hundreds of thousands of deaths, millions were affected, and it caused massive destruction to livelihoods and infrastructure. Five times as many women as men are believed to have died, highlighting the important gender aspect to disasters. Similarly, the high magnitude earthquake in Kashmir on October 8th 2005, caused more than 73,000 deaths and affected more than half a million people. The death toll among women and children was disproportionately high.

Major disasters often reveal pre-existing social insecurity and vulnerability. In fact, the somewhat invisible but 'real' disaster is often not the natural hazard itself. It is the increased vulnerability of poor people, women, children, and the elderly and disabled following natural hazards. For example, women's role as caregivers in the family is intensified during and after the occurrence of natural hazards, thereby increasing their vulnerability to disasters. They often face overwork, stress, health problems, and premature death as they struggle to compensate with the loss of land, absent husbands, and loss of other resources following natural disasters. Simple improvements in the security of the more vulnerable can dramatically reduce losses and increase community resilience.

Cultural norms often contribute to gender inequities which increase their vulnerability to natural hazards and disasters. Cultural norms refer to rules or values that prevent or limit women's access to food, education, health services, and any other resources that are vital before, during, and after a disaster. For a socially inclusive, gender-sensitive perspective on disaster management, vulnerability assessments need to take into account local knowledge and risk-reducing activities and disaggregate what is often conceived as a homogenous 'community'. A great need still exists for bridging the social-technical divide across disciplines.

India is one of the countries with comparatively extensive experience in the exercise of social inclusion. Its efforts and challenges, to a certain extent, reflect what other countries in the region can undergo as they embark on this relatively new journey of social inclusion in disaster preparedness. India has recently fostered social engineering to give due share to the socially excluded.

Despite affirmative legal, social, and economic measures, however, discrimination and social exclusion still persist. The mega disasters of the last decade and a half have accentuated the discrimination when more women than men have died in disasters. The burden on women has increased and they face more exploitation and violence and as a result women have faced more trauma and distress. Children have suffered serious disruption in critical stages of development and have become vulnerable to trafficking and exploitation. Separation and experiences of death of their parents have created traumatic conditions and bases for long-term mental health problems. The disabled have not been given due priority and sometimes have even been left out during evacuation operations. Early warning systems are not disability friendly. Relief workers are generally insensitive to the needs of the disabled. The majority of short- and long-term shelters – including latrines, health care, food and water services – have not been accessible for disabled people.



The fact that social exclusion is deeply ingrained in social and economic systems in the region gives rise to issues that are multi-dimensional in nature. This scenario calls for the ability to deal with and get results from a multi-cultural, multi-tasking, multi-disciplinary, and multi-level setting. Added to this is the focus on the social aspects of gender, caste, class, ethnicity, age, and disability. There is a need to bridge gaps between social-technical aspects and across disciplines. Understanding and acknowledging local communities as valuable resources and ensuring a place for local-level initiatives and learning experiences in DP/M policy and action call for extensive sensitisation and capacity building at all levels.

Accounting for local knowledge, practices, and contexts can help implementing organisations improve their plans for disaster preparedness. It can contribute to project performance in the local area; that is, build project acceptance, ownership, mutual trust, and sustainability. Many project planners and implementing organisations do not have a clear understanding of 1) the value of local knowledge in their project's success and sustainability, 2) the meaning of local knowledge on disaster preparedness, and 3) the methods of identifying and collecting information related to it. Understanding, accounting for, and respecting local knowledge can contribute to a project's cost effectiveness in the long term, from both a financial and a social point of view.

Solutions in the context of resource management need to go beyond the dichotomy between local versus state management levels and to integrate cross-scale institutions. As the rate of change (institutional, economic, and cultural) related to globalisation processes is increasing, innovative forms of governance are required to address the complexities and uncertainties associated with it. A better understanding of local knowledge practices can help to identify what is important and can be promoted at the local level. Building upon local knowledge and practices that capitalise on local strengths whenever relevant can decrease dependencies on external aid.

It is evident that disaster preparedness planning in the region is dynamic and vital at the moment. Although considerable initiatives have been taken recently, more effort is needed to take the entire region into a mode of sustainable preparedness, resting on empowered communities, firmly guided by national strategies and plans, and with proper inclusion of socially marginalised and vulnerable groups in all parts of the disaster management cycle.

**Regional Workshop on  
Disaster Preparedness Plans  
for Natural Hazards**

**Kathmandu, 7-9 August, 2006**



# Regional Workshop on Disaster Preparedness Plans for Natural Hazards

**Kathmandu, 7-9 August, 2006**

## **Day 1: Monday, 7 August 2006: Focus on Disaster Preparedness Plans at National Level**

### **Session 1: Opening Remarks**

**Xu Jianchu**, Programme Manager for 'Water, Hazards and Environmental Management', ICIMOD, welcomed the participants to the regional workshop.

**Madhav Karki**, Acting Director General, ICIMOD, emphasised that disaster preparedness (DP) is crucial for South Asian countries where resources for relief, recovery, and reconstruction are limited. Natural disasters cannot be predicted or fully prevented. Agencies and vulnerable communities need to share information and build capacities to improve collective mitigation, time taken to respond, and rehabilitation and reconstruction of communities affected.

**Thir Bahadur GC**, Under Secretary from the Disaster Management Section, Ministry of Home Affairs (MoHA), Nepal, emphasised that the Hindu Kush-Himalayan (HKH) region shares common natural hazards and problems. Disaster mitigation became part of the national political agenda under the 7th Plan (1985-90). Since then, MoHA has been entrusted with the formulation of national policies on disaster management (DM). Nepal is gradually focussing on disaster preparedness with specific reference to the Hyogo Framework.

**Abdul Bari Khan**, Additional Secretary for the Ministry of Food and Disaster Management, Bangladesh, highlighted the Standing Orders for Disaster (1997) as a comprehensive national guide for DM. He emphasised the need for regional cooperation in order to approach DM holistically.

**N.S. Napalchyal**, Principal Secretary, Department of Disaster Management, Government of Uttaranchal, India, mentioned that this workshop was timely considering the recent disasters that had occurred in the region. India is prone to multiple hazards. DP constitutes an important element of DM in the recent national policies and acts. Capacity building and knowledge sharing among stakeholders are key common concerns and requirements for effective DM in the region. A regional knowledge network on DP should facilitate knowledge sharing actively not only during the workshop but also beyond.

**Ghulam Khan**, Director, Research & Analysis, National Crises Management Cell, Ministry of the Interior, Pakistan, shared his experiences of the 2005 Kashmir earthquake with the workshop participants. The response mechanism would have been better if a national plan had been in place. The South East Asian regional countries are facing similar disasters. Mechanisms to improve regional cooperation are necessary to face the challenges posed by natural hazards.

### **Session 2: Natural Hazards in the Himalayan Region**

Floods, landslides, and earthquakes are the most frequent natural hazards occurring in the Himalayan region. This session highlighted the nature and the impacts of those natural hazards through case studies and

organisational experiences at the international, national, and regional/local levels. The lack of data, lack of national and regional collaboration, and lack of community empowerment and participation have been common highlights in each case.

**Masahiko Murata**, Asian Disaster Reduction Centre (ADRC), in his presentation entitled, '**Premonitory Phenomena of Sediment-related Disasters**', reported how interviews with people affected in Japan and in the Philippines and scientific analysis of geological conditions helped to identify effective and detailed premonitory phenomena (e.g., change in the colour of streams, unusual sounds from mountain/hill slopes, and unusual smells from soil and land surfaces) for landslides, debris flows, and other mass movements. A monitoring system for such premonitory phenomena by governments with community cooperation will work effectively for early warning and evacuation. The development of successful early warning techniques requires community empowerment and involvement.

**Ramesh Tuladhar**, Department of Water Induced Disaster Prevention (DWIDP), Nepal, gave an overview of '**Landslide and Mitigation Measures for Risk Reduction**' in Nepal. Landslides are common in Nepal and kill more people than any other water-induced disaster. The key gaps in mitigation measures are lack of land development and land-use regulations; lack of coordination amongst stakeholders; lack of accessible disaster databases; imbalance in budget distribution; bias towards infrastructure projects; and underutilisation of study reports and maps. Accounting for the effects of global climatic change, improving coordination among stakeholders, and planning for rampant urbanisation, mass migration, and village road development are the key challenges to landslide mitigation in Nepal.

**Amod M. Dixit**, National Society for Earthquake Technology (NSET), reported on '**Earthquake Preparedness in Nepal**'. According to the UNDP, Nepal is ranked as the 11th worst country in terms of relative vulnerability to earthquakes and Kathmandu Valley is the most 'at risk' settlement in the world in terms of probable casualties resulting from earthquakes (GESI/UNCRD 2001). The collapse of buildings represents the main source of risk in Kathmandu city. The implementation of the National Building Code is difficult and the National Action Plan for Disaster Management (1996) has little ownership among stakeholders. NSET's efforts in earthquake risk management include a school earthquake safety programme, awareness raising (e.g., Earthquake Safety Day), education (e.g., training programmes for masons), and institutional development at the municipal level. Earthquake risk management in Nepal can be improved through fostering collaboration between key stakeholders, increasing outreach and communication, and creating efficient institutional arrangements within a decentralised process. A Pan Himalayan study on historical earthquake-resistant buildings is starting to analyse how traditional techniques for buildings can be combined with modern technologies.

**Aziz Ahmed Jamali**, Earthquake Reconstruction and Rehabilitation Authority (ERRA) of the Government of Pakistan shared the '**Experiences and Lessons Learned from the Pakistan Earthquake**' that hit Kashmir at the onset of the severe winter in 2005. This disaster posed several challenges to the Government and people of Pakistan. The absence of a national strategy and a national DM plan was acutely felt. Most people, communities, and organisations were unprepared, and this affected the time taken to respond. The establishment of a national disaster management authority is necessary to improve the coordination of rescue and relief at all levels. An inventory of disasters and organisations working in the field will help to make response effective in future. The tragedy demonstrated that the involvement of local communities and political representatives contributed to self-sustenance in the relief process. Communities should be trained in search and rescue work. The media played an important role in linking the people affected with the global community and international cooperation helped in the relief and rescue processes. In order to improve response capacities, awareness should be promoted within the international community through regular exchange of information, joint exercises, periodic seminars, and workshops.

**Allah Bakhsh Kausar**, Geological Survey of Pakistan (GSP), gave an overview of GSP's studies in '**Landslide Hazards in Earthquake Hit Areas of Pakistan**'. The major activities include identification of landslide areas; preparation of risk assessment and landslide hazard maps; and monitoring of landslides. Key recommendations include (1) regionally - to create a region-wide database of natural hazard events, (2) for the government - to fund geo-hazard professionals, (3) to improve collaboration between researchers, the private sector, and international organisations, (4) for international development banks - to develop better methods of reconstructing communities destroyed by disasters, and (5) for international and national development organisations - to increase, relatively, the amount of investment in disaster preparedness and mitigation in comparison to investment in disaster response.

**Md. Wajiullah**, Centre for Environmental and Geographic Information Services (CEGIS) reported on **‘Flood Mitigation in Bangladesh’**. The country is well known for being affected by annual floods. The government has installed over 600 flood-management systems and brought a total of 5.4 million hectares under flood protection through structural measures such as embankments and drainage. Flood forecasting and warning, change in cropping patterns, and flood-related rules and regulations are among the popular non-structural measures. Key recommendations on flood mitigation include strengthening the current flood-management system, emphasising research for preparedness, and improving regional cooperation.

**Mandira Shrestha**, ICIMOD provided a **‘Regional Perspective of Floods and Flash Floods in the HKH Region’**. Globally, although the number of disasters is increasing, the number of deaths is decreasing—but the number of people affected by disasters is increasing. Floods account for 50% of global water-related natural disasters and Asia itself accounts for a 35% share of global water-related natural disasters. The HKH region, with its transboundary rivers, is extremely vulnerable to flood disasters. A key challenge for improving flood mitigation in the region is to improve communication and the sharing of information across national boundaries to increase lead times for flood preparedness. The project on ‘Satellite Rainfall Estimates in the HKH Region’ is one of ICIMOD’s initiatives to overcome these challenges by facilitating exchange of real-time data to improve lead times and regional scientific and technical know-how.

In the discussions, **Md. Tarik-ul-Islam**, UNDP-Bangladesh highlighted the need to integrate financial institutions in DP, for instance, through micro-finance.

### Session 3: National Disaster Preparedness Plans

The major objective of the workshop was to review the current status of national disaster preparedness plans in the four countries targeted and to explore gaps and shortcomings in the functioning and implementation of plans. Four authors, one from each of the countries, presented the status of disaster preparedness plans in Bangladesh, India, Nepal, and Pakistan.

**Aloysius Rego**, Asian Disaster Preparedness Centre (ADPC), gave a keynote presentation on **‘The importance of Plans for Disaster Preparedness’**. In doing so he highlighted how plans are necessary at different governing levels, from national via district to community level, and that there are well-established communication channels between the different levels in order to ensure efficient implementation of plans.

**Masroor-ul Haq Siddiqi**, Kranti Associates Limited, Bangladesh, presented the **‘Status Report on Disaster Preparedness Plans in Bangladesh’**. Bangladesh is the lowest riparian state of the Ganga-Brahmaputra-Meghna (GBM) basin and is affected by flooding annually which can inundate 20-60% of the country. In Bangladesh, during the last decade, the focus of DM activities has slowly changed from post-disaster relief to preparedness. The disastrous floods of 1986 and 1987 acted as an alarm clock and prompted the government to develop the Flood Action Plan (FAP) (1991-95). Later, the Ministry of Relief was renamed the Ministry of Disaster Management and Relief with the creation of the Disaster Management Bureau (DMB) as the main body of this Ministry. The DMB revised the Standing Order on Cyclones (1985) and developed it into the ‘Standing Orders on Disaster Management’ (SOD) in 1997. It is a comprehensive set of guidelines for departments and agencies to develop DM Action Plans. Under the SOD framework, Disaster Management Committees have been established at district, thana, and union levels. The Ministry of Food and Disaster Management (MoFDM) released a Comprehensive Disaster Management Plan (2005-2006) and a Corporate Action Plan which incorporate a multi-hazard approach — including climate change.

**Chandrani Bandyopadhyay**, National Institute of Disaster Management, India, presented the **‘Status Report on Disaster Preparedness Plans in India’**. India is a vast country with 15% of the world’s population, 85% of which is exposed to multiple natural hazards. In India, the International Decade for Natural Disaster Reduction (IDNDR) (1990-2000) contributed to a shift in India’s focus from ‘post-disaster response and relief’ to ‘pre-disaster prevention and mitigation’. Four major natural disasters between 1993 and 2004 (i.e., the 1993 Latur and 2001 Gujarat earthquakes, the 1999 Orissa super cyclone, and the 2004 South Asian tsunami) heightened the importance of DP as a means of reducing the social and financial costs of disaster relief. In light of the shifting paradigm, the government formulated several national initiatives such as the High Powered Committee on Disaster Management (1999) and the National Committee on Disaster Management (2001). The tenth development plan (2002-2007) recognises that DM is directly linked to development in general. The National Disaster Management Act (2005) established a National Disaster Management Authority (NDMA) responsible

for laying down the national policies, plans, and guidelines for DM. The NDMA is required to set up State Disaster Management Authorities, which in turn have to establish District Disaster Management Authorities (DDMA). The DDMA is responsible for preparing and managing the District Disaster Management Plans. A multi-hazard and multi-sectoral approach is being adopted in all DM activities with a bottom-up approach to establish a culture of prevention.

**Bhubanesh Kumar Pradhan**, Association for Research and Management Services, Nepal, presented the '**Status Report on Disaster Preparedness Plans in Nepal**'. Nepal is exposed to multiple and interrelated natural hazards (especially floods and landslides during monsoon). Three main fault lines running east to west make the country tectonically volatile. In 1988, a major earthquake in Nepal brought into the political agenda the necessity to focus on DP activities as an important component of DM. The National Disaster Relief Act, enacted in 1982, was the first Act on DM in Nepal. The declaration of the International Decade for Natural Disaster Reduction (IDNDR) in 1991 played a key role in shifting the focus of DM from post-disaster response and relief to pre-disaster prevention and mitigation. The National Action Plan prepared in 1996 details the necessary measures for each type of disaster. The tenth plan (2002-2007) included DM as a key component of development for the first time. The MoHA is the focal body responsible for enforcing DM activities and coordinating the several ministries and non-government organisations (NGOs). The DM section in MoHA is understaffed and under-resourced, and this makes implementation of plans a difficult task.

**M. Asif Khan**, National Centre of Excellence in Geology, University of Peshawar, presented the '**Status Report on Disaster Preparedness Plans in Pakistan**'. According to the UNDP Assessment Report 2005, DM in Pakistan primarily focuses on flood disasters with emphasis on rescue, relief, and rehabilitation. The Pakistan Army plays a key role in these activities. The Flood Control Plan was introduced during the fifth 5-year plan (1979-1983); DM was first considered in the ninth 5-year plan (1998-2003); and the Ten Year Perspective Development Plan (2001-2011) was launched in 2001. All these plans focused mainly on flood disasters with particular emphasis on structural measures. The 2005 Kashmir earthquake revealed Pakistan's lack of preparedness for other types of disaster. The national response was activated after three days only. This unprecedented event resulted in a switch of focus in the political agenda from flood mitigation to multiple hazard mitigation and preparedness.

## Day 2: Tuesday, 8 August 2006: Focus on DP Plans at Local and Intermediate Level

### Session 4: Vulnerable groups and local knowledge

DM has focused mainly on physical and technological solutions with an unsatisfactory understanding and integration of social and cultural realities. This session demonstrated that an understanding of and accounting for vulnerable groups and local knowledge are part of a necessary process for effective DM. The presentations emphasised the need to understand the contexts within which disasters are shaped and especially the role of policies and power relations (between social groups, between genders, between disciplines, between different types of knowledge etc) in DM.

**Manjari Mehta**, ICIMOD, highlighted the linkages between '**Disasters and Vulnerable Groups**'. Mehta explained how vulnerable groups, including girls and women, who are often excluded socially and economically insecure bear a disproportionate burden of disasters. Gender relations and ideologies, by shaping perceptions and behaviour influence people's ability to anticipate, prepare for, survive, cope with, and recover from disasters. Social and gender analyses need to be incorporated into DP for long-term sustainable development. Analyses should be based on context-specific models which build upon local strengths and address local constraints. Helping women to become economically self-sufficient is a major factor in increasing their ability to mitigate the impacts of disaster. Other principles of good practice should include sex-disaggregated disaster-related data and sharing of information about gender issues in disasters.

**Julie Dekens**, ICIMOD, gave a presentation on '**Local Knowledge for Disaster Preparedness**' highlighting the importance of taking into account local knowledge in the field of disaster preparedness. The presentation demonstrated, using various case studies in the Himalayan region, that accounting for local knowledge can



help implementing organisations improve formulation and implementation of their DP plans. Coping strategies related to natural disasters encompasses more than just local technical and structural strategies. For instance, over the years many communities have developed safety nets through complex livelihood diversification mechanisms (economic, spatial, ecological, and institutional diversification) to help them adjust to the impacts of disasters. Combining local knowledge and conventional knowledge faces many challenges; and especially from development processes and policies that restrict land and forest access and hence contribute to undermining local practices. Scientists, government officials, and NGOs need to work with communities to understand within which contexts local knowledge and practices can contribute to the improvement of disaster preparedness and formulation of adequate policies.

## Session 5: Community Based Disaster Preparedness Plans (CBDP)

This session highlighted the role, nature, and structure of three CBDP plans introduced by the CBDP programmes of Bangladesh Unnayan Parishad (BUP), Nepal Red Cross Society, and UNDP-India.

**Ahsan Ahmad**, Bangladesh Unnayan Parishad (BUP) reported on ‘**Disaster Preparedness Plans at Community Level in Bangladesh**’. The official approach to DP is based on the Standing Orders on Disaster (SOD) and on the Comprehensive Disaster Management Programme (CDMP). The SOD describes who is supposed to do what in the case of floods and cyclones, but its implementation on the ground is poor. CDMP introduces a shift in paradigm from relying on relief to focusing on community resilience-building with more emphasis on community preparedness. Flood management at the individual and household level includes responses directed towards avoiding risks, reducing losses and damage, and building gradual resilience. This can be partly achieved through preparatory activities such as disseminating flood warnings well in advance and safeguarding assets, perishable items, and livestock. At the community level, flood management includes empowering organisations and raising awareness; providing continuous education and capacity building; planning on a meso-scale; and facilitating organised services to reduce damage and losses.

**Prajwal Acharya**, Nepal Red Cross Society (NRCS) in his presentation on ‘**Disaster Preparedness Plans at Community Level in Nepal**’ presented the CBDP programme activities of NRCS introduced in 1997. A methodological curriculum has been developed to support communities in the elaboration of disaster plans. DP plans at community level cover mitigation measures, preparedness, and search, rescue and relief. The CBDP activities have five major steps (1) analysis of past disasters, (2) analysis of possible future disasters and their effects, (3) identification of possible pre/post disaster activities, (4) prioritisation of future activities, and (5) preparation of an action plan and budget. The integration of CBDP plans with other plans is perceived as the main problem. Having community and district or VDC-level plans in place is crucial for responding to disasters locally. Frequent drilling exercises are necessary to ensure the plans are appropriate.

**Rahul Sengupta**, UNDP-Nepal, presented ‘**Disaster Preparedness plans at Community Level in India**’, and the role of community-based disaster preparedness plans within the UNDP Disaster Risk Management (DRM) Programme in India (2002-2007). The Indian Ministry of Home Affairs is the executing agency for this programme and UNDP provides executive support. The DRM programme tasks include the establishment of multi-hazard preparedness and mitigation plans at all levels, including at community level. The CBDP aims mainly at generating sensitivity and awareness, elaborating preparedness and evacuation plans, and building capacity and improving skills of village DM teams. The CBDP process includes a comprehensive inventory of community assets; and this includes specification of the roles and responsibilities of village DM teams. A concluding example illustrated how a community in Tamil Nadu selected as a model village for training by the UNDP managed to save lives and properties through preparedness in the face of a tsunami.

In the discussions, the **participants** raised the issue of institutionalising and scaling up community activities with government activities and the need to embed plans with broader contexts. **Amod Dixit** warned against the risks associated with scaling up community plans. Indeed, now that everybody is adopting community-based approaches the risk might be forgetting the communities. The participants also highlighted the need to integrate DP in community day-to-day knowledge, practices, and life and to perceive CBDP as a non-linear approach.

## Session 6: Knowledge Sharing and Training

**Zbigniew Mikolajuk**, ICIMOD, in his presentation on ‘**The Importance of Knowledge Sharing**’ raised the following questions in the context that DM also needs to be analysed through the lens of knowledge management: what

kind of knowledge is needed? what are the gaps? how do you make knowledge accessible? what does 'knowledge' (versus education) mean on different levels? Two examples were given to highlight how knowledge is useful only when it is delivered in meaningful ways to those who need it. The first example illustrated how farmers in Vietnam have access to satellite-based remote-sensing advisories about ground salinity. The information helps the farmers to plan for their crops. The second example was about some farmers in India who incurred economic losses because they did not know how to store onions properly. A knowledge search revealed that the University of Minnesota, USA, had carried out research in this particular field. By connecting the Indian farmers with the US researchers, the farmers saved their economy. It was concluded that, in order to share knowledge effectively, one needs to identify what knowledge is required and for whom, who can provide the knowledge and how to package the knowledge for different users.

**Pradeep Mool**, ICIMOD, gave a presentation on **'Training for Multi-hazard Risk Assessment'** and reiterated that the region was extremely vulnerable to multiple risks. ICIMOD, within the 'Living with Risk' project, is planning two training courses on multi-risk hazard assessment. Using GIS/RS as a primary tool, the training will enable middle-level professionals to develop risk maps and make assessments and analyses of different types of hazard. National-level and regional-level training courses are planned in November 2006 in Pakistan and in early 2007 in Nepal respectively for a total of 50 participants.

## Session 7: Gap Analysis of Disaster Preparedness Plans

Based on the presentations of the DP plans at national and community levels, country-wise groups were formed to discuss and identify gaps and shortcomings in the existence and implementation of DP plans. The main outcomes of the discussions are compiled and presented in two tables.

**Table 1** summarises the strengths and weaknesses of DP as identified by each country-wise group. **Table 2** summarises the position of each country in relation to the four major issues identified during the workshop, namely, (1) the linkages between national DP plans and local DP plans, (2) the access to resources for the implementation of DP plans, (3) the integration of DP in national development activities, and (4) the existence of regional transboundary cooperation. This exercise revealed that the linkages between national and community plans are weak in all countries with the exception of Bangladesh. In each country, access to resources (human, financial, technological, legal, and institutional) exists, but is often incomplete. Bangladesh and India are working

**Table 1: Strengths and weaknesses of DP plans at the national level**

	Bangladesh	India	Nepal	Pakistan
<b>1. Strengths</b>	<ul style="list-style-type: none"> <li>Wealth of experience</li> <li>Proven system based on experience</li> <li>Strong leadership</li> </ul>	<ul style="list-style-type: none"> <li>Extremely responsive local administration (district level)</li> <li>Strong social fabric and community initiatives</li> <li>Adequate financial resources for relief and rehabilitation operations</li> </ul>	<ul style="list-style-type: none"> <li>Consensus among all the stakeholders</li> <li>NGOs and CBOs are working together</li> <li>National Building Code for Earthquakes</li> <li>Rescue and relief are the strengths</li> </ul>	<ul style="list-style-type: none"> <li>Great spirit of volunteerism at individual and organisational level outside government institutions</li> <li>Active and effective role of the army (before/after disasters) in responding to national disasters. Its resources, material and organisation have been the first to be used in any disaster response</li> <li>Lessons learned from recent experience of the 2005 earthquake</li> </ul>
<b>2. Weaknesses</b>	<ul style="list-style-type: none"> <li>Lack of resources</li> <li>Need for technological improvement</li> <li>Lack of real-time data from upper basins</li> </ul>	<ul style="list-style-type: none"> <li>Lack of dedicated institutional capacity at the local level</li> <li>Lack of mitigation culture across the departments/the agencies. Need to bring the mitigation culture along with the response culture</li> <li>Lack of uniform proliferation of DRM concepts (UNDP) across the districts</li> <li>Lack of coordination and communication between agencies/ departments during peace time</li> <li>Over reactive and somewhat irresponsible media</li> </ul>	<ul style="list-style-type: none"> <li>Lack of coordination among the agencies</li> <li>Poor implementation of existing plan</li> <li>Policies are not practical</li> </ul>	<ul style="list-style-type: none"> <li>Absence of bottom up planning: no ownership for the communities</li> <li>Absence of a Disaster Management Strategy and Agency at the national level (but a new plan is going to be passed soon)</li> <li>Lack of capacity (esp. in the civil sector) in terms of expertise, equipment, stockpiles, and training with the civil response agencies</li> </ul>

**Table 2: Status of each country in relation to key aspects of DP plans**

Key issues	Bangladesh	India	Nepal	Pakistan
1. <b>Linkages between national DP plans and local DP plans</b>	<ul style="list-style-type: none"> <li>• <b>Yes:</b> gaps, obstacles and needs are being identified and efforts are underway</li> </ul>	<ul style="list-style-type: none"> <li>• <b>No:</b> lack of funding and institutional support at community level. How to implement DP plans is left to the community.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>No:</b> rescue oriented politics/regulations</li> <li>• Obstacles: no institutionalised linkage, no standing order, no implementation mechanism</li> </ul>	<ul style="list-style-type: none"> <li>• <b>No:</b> top-down approach of existing and proposed DP national plans</li> <li>• No communities ownership of the strategies and plans lack of community trust and reluctance in getting involved</li> </ul>
2. <b>Access to resources for the implementation of DP plans</b>	<ul style="list-style-type: none"> <li>• <b>Yes:</b> human, legal and technical resources</li> <li>• <b>No:</b> financial resources, state-of-the-art technologies need for capacity building of sub-national institutions by blending local knowledge and modern technology</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Yes:</b> financial, human, and legal resources provided by national policy</li> <li>• <b>No:</b> technical support lacks coordination among various agencies and lacks accountability</li> </ul>	<ul style="list-style-type: none"> <li>• Additional resources, particularly human, are highly desirable</li> </ul>	<ul style="list-style-type: none"> <li>• Resource constraints (financial, training, etc)</li> <li>• Lack of coordination between district governments: most of the plans run on an ad hoc basis</li> </ul>
3. <b>Integration of DP in national development activities</b>	<ul style="list-style-type: none"> <li>• <b>Yes:</b> Poverty Reduction Strategies reflect the integration of a multi-disciplinary approach</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Yes:</b> but multi-disciplinary integration needs to be strengthened</li> </ul>	<ul style="list-style-type: none"> <li>• <b>No:</b> Funds for rescue directed to CDO (Chief Disaster Office) whereas funds for development are directed to DDCs (District Development Committees)</li> <li>• Local plans are not reflected at national level</li> <li>• No decentralization</li> <li>• Responsibilities but no resources</li> </ul>	<ul style="list-style-type: none"> <li>• Integration needs to be fostered at national, provincial, and district levels</li> </ul>
4. <b>Regional trans-boundary dimension</b>	<ul style="list-style-type: none"> <li>• <b>No:</b> Need for regional cooperation and free flow of hydro-meteorological information from upstream countries</li> </ul>	<ul style="list-style-type: none"> <li>• Multilateral/institutional mechanisms need to be developed among countries</li> <li>• Lack of communication protocols and standing agreements between nations of the region (current confusion due to lack of clearly laid out policies)</li> <li>• Lack of capacities sharing (technical, managerial, etc) at regional level</li> <li>• Easy movement of experts across borders</li> </ul>	<ul style="list-style-type: none"> <li>• No explicit mentioning of trans-boundary coordination in the existing national plan</li> <li>• Nepal and Bangladesh have a joint committee</li> <li>• Cooperation is required for knowledge/experience/technology sharing, flood warning, and post disaster response.</li> </ul>	<ul style="list-style-type: none"> <li>• Regional collaboration on earthquake management initiated</li> <li>• Indus Treaty provides a mechanism for a transboundary dialogue on floods</li> </ul>

towards the integration of DP into national planning. Such a multidisciplinary approach is still missing in Nepal and Pakistan. Regional transboundary cooperation needs to be improved in each country.

A discussion following each country-wise group presentation emphasised the need to strengthen collaboration at both bilateral and multilateral levels. Opportunities for regional cooperation through sharing experience and expertise should be identified and explored. For instance, the Standing Orders on Disaster (SOD) from Bangladesh could become a reference point to help other countries bring their plans into practice. Also, the creation of mitigation funds at different levels, as practised in India, could be replicated in other countries. Learning within the country as well as between countries needs to be nurtured and such efforts should be especially promoted during peace time. **Mats Eriksson** concluded the session by highlighting the strengths of each country.

## Day 3: Wednesday, 9 August 2006: Excursion Day

### Session 8: Closing Session – Conclusions

The conclusions of the workshop are based on the outcomes from the working groups' findings and observations and remarks brought up in the workshop. The conclusions were discussed during the closing session and agreed upon as an outcome of the workshop. Following are the conclusions:

#### General Observations

1. Disaster Preparedness (DP) has to be approached **holistically** because it is difficult to isolate preparedness from other components of Disaster Management (DM) such as reduction, response, and recovery.
2. A **paradigm shift** in DM from a relief-driven approach to a more preparedness-driven approach is occurring.
3. **Local communities** should be at the centre of DM plans. They are the first victims of natural hazards and the first respondents.

#### Development and Vulnerable Groups

4. DM should be integrated into **national development plans** for improved sustainable livelihoods and poverty reduction.
5. A **multi-hazard approach** is crucial as most communities are exposed to hazards that have interacting and cascading effects.
6. **Vulnerable groups** and marginalised people are insufficiently addressed in DM plans.

#### Institutions and Policies

7. The **political will** to direct sufficient resources is essential for the efficient implementation of existing DM plans.
8. Planning for DM is an iterative **process** that should be based on the efficient use of already existing resources.
9. **Roles and responsibilities** for DM of all stakeholders at the national, regional, and local levels need to be clarified. DM should be a priority on the national political agenda.

#### Knowledge and capacities

10. **Local knowledge** should be respected and combined with other knowledge to improve the design and implementation of DM activities.
11. **Learning** from past disaster events through research and documentation is important in order to anticipate and respond to future disasters more effectively than is currently the case.
12. **Education and training** in DM is necessary for awareness and capacity building of all stakeholders.

#### Communication and Cooperation

13. **Insufficient coordination** prevails among key actors in the field of DM.
14. Functional and **efficient communication** among key actors at local, national, and international levels needs to be improved.
15. **Data and information sharing** at a regional transboundary level needs to be strengthened and requires appropriate capacity and technology.

### Excursions

ICIMOD arranged two field trips following the concluding session. Participants took one of two trips according to their choice.

**Trip 1: Earthquake vulnerability walk through Patan.** NSET guided one group of participants on an earthquake vulnerability walk through Patan, situated in the heart of Kathmandu Valley. The trip enabled participants to discuss the potential vulnerabilities of a populated community if a major earthquake were to strike.

**Trip 2: Bungamati landslide model site.** DWIDP led another group of participants to Bungamati, 3 km southwest of Kathmandu. Through a combination of technologies, DWIDP successfully stabilised the Bungamati site which is highly prone to landslides.



**Regional Workshop on  
Social Inclusion in Disaster Risk  
Reduction in the Himalayan  
Region — Sharing Knowledge  
and Bridging Gaps**

**Kathmandu, 9-11 May 2007**

# Regional Workshop on Social Inclusion in Disaster Risk Reduction in the Himalayan Region – Sharing Knowledge and Bridging Gaps

**Kathmandu, 9-11 May, 2007**

## **Day 1, Wednesday 9 May: Planning for Disaster Preparedness in the Region: Are Vulnerable Groups Reflected?**

### **Session 1: Opening Remarks**

**Madhav Karki**, Acting Director General, ICIMOD, delivered the welcome address. The August 2006 ICIMOD regional workshop on disaster preparedness planning called for bridging the gap between local and conventional knowledge through sharing for disaster risk reduction. The rich source of traditional and indigenous knowledge among local communities can contribute to the crucial issue of social inclusion in disaster risk reduction.

**Pratap Kumar Pathak**, Joint Secretary, Disaster Management Section, Ministry of Home Affairs, Nepal, highlighted the need for a people-centred government agenda to ensure an inclusive approach to disaster preparedness. This requires capacity-building and involvement of policy-makers in designing disaster management policies. The concern for human security can be addressed through synergetic and coordinated efforts within the national and community frameworks. It will ensure the incorporation of best practices in inclusive intervention, especially in reference to gender and vulnerability.

**Mohsena Ferdousi**, Joint Secretary, Ministry of Food and Disaster Management, Bangladesh, described the transition of Bangladesh from a conventional response, relief and rehabilitation approach to a holistic model. In order to strengthen pre-disaster processes, the government is incorporating hazard identification and mitigation with an emphasis on community preparedness. Steps are also being taken to ensure that recovery planning addresses vulnerability issues. Regional cooperation, especially in the area of early warning systems, is of prime interest to Bangladesh.

**P.G. Chakrabarti**, Executive Director, National Institute of Disaster Management (NIDM), India, highlighted the challenges to social inclusion in DRR especially regarding social discrimination against women, the aged, children, the disabled, and Dalits. The recent major disasters in the region have accentuated these discriminations which are deeply rooted in the socioeconomic system. It is crucial to distinguish between risks that can be mitigated through preparedness and risks that people have to learn to live with.

**Nawazish Ali Khan**, Deputy Director, Earthquake Reconstruction and Rehabilitation Authority, Pakistan, shared the experiences of Pakistan from the 2005 earthquake, highlighting how the challenges have also led to new opportunities. One such outcome is the establishment of the Natural Disaster Management Authority (NDMA). The issue of vulnerable groups is being addressed through consideration of gender and spatial equity and the promotion of behavioural change. The DRR agenda includes improved urban centres and hazard-sensitive reconstruction. Emphasis is also being given to transparency and decentralised local bodies that deal with the grievances of community members.

**Mats Eriksson**, Senior Water Specialist, ICIMOD, presented the workshop objectives in line with the conclusions from the previous workshop on ‘Disaster Preparedness Plans for Natural Hazards’ and the Hyogo Framework for Action (HFA). The workshop is a small step among many steps towards building a more disaster- resilient society. The three objectives were as follows.

- To provide a platform for interaction and sharing knowledge among key practitioners in disaster preparedness (DP) and management; especially between institutions working at the community and central levels
- To explore opportunities to include local knowledge, innovations, and practices in the disaster management process
- To examine how gender, equity, and vulnerability issues can be reflected better and incorporated in the work of disaster management

## Book Launch

Pratap Kumar Pathak launched three ICIMOD publications on Knowledge for Disaster Preparedness.

1. ‘Gender Matters – Lessons for Disaster Risk Reduction in South Asia’ by Manjari Mehta
2. ‘The Snake and the River Don’t Run Straight – Local Knowledge on Disaster Preparedness in the Eastern Terai of Nepal’ by Julie Dekens
3. ‘Herders of Chitral the Lost Messengers? Local Knowledge on Disaster Preparedness in Chitral District, Pakistan’ by Julie Dekens

The books can be downloaded from the website: [www.disasterpreparedness.icimod.org](http://www.disasterpreparedness.icimod.org)

## Keynote speeches

**Kenneth Hewitt**, Department of Geography and Environmental Studies, and Cold Regions Research Centre, Wilfred Laurier University, Canada in his presentation ‘**From Vulnerability to Disaster Prevention**’ presented a case study on landslide hazard risks in the Hopar villages, Karakoram Himalayas, Northern Pakistan. In Hopar, most deaths and damage can and have been prevented through preparedness. Modest improvements in the security of the more vulnerable have dramatically reduced losses and increased community resilience. In fact, the somewhat invisible but ‘real’ disaster is not the landslide hazard itself. It is the over-work, stress, health problems, and premature death of women struggling to compensate the loss of land and other resources following landslide disasters. The Hopar case study illustrates how disaster risk often reveals pre-existing social insecurity and vulnerability. As such, disaster management would gain by applying the lessons learned from the public health and civil justice sectors; for example, emphasis on prevention, recognition of broad professional and official responsibilities, focus on vulnerable groups and situations, rights’ dimension, and precautionary principles. A major concern is the risk of large institutions taking over the role of civil society and thereby diminishing the skills and initiatives of the intended beneficiaries. Hewitt concluded with proposals for greater inclusiveness of (1) gender issues as a precondition for a holistic prevention approach and (2) the linkage between local knowledge and disaster preparedness for livelihood security and resilient communities.

**Manjari Mehta**, ICIMOD, in a keynote presentation entitled ‘**Reaching out to Vulnerable Populations – Issues and Considerations in Disaster Risk Reduction**’, demonstrated how cultural norms and the invisibility of women often contribute to gender inequities that increase their vulnerability to natural hazards and disasters. Cultural norms refer to rules or values that prevent or limit women’s access to food, education, health services, and any other resources that are vital before, during, and after a disaster. Women, as care givers in the household, have many responsibilities that have often been overlooked – and this is despite the fact that their responsibilities are intensified during and after the occurrence of natural hazards. Both factors hamper women’s access to relief and early warning systems and ultimately contribute to higher morbidity rates. Women’s vulnerability to violence following natural disasters is another key issue. For a socially inclusive and gender sensitive perspective on disaster management, vulnerability assessments need to take into account local knowledge and risk-reducing activities and disaggregate what is often conceived as a homogenous ‘community’. This will help to identify the most vulnerable and provide entry points to tap into communities’ strengths, knowledge, and local coping strategies – that is, reveal people’s capabilities rather than focusing on vulnerabilities only. A great need still exists to bridge the social-technical divide across disciplines, for promoting local-level initiatives, and for learning from experiences in disaster preparedness and management policy and action.

## Discussion

Chakrabarti highlighted Ladakh as a case where the rapid changes induced by modernisation of the economy are making what used to be a relatively balanced social-ecological system more vulnerable to stresses, including to natural hazards.

The need to identify and discuss social practices in the context of disaster risk mitigation was emphasised. Some examples of how cultural reasons make women more vulnerable to natural disasters than men include how saris impede the mobility of women and how young girls are deprived of opportunities to learn key survival skills as they are not allowed to climb trees or swim.

## Session 2: Planning for DP in the Region

**Mats Eriksson**, ICIMOD, provided an **‘Overview of the Status of DP plans in the Region’** based on the findings from the August 2006 workshop. Preparedness planning is mainly disaster driven by country and donor priorities. A paradigm shift is occurring in DM from a relief-driven approach to a preparedness-driven approach. Recent disasters in the region as well as a general awakening process on the importance of the issue have contributed to putting DP/M tools, instruments, and institutions in place. Most countries are well on the way to endorsing policies, strategies, plans, and acts at the national level.

**Pratap Kumar Pathak**, Joint Secretary, Disaster Management Section, Ministry of Home Affairs, Nepal, in his presentation, **‘New Tools for Disaster Preparedness in Nepal: Strategy, Policy, and Act – How is Social Inclusion Reflected?’** presented the current situation of disaster planning in Nepal. The government has adopted a policy of disaster risk reduction and has included preparedness activities for DM at national and community levels. A National Water Resource Strategy, National Water Plan, and Water Induced Disaster Management Policy are already in place. A national policy on internally displaced persons has been approved by the government and is being put into operation. Social inclusion constitutes a key aspect of this policy. Overall, the major challenge at the policy level is the need for sensitisation about issues of social inclusion. Nepal is moving towards a rights’ based approach but remains rooted in a service providing or welfare approach. Societal restrictions based on gender, caste, class, and ethnicity also need to be overcome. Nepal is in the process of making several national-level decisions about DM. Among them are incorporating disaster management in the poverty reduction agenda, mainstreaming issues of disaster into the national policy framework and sectoral policies, and affirmative provisions for special needs’ populations during disasters (women, children, the marginalised and socially excluded, the disabled, and senior citizens). Legislative reforms and institutional strengthening are also on the agenda.

**P.G. Dhar Chakrabarti**, National Institute for Disaster Management, New Delhi, presented **‘Social Inclusion in the Central Planning Process in India’**. The provision for affirmative discrimination of ‘socially excluded’ groups by the Constitution of India has triggered a series of initiatives from community to central levels. The Ministries of Women and Child Development and Social Justice and Empowerment are mandated to lead the process of social inclusion. Accordingly, the Planning Commission has developed innovative tools such as Gender Budgeting to ensure that funds are clearly set aside for gender issues. Self-help groups at the grass roots are facilitating mobilisation and empowerment of the excluded as ‘social inclusion’ has now become the principal political agenda cutting across party affiliations. Despite these efforts, recent major disasters revealed that more women than men die from natural disasters and women face issues of violence following natural disasters. Children have to compete with adults to get their share of relief and their lives are being seriously disrupted at a critical stage of development. They are also vulnerable to exploitation such as trafficking. Early warning systems are not disability friendly and disabled people are sometimes left out during evacuation operations. Some steps have been taken to bridge the gaps such as drafting relevant manuals, procedures, and templates to incorporate the critical needs of the marginalised. Training modules have been developed to sensitise functionaries within and outside government about the needs of women and other marginalised people. NGOs working for marginalised groups are associated with disaster management committees at district and village levels. The National Disaster Management Authority (NDMA) is expected to incorporate further actions for social inclusion when developing minimum standards of relief for disaster victims.

**Mohsena Ferdousi**, Joint Secretary, Ministry of Food and Disaster Management, Government of Peoples Republic of Bangladesh, presented **‘Strategic Priorities of Disaster Management in Bangladesh’** focusing on professionalism in the disaster management system. The Standing Orders on Disaster (SOD) outline the roles and responsibilities of every relevant agency and responsible person for preparedness and response. A draft

Disaster Management Act, which will provide the legal basis for the SOD and communities to mitigate disaster risk, response, and recovery, is in the process of being finalised. However, communities are not included in the orders to an adequate degree. Another strategic provision is the National Disaster Management Plan, which serves as the umbrella for the plans to be designed at all local levels. This provision still needs to be approved by the Cabinet. The Gender and Social Exclusion Analysis Framework Comprehensive Disaster Management Programme (CDMP) has developed a draft gender and social exclusion analysis framework. It is a screening tool to help disaster managers to take design, implementation, and monitoring issues into account in their programme activities in a systematic way.

## Discussion

Pathak reiterated that lack of awareness and sensitivity at policy level was the bottleneck to social inclusion in DRR in Nepal. More pressure from civil society to account for social inclusion is needed to overcome this problem.

Chakrabarti observed that the Indian states which faced recent incidences of disaster have learned to be better prepared than other states that did not encounter major disasters. Community-based disaster risk management programmes are being implemented in 169 districts targeting 300 million people. Village disaster management plans are being prepared by villagers through village disaster management committees.

A major lesson learned is that community involvement is crucial for the success of disaster preparedness activities. Sustainable solutions have to account for multiple factors (ecological, socioeconomic, and political) and how these factors cascade through all levels and influence them. For example, top-down legal provisions banning human settlements in hazard-prone areas have often failed to prevent people from living in risky places.

## Session 3: Outreach, Networking, and Communication

**Kunda Dixit**, Nepali Times, in his presentation ‘**Reporting on Disaster Preparedness and Management – The Role of Media**’ highlighted the reasons behind the failure of the media to play a proactive role in DP/DM. Media owners have emphasised ‘saleable news’, consequently reporting on post disasters; and especially those with a large number of deaths. The Media is oriented towards sensationalism, mainly entertainment driven, and preoccupied with western and the developed world’s concerns. These limitations can be addressed by changing the market perspective. Organisations such as ICIMOD can play a proactive role by inviting media personnel out to field sites to report on the complex processes leading to increasing vulnerability to natural hazards in the region.

**Vijay Khadgi**, ICIMOD, in his presentation on ‘**Knowledge Networking – Are There Gaps to be Filled?**’ focused on what was needed to build a knowledge sharing culture. The benefits of networking include strengthening capacity, resource pooling, and developing synergies and catalysts for establishing partnerships. Despite these benefits, a huge gap still exists between the amount of information being generated and the extent of sharing to make the information useful for disaster-risk reduction practitioners. ICIMOD’s DRR initiatives on knowledge sharing reveal that, despite the existing members, infrastructure, and the availability of useful information, the sharing of information has been lacking so far. One major reason behind this is that the Knowledge Network is still relatively young and users may not be familiar with it yet. Some of the key questions that disaster management practitioners, as a community and as individuals, need to address to bridge the gap in information sharing include the following – how can we build a knowledge sharing culture? what kind of knowledge are you looking for? And what kind of knowledge are you able to share with others?

**Aslam Perwaiz**, Asian Disaster Preparedness Centre (ADPC), Bangkok, presented ‘**Regional Approach and Networking - Recent Examples of DRR from South and South East Asia**’. Composed of institutional members from 26 Asian countries, ADPC’s main roles are to identify disaster-related needs and priorities of the Asia-Pacific countries, to promote regional and sub-regional co-operative programmes, and to develop regional action strategies for disaster reduction. ADPC’s overall strategy in DRR in the region aims to strengthen institutional mechanisms and capacities, facilitate exchange of information and resources regionally, promote and provide demonstrations of innovative practices, promote and support good governance policies, and encourage participation and coordination among the public and private sectors.



**Dissanaike Tharuka**, Duryog Nivaran, Sri Lanka presented information on ‘**Duryog Nivaran – A Network for Disaster Mitigation in South Asia**’. Duryog Nivaran (DN) promotes disaster preparedness and risk reduction initiatives based on vulnerability analysis and community participation. It has around 50 registered, institutional and individual members and covers five thematic areas: understanding vulnerability and social linkages; promoting accountability; promoting regional cooperation; and traditional knowledge and capacities. Activities include publications, training, research, policy advocacy, and providing and participating in various forums. Vulnerability, gender, and marginalisation are major foci of the network’s research and publications.

### **Discussion – The need for networking and regional cooperation**

ICIMOD’s knowledge-sharing initiative in DRR through a website ([www.disasterpreparedness.icimod.org](http://www.disasterpreparedness.icimod.org)) might gain in linking up with the Hindu Kush- Himalayan – Flow Regimes from International Experimental Network Data (HKH-Friend) website which already has a maximum outreach to institutions dealing with natural disasters in the region. Due to the diversity of already existing initiatives, a network of networks could contribute to improving the networking of institutions, essentially by mapping institutions at all levels working on DRR. The Internet network is mostly used on a needs’ basis, especially during crises rather than on a routine basis. The low period is meant for preparation to ensure that all information is accessible and ready when the need arises. One key issue is the degree of accessibility and usefulness of such hi-tech medium to marginalised and vulnerable groups. One example is the case of women from fishing communities in South India who have been trained by M.S. Swaminathan Foundation to download images of cyclone tracking to assess whether fishing is feasible or not. The women’s participation is considered very effective. The combination of internet, fax, and news boards used by disaster management units of the Vietnamese Government provides another example. Early warning messages sent from Hanoi to community leaders through this system arrive at the community targeted within one day.

## **Day 2: Gender, Equity, Vulnerable Groups in DRR**

### **Session 4: Gender, Equity and Vulnerable People**

**Mats Eriksson**, ICIMOD, presented a ‘**Summary from Day 1**’. Keynote speeches emphasised that understanding and addressing the social insecurity and vulnerability pre-existing any natural hazards are crucial for improved disaster management activities. As such the needs of the marginalised and vulnerable groups need to be addressed to enhance the preparedness process. The issue of gender-related vulnerability is an integral part of disaster preparedness and should not be treated as an add-on. An overview of the planning processes in the region reveals that much is happening in DRR with new ideas, institutions, and a paradigm shift from post- to pre-disaster activities and the integration of social inclusion issues. Increased sensitisation about the issues of social inclusion among politicians and governments is needed. Within the area of networking and communication, changes in the media’s perception and way of reporting natural hazards and disasters are greatly required. At present the media are still geared towards post-disaster reporting as the result of an outdated perception of what is saleable news. Networking is crucial for disaster preparedness and the internet network is accessed and used on a needs’ basis rather than in a routine manner. This nature of internet networking needs to be recognised and accepted and further facilitated.

**P.G. Dhar Chakrabarti**, Director, SAARC Disaster Management Centre, India, presented ‘**The Emerging Framework of Regional Cooperation in Disaster Risk Reduction in South Asia**’. The nature of every major disaster in the region is interconnected and therefore requires regional cooperation for viable solutions. Some of the milestones of regional cooperation include the establishment of the SAARC Meteorological Research Centre (Dhaka, Bangladesh) and the SAARC Coastal Zone Management Centre (Male, Maldives). The 2005 Male Declaration of SAARC environment ministers called for a Comprehensive Framework on Disaster Management which led to the adoption of the Framework on DM during the 14th SAARC Summit, Delhi, India, in April 2007. The 2006 Delhi Declaration included setting up a Regional Platform on DRR. Following the Indian Ocean tsunami and Kashmir earthquake, every country has firmly committed to setting up legal institutional mechanisms for DRR although they are facing constraints in terms of capacities, technologies, and resources. Regional cooperation remains more challenging than bilateral cooperation and needs to be improved and pushed forward by the SAARC regional forum. Innovative and proactive commitment is required to raise the level of regional cooperation in South Asia.

**Shyam Jnavaly**, ActionAid Nepal, presented his experience on **‘Participatory Vulnerability Analysis (PVA): Social Inclusion Process in Disaster Risk Reduction’**. PVA is based on the principle that communities know their own situations best; and therefore any analysis should be built on their knowledge of local conditions. This method incorporates a rights’ based approach. Simple PRA tools and matrices are used to involve the community in the NGO process of acquiring information, understanding, and analyses of DRR-related information and participating actively in DP/DM activities. PVA can provide a clear analysis to practitioners to identify and/or understand target groups, their vulnerabilities, and their coping capacities in regards to natural hazards. The method also gives a perspective on communities’ ability to think in a broader framework by taking into account their perceptions on the influence of regional, global, and market economy issues. PVA is used as a baseline during the preliminary phase of project activities.

**Faizul Kabir**, Handicap International, Bangladesh, presented **‘Mainstreaming Disability Issues and Inclusion of Marginalised Groups in Disaster Preparedness and Risk Reduction’**. In mainstreaming the issues of disability in DRR, Handicap International Bangladesh uses the ‘twin track approach’ focusing primarily on creating sustainable change and inclusion of persons with disability (PWDs) in the society and establishing their rights in every sphere of life. The programme focuses on strengthening programme collaboration, advocacy, awareness raising, capacity building, better networking, and sharing information to build safer communities through a multi-hazard, disaster preparedness approach mainstreaming disability, women’s, and children’s issues. The participation of target groups in society and DP meetings is facilitated through various means. Door-to-door therapy is supported by providing the individuals with locally available and adapted devices for assistance such as crutches and wheel chairs. Houses and the community environment are designed to facilitate people’s mobility. Simulation exercises and appropriate means of communication are developed to ensure disabled people’s preparedness to cope with natural hazards. Government agencies and district administration are involved in the DP mechanism to ensure the inclusion of people’s specific needs at policy and implementation levels. Linking DP with poverty alleviation and taking an inclusive approach during the preparedness phase have proved to be effective. Making early warning systems accessible to all is a major challenge as varied disabilities need to have different communication and outreach means. Community-based rehabilitation (CBR) programmes are crucial for the DP approach and require the proactive participation of all community members. The organisation is open to all types of support available in the community. It does not accept or reject on the basis of whether the support offered is of a service-oriented nature or a rights-based one. The ultimate decision is left up to the individual beneficiary.

**Deepesh Sinha**, All India Disaster Mitigation Institute (AIDMI), India presented AIDMI’s experience of **‘[A] Gender Perspective in Disaster Risk Reduction’**. AIDMI works towards DRR in vulnerable communities through livelihood security activities; for example, women are given support to start small businesses and are also involved in cash for work projects. AIDMI has developed a disaster insurance package to help women during the recovery process. The package has been designed to include shelter, household and livelihood items, life, and accidental death. Premiums are initially paid by AIDMI and later by the women themselves. The insurance system currently covers approximately 784 men and women in the project areas. The Safer School Campaign promotes the role of mothers and female staff for DP in schools. These activities empower women victims to gain bargaining power in the household and increase their role in decision making. The activities also expand the women’s scope to explore social, economic, and educational areas.

**Jakia Akter**, Centre for Environmental and Geographic Information Services (CEGIS), presented her experience in **‘Bangladesh Erosion Prediction: A Tool for Poverty Reduction’**. Land erosion on the river sides is a major cause of poverty in Bangladesh. Between 1973 and 2006, Bangladesh lost 200,000 ha of land and 64,000 people have been displaced annually, affecting a total of 1,600,000 people. CEGIS has carried out erosion forecasting over a period of three years (2004-2006) on the bank line in Shailabari using remote sensing-based erosion prediction technology. The case study demonstrates that this technology is useful in planning and prioritising DP, including issues of resettlement and rehabilitation. Such technology can facilitate proper distribution of relief and relocation of schools, community buildings, and other infrastructure including hat bazaars, roads, and transmission lines to less hazard-prone areas. According to CEGIS’s experience, this locally developed technology is quick, easily understood, and less expensive than other methods.

## Panel discussion and comments

**Panellists:** Faizal Kabir, P.G. Dhar Chakrabarti, Shyam Jnavaly, Deepesh Sinha, and Jakia Akter

**Moderator:** Manjari Mehta

Practitioners and communities working with DRR are facing a diversity of issues including gaps between national policy and ground reality (e.g., diversity of people's needs), political agenda, and their implementation and the highly technical/scientific perspective and the basic issues of livelihood survival and social rights. The complex dynamics associated with the multicultural setting within and across nations further complicates and makes the social inclusion of marginalised and vulnerable groups more difficult for DRR practitioners.

Social inclusion can be defined as the lifting up of (sociocultural, economic, political, etc.) barriers that prevent excluded groups from having access to and benefiting from various assets (natural resources for example). Finding ways for the socially excluded and socially included groups to interact and ensure a win-win situation is a key challenge. This issue needs to be addressed at the root — that is starting with changing people's attitudes. Christian Aid uses the social equity audit tool to promote an inclusive approach through a transformation process by analysing personal values and attitudes.

Implementation of DRR at community level is often perceived to be the role of NGOs and INGOs. Community outreach involves dealing with complex social issues that need time, sensitivity, and particular skills. Governments should commit resources and ensure that local best practices and initiatives can be scaled up and included in policy, legal, and institutional frameworks and in strategy and action plans whenever relevant.

At the regional level, SAARC might be the most suitable institution to deal with DRR within a regional framework. The SAARC Disaster Management Centre (DMC), which is expected to be fully operational within a few months from May 2007, aims at developing a network of networking institutions to facilitate rapid acquisition, storage, retrieval, and dissemination of information. Data and knowledge on disaster management will be made available — including linkages with approved real-time data providers. Its major challenge is the implementation of the huge mandate given to it by the member countries with limited resources and a complex decision-making process. The vision is to make the DMC a vibrant centre of excellence for knowledge, research, and capacity development in disaster management.

## Session 5: Group work

**Manjari Mehta** and **Dechenla Sherpa**, ICIMOD, initiated a group work exercise on '**Mainstreaming Social Inclusion in Disaster Preparedness**'. The purpose of the group work was to identify the key challenges, key responsible stakeholders, and possible solutions for mainstreaming social inclusion in DP. Participants were divided into four groups: gender, age and disabled, poverty, and caste/ethnicity/indigenous people. The questions posed were a) why do disasters affect more women, children, the elderly, and the poor, and disabled people? b) how can we address these problems? and c) who is responsible for the different roles (who does what)?

The main reasons for social exclusion as perceived by the participants include lack of education, negative cultural beliefs, lack of policy implementation, and lack of understanding about vulnerable groups and/or insensitivity towards the issues of these groups. In response to these key challenges, the participants suggested empowerment of vulnerable groups through sensitisation of socially included groups, training, education, and strengthening implementation of legal provisions through proper and regular monitoring. The emphasis on the participatory approach also highlighted the need to focus on people's capabilities rather than focusing on their vulnerabilities to make a difference in their lives. All stakeholders (vulnerable groups, government and non government organisations, and the media and private sector) were identified as having a key responsibility to mainstream social inclusion in DP.

**Brigitte Leduc** and **Manjari Mehta**, ICIMOD, summarised the group work. The root causes for social exclusion coming from the group work revolve around socio-cultural beliefs and locations (places where people are forced to be or in some cases where they are not given access). It is important for all stakeholders to understand the needs and situation of vulnerable groups and take collective responsibility for improving their conditions. Although political provisions and mechanisms may exist to account for issues of social inclusion, their effectiveness on the ground is the real issue.

The group-work solutions prioritised sensitisation of stakeholders at every level through awareness-raising.



Listening to socially excluded groups is considered a precondition for meaningful participation of vulnerable and marginalised groups. The multidimensional nature of the problems calls for learning to work in multi-disciplinary teams, exchange of experiences, and respect and acknowledgement of others' culture and knowledge.

The session was concluded with a self-reflective question: what do we have to change in our own organisations and our way of working to reduce the vulnerability of marginalised groups?

## Day 3: Friday 11 May: Understanding Local Knowledge and Practices for Disaster Preparedness

**Manjari Mehta**, ICIMOD, shared the '**Summary of Day 2**'. The gap between what exists in constitutional and legal provisions and the everyday realities of millions of people is a persistent issue. The main causes attributed to the lack of implementation of the provisions are sociocultural norms and traditional barriers that influence the attitude of those responsible. They are unaware of the value of accounting for and working with marginalised and vulnerable groups. They consider these issues to be burdens rather than a means of solving a common societal problem; and hence challenges still remain to the processes and mechanisms for ensuring social inclusion. A great need still exists for sensitising policy and decision-makers regarding how disasters have differential impacts on varied groups of society. Marginalised groups need to be empowered to participate in policy and decision-making processes. Information must be tailor made to ensure it reaches all groups in society. Capacity building of relevant institutions to implement and enforce disaster management policies and plans is crucial for ensuring inclusion of socially excluded groups.

### Session 6: Local Knowledge for Disaster Risk Reduction

**Julie Dekens**, ICIMOD, presented the keynote speech on '**Identifying Local Knowledge for Disaster Preparedness**'. Local knowledge is understood in its broadest sense and includes indigenous knowledge. It refers to the knowledge of the people-at-risk and their related beliefs and practices. Understanding and accounting for local knowledge and practices can contribute to improving the formulation and implementation of disaster preparedness activities. The four pillars of local knowledge on DP provide a simple framework designed to help implementing organisations to identify local knowledge about and practices in DP. According to this framework, local knowledge about DP is based on people's abilities to observe their local environment, anticipate early signals of natural hazards, and adapt to natural hazard risks based on their assets and ability to learn, re-organise, and communicate about natural hazards among community members and between generations. People are facing rapid changes and multiple stresses and these make the use of local knowledge for DP a key challenge. Although not all local knowledge and practices are relevant or sustainable, they always need to be understood and accounted for in order to ensure a DP project's acceptance and sustainability.

**Nazmul Chowdhury**, Practical Action, Bangladesh, presented '**Alternative Strategies for Community-based Disaster Risk Reduction: A Case about Communities Displaced by River Erosion in Bangladesh**'. The aim of Practical Action's DRR work is to shift the emphasis from short-term relief and rehabilitation to long-term mitigation measures and to mainstream DRR into development practices. This can only be achieved by strengthening community capabilities to cope with disasters. One such process has been undertaken since 1997 in one district benefiting 40,000 people. The project is implemented on a model basis and can be used for scaling up and replication by the government. Developing livelihood activities that take into account gender and vulnerability issues and enable communities to cope with disasters better is the main focus. The promotion of various livelihood activities that take advantage of the specificities of the flood-prone environment enables people to become contributors rather than just beneficiaries of the project. Livelihood activities include various agricultural activities such as cropping on flood protection embankments and on barren and unfertile sand bars, fisheries, and livestock resource management.

**Deepesh Sinha**, All India Disaster Mitigation Institute (AIDMI), India, presented his experience on the '**Use of Local Knowledge in Disaster Recovery**'. AIDMI is working in close consultation and cooperation with local communities and authorities (government, army, and panchayat) to initiate a community-driven approach to relief and rehabilitation. The Institute identified key community representatives and volunteers to play vital roles in working effectively with communities affected. The sociocultural traditions of the communities were taken

into consideration in developing appropriate activities. Some of the AIDMI activities included establishment of partnerships with schools, school safety training for teachers and staff, cash for work schemes, and a disaster insurance scheme. Communities were consulted about using eco friendly local materials.

**Naheeda Khan**, Focus Humanitarian Assistance, Pakistan, presented a case study on **‘Disaster Risk Management: Indigenous Solutions’**. Due to the interventions of government and relief agencies, communities have become increasingly dependent on external services. In response, Focus revived the tradition of doing voluntary work in the community and built upon it to improve the communities’ preparedness to respond to disasters. At present more than 30,000 community volunteers have been trained in responding to emergencies throughout Pakistan, and almost 50% are female volunteers. One hundred and forty-six Community Emergency Response Teams (CERT) and more than 300 Village Emergency Response Teams have been established. Trained community volunteers have responded to more than 75 major and minor disasters. Where the disaster is beyond the capacity of the community, a 40-member trained and equipped Search and Rescue Team is now available for response. Focus has learned from this experience that (1) combining modern concepts with traditional approaches is necessary to make programmes acceptable to the communities; (2) involving religious leaders to help communities make the right choices is a must; (3) gaining community trust and establishing linkages between the local community and institutions and external agencies are necessary for developing sustainable coordination mechanisms; and (4) supporting local coping and survival strategies is important because it enables the community to respond to the situation long before outside help arrives (especially in the context of remote communities).

## Session 7: Group Work

**Julie Dekens** and **Prof. Xu Jianchu**, ICIMOD, introduced role play on **‘Action Planning: Integrating Local Knowledge in Disaster Preparedness’**. The groups were divided according to their countries and were asked to contribute to the design of a working plan at the local community level in order to integrate local knowledge and practices into DP activities. The outcome expected was concrete recommendations on how to integrate local knowledge into DP activities.

Each group highlighted different aspects: the role of outsiders (academicians, government officials, NGOs, and private companies), the nature of the process (who has local knowledge, what type of knowledge, how to find this knowledge, how to document or map the knowledge, how is it transmitted and disseminated, why should this knowledge be or not be incorporated, how to support local knowledge and practices) and the integrated approach (situation analysis, analysis of information, community response, community training, vulnerable areas, and interventions). The overall group work outcomes emphasised that the participatory approach using PRA tools was the most common approach chosen for getting input from the communities. The ICIMOD framework ‘four pillars of local knowledge on DP’ was also used. NGOs were seen to be the most appropriate bodies to gather local knowledge. One group stressed that the private sector has a role to play and has done so in many cases of disaster. NGOs can also facilitate the collaboration between communities and private companies (e.g., cooperation with insurance companies).

Prof. Xu Jianchu stated that indigenous and local knowledge is a very difficult topic and to understand this topic requires a change in one’s attitude and values. Working with the community is a commitment. One has to approach the local communities from the heart, see their situation and environment with one’s own eyes, listen to them, walk through the hazard areas, ask them what kind of knowledge they have, where and whom they got the knowledge from, and why and how they use the knowledge.

## Session 8: Closing Session

### Conclusions

The conclusions from the workshop are based on observations and remarks made during the workshop. The main outcome from the working groups has also been included in the conclusions. The conclusions were discussed during the closing session and agreed upon as an outcome of the workshop.

### General Observations

1. The transboundary nature of many disasters in the Himalayan region calls for the **development of regional mechanisms** as well as national mechanisms to ensure effective disaster risk reduction (DRR).
2. Policy and decision-makers, mid-level practitioners, the media, and the general public should be sensitised through **advocacy and by raising awareness** about how disasters have different impacts on different groups of society.

### Local Knowledge

3. **Recognising and respecting** local knowledge and practices empowers local communities. While not all local knowledge and practices are relevant, they should always be accounted for to ensure projects are acceptable and sustainable.
4. By **integrating local and scientific knowledge**, interventions in the field of DRR can be improved.
5. **Sociocultural norms and traditional customs** that promote or inhibit social inclusion in DRR must be understood and addressed.

### Equity and Vulnerable Groups

6. **Secure sustainable livelihoods** are necessary to reduce vulnerabilities and strengthen resilience against natural hazards, particularly among marginalised and vulnerable groups.
7. Political and socioeconomic **empowerment of marginalised groups** enables their participation in policy and decision-making and reduces their vulnerability.
8. **Capacity-building** of relevant institutions is essential for implementing and enforcing disaster management policies and plans that give specific attention to socially excluded groups.

### Communication, Cooperation, and Collaboration

9. **Building partnerships** between government agencies, civil society institutions, and the private sector is compulsory for improving DRR and understanding and including socially excluded groups.
10. **Improved dialogue** is a must for bridging the current gap between central-planning and community-implementation levels. This applies to issues related to social inclusion as well as DRR at large.
11. **Information about disaster preparedness must be tailor-made** to reach all groups in society and give high priority to the most vulnerable.
12. **Sensitisation of the media** on the importance of covering disaster preparedness activities as well as post-disaster events is essential.

### Concluding Remarks

**Kenneth Hewitt**, Department of Geography and Environmental Studies, and Cold Regions Research Centre, Wilfred Laurier University, Canada, concluded the session stressing that, unless issues of social inclusion are adequately integrated into DRR, efforts will continue to fail. Disasters are special in that they are evidence of failure, clearly reflecting pre-existing vulnerabilities. The focus on social inclusion is often difficult to discuss and tackle because we all tend to promote our own agenda. Working with the community is challenging: it requires dialectical thinking, a flexible agenda, and reflexivity among other things. Three important aspects need further consideration: (1) local knowledge in urban contexts, (2) language barriers (in many cases external organisations do not speak the local languages), and (3) violence (communities are facing multiple stresses which undermine their livelihoods. Often natural hazards are not the most important stresses (as illustrated by the terrible legacies of violence in Nepal and in many other countries). The issues of rights, ethics, and social justice call for obligations at a higher level.

**Madhav Karki**, Acting Director General, ICIMOD, reaffirmed that DP is a core element within ICIMOD's work and the organisation has a responsibility to integrate its elements into different programmes and institutionalise it. The wide and rich range of best practices in the region is a strong basis for regional sharing. The challenges of living in multiple hazard zones require the use of all existing knowledge and a holistic approach to DM.

# **Annexes**

# Agenda of Regional workshop on Disaster Preparedness Plans for Natural Hazards Kathmandu 7-9 August, 2006

## SUNDAY 6 AUGUST

19.00 Registration and ice breaker reception at Hotel Himalaya

## MONDAY 7 AUGUST: Focus on DP plans on National Level

08.00 Vehicle leaves for ICIMOD from Hotel Himalaya

08.30-09.00 Registration

### Session 1: Opening session: (Chair: Xu Jianchu)

09.00-09.15	Welcome address	Dr. Madhav Karki, ICIMOD
09.15-09.25	Opening remarks	Mr. Thir Bahadur G.C., Under Secretary, Disaster Management Section, Min. of Home Affairs, Nepal
09.25-09.35	Opening remarks	Mr. Abdul Bari Khan, Additional Secretary, Min of Food and Disaster Management, Bangladesh
09.35-09.45	Opening remarks	Mr. N.S. Nepalchyal, Principal Secretary, Government of Uttaranchal, India
09.45-09.55	Opening remarks	Mr. Ghulam Khan, Director, National Crisis Management Cell, Min. of Interior, Pakistan
09.55-10.10	Workshop objectives	Dr. Mats Eriksson, ICIMOD
10.10-10.40	<i>Coffee &amp; Tea</i>	

### Session 2: Natural Hazards in the Himalayan Region (Chair: Sazedul Chowdhury)

10.40-10.55	Premonitory Phenomenon of sediment-related disasters, Mr. Masahiko Murata, Asian Disaster Reduction Center (ADRC)	
10.55-11.15	Landslide and mitigation measures for risk reduction, Dr. Ramesh Tuladhar, Department for Water Induced Disaster Prevention (DWIDP), Nepal	
11.15-11.35	Earthquake preparedness in Nepal, Mr. Amod Dixit, Executive Director National Society for Earthquake Technology-Nepal (NSET)	
11.35-11.55	Experiences and lessons learnt from the Pakistan earthquake, Mr. Aziz Ahmed Jamali, Earthquake Reconstruction & Rehabilitation Authority, Pakistan	
11.55-12.15	Flood mitigation in Bangladesh, Mr. Md. Waji Ullah, Center for Environmental and Geographic Information Services (CEGIS), Bangladesh	
12.15-12.35	Floods and flash floods in a regional perspective, Mrs Mandira Shrestha, ICIMOD	
12.35-13.00	Discussion	
13.00-14.00	<i>Lunch</i>	

### **Session 3: National disaster preparedness plans (Chair: Wolfgang Grabs, WMO)**

- 14.00-14.30 Key note presentation: The importance of plans for disaster preparedness, Mr Aloysius Rego, Asian Disaster Preparedness Centre (ADPC), Thailand
- 14.30-14.55 Status report on DP plans in Bangladesh, Mr M H Siddiqi, Kranti consultants, Bangladesh
- 14.55-15.20 Status report on DP plans in India, Mrs Chandrani Bandyopadhaya, National Institute of Disaster Management (NIDM), India
- 15.20-15.50 *Coffee and Tea*
- 15.50-16.15 Status report on DP plans in Nepal, Mr Bhubanesh Kumar Pradhan, Association for Research and Management Services, Nepal
- 16.15-16.40 Status report on DP plans in Pakistan, Dr Asif Khan, National Centre of Excellence in Geology, University of Peshawar, Pakistan
- 16.40-17.30 Discussion on DP plans in the four countries; achievements, needs, gaps, implementation, etc.
- 17.30 Closure of the day/ Vehicle leaves for Hotel
- 19.00 Workshop dinner hosted by ICIMOD

### **TUESDAY 8 AUGUST: Focus on DP plans on local and intermediate level**

- 08.20 Vehicle leaves for ICIMOD from Hotel Himalaya

### **Session 4: Vulnerable groups and indigenous knowledge (Chair: C. Bandopadhyay)**

- 09.00-09.20 Disasters and vulnerable groups, Dr Manjari Mehta, ICIMOD
- 09.20-09.40 Local knowledge for disaster preparedness, Ms Julie Dekens, ICIMOD
- 09.40-10.00 Discussion
- 10.00-10.30 *Coffee and Tea*

### **Session 5: Community based disaster preparedness plans (Chair: Rahul Sengupta)**

- 10.30-10.50 DP plans on community level in Bangladesh, Dr. Ahsan Ahmad, BUP, Bangladesh
- 10.50-11.10 DP plans on community level in India, Mr Kamal Kishore, UNDP, India
- 11.10-11.30 DP plans on community level in Nepal, Red Cross Nepal
- 11.30-11.50 DP plans on community level in Pakistan, Speaker to be announced
- 11.50-12.30 Discussion on DP plans on community level; linkages to national level, shortcomings gaps, needs etc.
- 12.30-13.30 *Lunch*

### **Session 6: Knowledge sharing and training**

- 13.30-13.50 The importance of knowledge sharing, Dr Zbigniew Mikolajuk, ICIMOD
- 13.50-14.10 Training for multi-hazard risk assessment, Mr Pradeep Mool, ICIMOD

## Session 7: Group work

- 14.10-14.30 Gap analysis of disaster preparedness plans, Mr Gehendra Gurung, Practical Action
- 14.30-14.40 Introduction to group works for Gap Analysis, Dr Mats Eriksson, ICIMOD
- 14.40-16.20 Group work (including coffee/tea)  
Based on the presentations of DP plans on national and community level, we will form country-wise groups to discuss and identify gaps and shortcomings in the existence and implementation of DP plans.
- 16.20-17.00 Presentation of group discussions
- 17.00-17.45 Plenary discussion on the outcome of group works, the need in the region and the way forward.

## WEDNESDAY 9 AUGUST: Excursion day

- 08.20 Vehicle leaves for ICIMOD from Hotel Himalaya

## Session 8: Closing session

- 09.00-10.00 Conclusions and closing remarks.  
  
Summary of the working groups findings,  
(Dr Mats Eriksson & Gehendra Gurung)  
The way forward: Bangladesh, India, Pakistan, Nepal  
Upcoming activities in the region  
Closing remarks
- 10.00-10.30 *Coffee and Tea*
- 10.30-13.00 *Excursions:*
- A) City Excursion: Earthquake vulnerability and preparedness walk in Patan.
  - B) Visit to a Landslide risk mitigation site, Bungamati

**Please, sign up on the excursion lists in order to participate!!**



# List of Participants – Regional Workshop on Disaster Preparedness Plans for Natural Hazards

## Bangladesh

### Mr. Abdul Bari Khan

Additional Secretary  
Ministry of Food and Disaster Management  
Government of People's Republic of Bangladesh  
Bangladesh Secretariat, Dhaka  
Tel: 88-02-9557007  
Fax: 88-02-7165405  
Email: mof@bttb.net.bd

### Dr. Ahsan Uddin Ahmed

Executive Director  
Bangladesh Unnayan Parishad (BUP)  
House 50, Road 8, Block-D, Niketon, Gulshan-1  
Dhaka-1212, Bangladesh  
Phone: (8802) 885 3958-60  
Fax: (8802) 885 0036  
Email: aua\_bup@citech-bd.com

### Mr. Istiaque Ahmad

Deputy Secretary  
Cabinet Division, Ministry for Cabinet Affairs  
Room no: 201 Building: 1, Bangladesh Secretariat,  
Dhaka 1000, Bangladesh  
Tel: 008802 7166260 (office), 8151780  
Fax: 008802 7160656  
Email: ahmadistiaque@yahoo.com

### Mr. Masroor-ul Haq Siddiqi, Bir Uttam

Chief Technical Advisor  
KRANTI ASSOCIATES LIMITED  
House 38/3, road 16A, Dhanmondi, Dhaka 1209  
Bangladesh  
Tel: 08802 – 8113292  
Email: mhs@bangla.net

### Mr. Md. Shah Alam

Deputy Director  
Bangladesh Meteorological Department (BMD)  
Tel: 88-02-8116634, 8119832  
Fax: 88-2-8118230  
Email: bmddhaka@bttb.net.bd, bmdswc@bdonline.com

### Mr. Md. Wajullah

Head, Water Resources Division  
Center for Environmental and Geographic Information  
Services (CEGIS), House No 6, Road No 23/C, Gulshan  
one, Dhaka, Bangladesh  
Tel: 8821570-2 (o), 8812842 @, 0171  
Fax: 880-2-8855935, 880-2-8823128  
Email: wullah@cegisbd.com

### Mr. Munir Siddiquee

GIS Specialist  
Local Government Engineering Department  
GIS Unit (Level-4)  
LGED Bhaban, Agargaon,  
Sheer-E-Bangla Nagar  
Dhaka-1207, Bangladesh  
Tel: 88-02-8112126  
Fax: 88-02-8112126  
Email: munir\_s@lged.org

### Mr. Sazedul Karim Chowdhury

Superintending Engineer & National Project Director  
Processing and Flood Forecasting Circle,  
Bangladesh Water Development Board (BWDB)  
72, Green Road,  
Dhaka, Bangladesh  
Tel: +880-2-8121491  
Fax: +880-2-95647630  
Email: sazed123@hotmail.com,  
chowmsk@dhaka.net

### Mr. Md. Tarik-ul-Islam

Senior Programme Officer  
UNDP-Bangladesh  
UN Offices, IDB Bhaban (level-7),  
Agargaon, Dhaka-1207, Bangladesh, GPO Box 224  
Tel: 880-2-8118600 (Ext. 2664)  
Fax: 880-2-8117811  
Email: tarik.islam@undp.org

## India

### Ms. Chandrani Bandyopadhyay

Asst. Professor  
National Institute of Disaster Management  
Ministry of Home Affairs  
IIPA Campus, I.P. Estate  
Ring Road, New Delhi – 110002, India  
Tel 91-11-23702432, 23705583  
Fax: 91-11-23702442  
Email: chandrani.bn@nidm.net

### Mr. Kamal Kishore

Regional Disaster Reduction Advisor  
South and South West Asia  
UNDP-BCPR (Disaster Reduction Unit)  
New Delhi, India  
Fax: 91 11 2433 1334  
Email: Kamal.kishore@undp.org



**Dr. M.P. Sah**

Scientist  
Wadia Institute of Himalayan Geology  
33-Gen.Mahadeo Singh Road  
Dehra Dun-248 001, India  
Tel: +91-135-2624806/2623174/ Extn.681  
Fax: +91-135-2625212  
Email: madho\_sah@rediffmail.com

**Mr. N.S. Napalchyal**

Principal Secretary  
Department of Disaster Management  
Uttaranchal Government, Uttaranchal Secretariat  
4, Subhash Marg, Dehradun, India  
Tel: 0135-2712001  
Fax: 0135-2712021  
Email: ns.napalchyal@nic.in

**Dr. Varun Joshi**

GB Pant Institute of Himalayan Environment &  
Development (GBPIHED), Sikkim Unit  
P.Box. 24, PO Gangtok  
Sikkim 737 101 India  
Tel: 91 3592 237189 (Extn. 204),237328  
Fax: 91 3592 237415: 09434629995 (M)  
Email: varunj63@yahoo.com

## Pakistan

**Mr Asad Lakhani**

Vice Chairman, Board  
FOCUS Humanitarian Assistance, Pakistan  
Block 14, Civic Centre, G-6, Islamabad, Pakistan  
Tel. 92-51-2201018 Ext. 111, 92-51-2201134  
Fax. 92-51-2201976  
Email: asad\_lakhani@hotmail.com

**Dr. Allah Bakhsh Kausar**

Director  
Geological Survey of Pakistan  
Ministry of Petroleum & Natural Resources  
Plot. 84, Street No. 03, H-8/1  
Islamabad, Pakistan  
Tel: 92-51-9257182  
Fax: 92-51-9250499  
Email: kausar\_20001@yahoo.com

**Mr. Aziz Ahmad Jamali**

Deputy Director (Planning)  
Earthquake Reconstruction & Rehabilitation Authority  
Pakistan  
Email: jamalidmg@gmail.com

**Mr. Ghulam Khan**

Director, Research & Analysis  
National Crises Management Cell, Ministry of Interior  
426, Street 1, I-8/4, Islamabad, Pakistan  
Tel: +92519211082  
Fax: +92519211225  
Email: Ghulamabbas\_55@hotmail.com

**Dr. M. Asif Khan T.I.**

Professor & Director  
National Centre of Excellence in Geology  
University of Peshawar  
Peshawar 25120, Pakistan  
Tel: 0092-91-9216767 (Office)  
Cell: 0092-0301-5946165  
Fax: 0092-91-9218183  
Email: masifk9@yahoo.com

**Mr. Mirza Talib Hassan**

Director General  
Geological Survey of Pakistan  
Quetta, Pakistan  
Tel: 081-9211032  
Fax: 081-9211018, 081-9211361  
Email: qta@gsp.gov.pk

**Prof. Muhammad Haneef**

Department of Geology  
University of Peshawar, Peshawar 25120  
Pakistan  
Tel: 0092-91-9216767  
Fax: 0092-91-9218183  
Email: mhaneef\_pk\_pk@yahoo.com

**Mr. Talat Zia**

A-20, Nisaar Road Lahore Cantonment  
Pakistan  
Tel: 0300-8422215,-042-6661328  
Fax: 042-6661328  
Email: aquavelva\_15@hotmail.com

**Mr. Shaukat Ali Awan**

Pakistan Meteorology Department  
Chief Meteorologist  
Flood Forecasting Division  
46-Jail Road, Lahore 54000, Pakistan  
Tel No. +92-42-9200139  
Email: salilawan2002@yahoo.com

## Nepal

**Mr. Amod Dixit**

National Society for Earthquake Technology-Nepal  
(NSET)  
1133 Devkota Sadak, Mahadevsthan, Baneshwor  
Kathmandu, Nepal  
Tel: +977-1- 4486444/ 4490359 / 4474192 / 4473656  
Fax: +977-1- 4490943  
Email: adixit@nset.org.np

**Mr. Bas van Doesburg**

DIPECHO Management Consultant  
UNICEF, Kathmandu  
Fax: 5527280/5535395  
Email: bvandoesburg@unicef.org

**Mr. Bhubanesh Kumar Pradhan**

Chairperson  
 Association for Research and Management Services  
 Kathmandu, Nepal  
 Tel: 4243461  
 Email: bhubaneshwor@wlink.com.np

**Mr. Bimal Gadal**

Programme Support Officer  
 Action Aid  
 Lazimpat, Kathmandu  
 Fax: 4419718  
 Email: bimal\_gadal@yahoo.com

**Mr. Danda Pani Jaishy**

Jalsrot Vikas Sanstha (JVS)  
 Post Box No. 20694  
 Anamnagar, House No. 723/67, Tanka Prasad Marg,  
 Kathmandu, Nepal  
 Phone: 977-1-4229582  
 Fax: 977-1-4253669  
 Email: jvs@wlink.com.np

**Mr. Gahendra Gurung**

Practical Action Nepal  
 Pandol Marga, Lazimpat  
 P O Box 15135, Kathmandu, Nepal  
 Tel: +00 977 1 444 6015 and +00 977 1 209 4063  
 Fax: +00 977 1 444 5995  
 Email: gehendra.gurung@practicalaction.org.np

**Mr. Govinda Kadel**

Acting Director General  
 Department of Soil Conservation and Watershed  
 Management  
 Ministry of Forests and Soil Conservation  
 Babar Mahal, Kathmandu, Nepal  
 Tel: 977-1-4220828,  
 Fax: 977-1-4221067  
 E-mail: dosc@wlink.com.np

**Dr. Keshav Prasad Sharma**

Senior Divisional Hydrologist  
 Flood Forecasting Section, Department of Hydrology &  
 Meteorology  
 P.O. Box 406, Babar Mahal, Kathmandu, Nepal  
 Tel: 977-1-4248808  
 Fax: 977-1-4262348  
 E-mail: keshav@dhm.gov.np

**Mr. Krishna P. Kaphle**

Superintendent Geologist and Chief of Geological Survey  
 and Research Sub-Division  
 Department of Mines and Geology, Government of Nepal  
 Ministry of Industry, Commerce and Supplies  
 Lainchaur, Kathmandu, Nepal  
 Tel: 4416521, 4413765  
 Fax: 4414806  
 Email: kkaphle@infoclub.com.np

**Mr. Mahesh Acharya**

Section Officer  
 Disaster Management Section, Ministry of Home Affairs  
 Government of Nepal  
 Singha Durbar, Kathmandu, Nepal  
 Tel: 4211212, 4211274, 4211224  
 Fax: 4211286, 4211257

**Mr. Narendra Bahadur Lama**

Senior Divisional Engineer  
 Surface Irrigation Division, Department of Irrigation  
 Ministry of Water Resources, Government of Nepal  
 Jawlakhel  
 E-mail: doi@info.com.np

**Mr. Peter Crawford**

DIPECHO Project Manager  
 Practical Action Nepal  
 Pandol Marga, Lazimpat  
 P O Box 15135, Kathmandu, Nepal  
 Tel: +00 977 1 444 6015 and +00 977 1 209 4063  
 Fax: +00 977 1 444 5995  
 Email: peterc@practicalaction.org.np

**Mr. Prajwal Acharya**

Nepal Red Cross Society  
 P. O. Box No: 217. Kalimati, Kathmandu Nepal.  
 Tel: 0977-1-270650, 272761, 273734  
 Fax: 0977-1-271915  
 Email: prajwal@nrccs.org

**Mr. Rahul Sengupta**

Programme Officer  
 Disaster Management, Environment and Energy Unit  
 UNDP, Pulchowk, Lalitpur  
 Fax: 5523991  
 E-mail: rahul.sengupta@undp.org

**Mr. Ram Chandra Kandel**

National Society for Earthquake Technology-Nepal  
 (NSET)  
 1133 Devkota Sadak, Mahadevsthan, Baneshwor  
 Kathmandu, Nepal  
 Tel: +977-1- 4486444/ 4490359 / 4474192 / 4473656  
 Fax: +977-1- 4490943  
 Email: rkandel@nset.org.np

**Dr. Ramesh Tuladhar**

Department of Water Induced Disaster Prevention  
 – (DWIDP)  
 Pulchowk, Lalitpur, Nepal  
 Tel: 5555088, 5535502  
 Fax: 977-1-5523528  
 Email: dwidp@wlink.com.np, r.tula1950@gmail.com

**Ms. Rita Dhakal**

Program Coordinator, CARE  
 Kathmandu  
 Email: rita@carenepal.org

**Mr. Sohan Sundar Shrestha**

Director General  
Department of Local Infrastructure Development and  
Agricultural Road  
Babar Mahal, Kathmandu  
Tel: 5555001  
Email: dg@dolidar.wlink.com.np

**Mr. Thir Bahadur G.C.**

Under Secretary  
Disaster Management Section, Ministry of Home Affairs  
Government of Nepal  
Singha Durbar, Kathmandu, Nepal  
Tel: 4211212, 4211274, 4211224  
Fax: 4211286, 4211257  
Email: thirgc@hotmail.com

**Mr. Umesh Prasad Dhakal**

Disaster Management Department  
Nepal Red Cross Society  
P. O. Box No: 217. Kalimati, Kathmandu Nepal.  
Tel No: 0977-1-270650, 272761, 273734  
Fax No: 0977-1-271915  
Email: umesh@nracs.org

## International Organisations

**Mr. Akshat Chaturvedi**

Programme Officer (Disaster Risk Reduction)  
UN / ISDR, Regional Programme for Asia and the Pacific  
Bangkok- Thailand  
Tel: +66 22 88 2748 (o)  
Fax: +66 22 88 1050 (fax)  
Email: chaturvedi1@un.org

**Mr. Aloysius J. Rego**

Team Leader, Disaster Management Systems  
Asian Disaster Preparedness Center  
PO Box 4, Klong Luang  
Pathumthani 12120 Thailand  
Tel: +66 2 516 5900 to 10  
Fax: +66 2 524 5360  
Email: ajreg@adpc.net

**Mr. Masahiko MURATA**

Senior Expert, Asian Disaster Reduction Center (ADRC)  
Recovery Expert, International Recovery Platform (IRP)  
Hitomiraikan 5F, 1-5-2 Wakinohamakaigan-dori  
Chuo-ku, Kobe, 651-0073, Japan  
Tel: (81-78) 2625540  
Fax: (81-78) 2625546  
Email: murata@RecoveryPlatform.org

**Dr. Wolfgang E. Grabs**

Chief, Water Resources Division  
World Meteorological Organization (WMO)  
Case Postale No. 2300, 7 Bis Avenue De LA Paix  
CH - 1211 Geneva 2, Switzerland  
Tel: +41 22 730 8353  
Fax: +41227308043  
Email: wgrabs@wmo.int

## ICIMOD

**Khumaltar, Lalitpur, G.P.O. Box 3226  
Kathmandu, Nepal  
Tel: 977 1 5003222  
Fax: 977 1 5003277 / 5003299**

**Dr. Arun Bhakta Shrestha**

(abshrestha@icimod.org)

**Mr. Pradeep K. Mool**

(pmool@icimod.org)

**Mr. Gyan K. Shrestha**

(gyshrestha@icimod.org)

**Ms. Sarita Joshi**

(sarjoshi@icimod.org)

**Ms. Julie Dekens**

(jdekins@icimod.org)

**Mr. Sushil Pandey**

(spandey@icimod.org)

**Dr. Madhav Karki**

(mkarki@icimod.org)

**Mr. Tek Jung Mahat**

(tmahat@icimod.org)

**Ms. Mandira Shrestha**

(mshrestha@icimod.org)

**Mr. Vijay Khadgi**

(vkhadgi@icimod.org)

**Dr. Manjari Mehta**

(mmehta@icimod.org)

**Dr. Xu Jianchu**

(jxu@icimod.org)

**Dr. Mats Eriksson**

(meriksson@icimod.org)

**Dr. Zbigniew Mikolajuk**

(zmikolajuk@icimod.org)



# Field Trip – Regional Workshop on Disaster Preparedness Plans for Natural Hazards

## The Bungamati's Landslide Model Site

The Bungamati landslide is located in Bungamati VDC of Lalitpur, Kathmandu at about 3 km south-west of Ring Road at Ekantakuna on the left bank of Nakhu Khola. This area forms the eastern bank of Bagmati River along the Nakhu Khola in the southern part of the Kathmandu Valley covered by around 2.5 million years old Lukundol Formation of Fluvio-lacustrine deposits of the Kathmandu Basin. Due to its continuous movement, the Bungamati Landslide has been threatening the only road linking Bungamati with Lalitpur. Therefore, DWIDP carried out some countermeasures works to control the landslide. Initially, the focus was on river bank protection work, which prevented further sliding of the toe part. However, with the identification of the slip surface of the landslide its probable relationship with the groundwater and surface water the countermeasures have been focused towards controlling the ground water as well as the surface water by mitigation measures mentioned below.



Structural Mitigation Measures undertaken:

1. Drainage Works:
  - a) Surface Drainage Works:
    - i) A- Type with Ground Sill = 154m
    - ii) D – Type = 90m
  - b) Sub-surface Drainage Works:
    - i) at Upstream = 27m x 15m (405m<sup>2</sup>)
    - ii) Middle Portion = 3 No. x 15m (45m)  
1 No. x 16m (16m)
2. Retaining Wall = 200m
3. Slope Stabilisation Works: Earth Trimming and Filling as per need
4. Check Dam: 1 No. along with Gully
5. Topographical Survey of the Landslide Area to the Scale 1:500 & C.I = 0.5
6. Installation of 60 Nos. Moving Peg

These structural Mitigation measures have been found effective and the Bungmati Landslide is considered to be Semi-stabilized now.

#### **Recommendation for future works:**

The Bungmati Landslide Mitigation works was started without any detailed investigation. The countermeasures were designed primarily based on field observation only. The rate of the landslide movement, therefore, is not known yet. Monitoring of the landslide movement through Moving Peg Survey has become essential –

- To determine the effectiveness of the countermeasures undertaken
- To further design countermeasures, if necessary

In view of these the following works are recommended:

1. Monitoring of installed Moving Pegs
2. Extension of the A-types Drainage & Sub-surface Drainage covering cultivated land
3. Pile works at the main sliding block

#### **Route and Excursion Demo**

Stop 1: General description of the Bungmati Landslide Model Site followed by observation of the Sub-surface Drainage network in the Upper Area.

Stop 2: Observation of small check dam cross the main gully

Stop 3: Observation of the main A and D – Type Surface Drain

Stop 4: Observation of Main Retaining Wall and assumed Slip Surface

Stop 5: Observation of newly constructed Surface Darin

Stop 6: Observation of Lukundol Formation of fluvio-lacustrine deposite of the Kathmandu Basin

# Agenda of Regional Workshop on Social Inclusion in Disaster Risk Reduction in the Himalayan Region – Sharing knowledge and Bridging Gaps 9-11 May, 2007

## Workshop objectives

- To provide a platform for interaction and knowledge sharing among key practitioners in disaster preparedness (DP) and management; especially between institutions working on community level and central level respectively.
- To explore opportunities to include local knowledge, innovations and practices in the disaster management process.
- To examine how gender, equity and vulnerability issues can be better reflected and incorporated in the work of disaster management.

## Workshop process

- a) presentations of case studies and lessons learned;
- b) moderated discussions;
- c) working groups

## TUESDAY 8 MAY

18.30 Registration and ice breaker reception at Hotel Himalaya

## DAY 1, WEDNESDAY 9 MAY

### Planning for Disaster Preparedness in the region: are vulnerable groups reflected?

8.30-9:00 Vehicle leaves for ICIMOD from Hotel

9.00-9.30 Registration Coffee & Tea available

### Session 1: Opening session (Chair: Xu Jianchu)

09.30-09.40	Welcome address	Dr Madhav Karki, ICIMOD
09.40-09.50	Opening remarks	Mr Pratap Kumar Pathak, Disaster Management Section, Ministry of Home Affairs, Nepal
09.50-10.00	Opening remarks	Ms Mohsena Ferdousi, Ministry of Food and Disaster Management, Bangladesh
10.00-10.10	Opening remarks	Mr P.G. Chakrabarti, National Institute of Disaster Management, India
10.10-10.20	Opening remarks	Mr Nawazish Ali Khan, Earthquake Reconstruction and Rehabilitation Authority, Pakistan
10.20-10.30	Workshop objectives	Dr Mats Eriksson, ICIMOD
10.30-10.35	Book launch	Launch of the following books: <ol style="list-style-type: none"> <li>1) Gender Matters – Lessons for disaster risk reduction in South Asia</li> <li>2) The snake and the river don't run straight – Local Knowledge on disaster preparedness in the Eastern Terai of Nepal</li> <li>3) Herders of Chitral The lost Messengers? Local Knowledge on disaster preparedness in Chitral District, Pakistan</li> </ol>

Annexes



10.35-10.50	Introduction of participants and group photograph	
10.50-11.10	<i>Coffee and Tea</i>	
11.10-11.50	Key note speech 1	From vulnerability to disaster prevention, Professor Ken Hewitt, Wilfrid Laurier University, Waterloo, Canada
11.50-12.20	Key note speech 2	Reaching out to vulnerable Populations - issues and considerations in disaster risk reduction, Dr Manjari Mehta, ICIMOD
12.20-12.45	Discussion	
12.45-13.30	<i>Lunch</i>	

## Session 2: Planning for DP in the region (Chair: R.K. Mazari)

13.30-13.45	A brief overview of the Status on DP plans in the region. – Dr Mats Eriksson, ICIMOD	
13.45-14.05	Nepal: New tools for disaster preparedness in Nepal: Strategy, policy and Act – how is social inclusion reflected? – Mr Pratap Kumar Pathak, Ministry of Home Affairs	
14.05-14.25	India: Social inclusion in the central planning process in India. – Mr P.G. Chakrabarti, National Institute of Disaster Management	
14.25-14.45	Bangladesh: Updating the Standard Orders on Disasters – how is social inclusion taken into account? – Ms Mohsena Ferdausi, Ministry of Food and Disaster Management	
14.45-15.15	Discussion – Social inclusion in the planning processes	
15.15-15.30	<i>Coffee and Tea</i>	

## Session 3: Outreach, networking and communication (Chair: Beatrice Murray)

15.30-15.50	(15+5 min)	Reporting on disaster preparedness and management – the role of Media, – Mr Kunda Dixit, Nepali Times
15.50-16.05	(10+5 min)	Knowledge networking – are there gaps to be filled? – Mr Vijay Khadgi, ICIMOD
16.05-16.20	(10+5 min)	Regional approach and networking Asian Disaster Preparedness Centre (ADPC) – Mr Aslam Perwaiz
16.20-16.35	(10+5 min)	Duryog Nivaran – a South Asian Network organisation – Ms Tharuka Dissanaik
16.35-17.30		Discussion – the need for networking and regional cooperation
17.30		Vehicle leaves for Hotel

## DAY 2, THURSDAY 10 MAY: Gender, equity & vulnerable people in DRR

### Session 4: Gender, equity and vulnerable people (Chair: Megh Rai)

9.00-9.10		Summary from Day 1
9.10-9.35	(15+10 min)	The establishment of a regional centre for disaster risk reduction, – Mr P.G. Chakrabarti, SAARC Disaster Management Centre
9.35-10.00	(20 + 5 min)	Participatory Vulnerability Assessment (PVA) for safety nets in disaster risk reduction, – Mr Shyam Jnavaly, Action Aid Nepal
10.00-10.25	(20 + 5 min)	Mainstreaming Disability Issues and Inclusion of Marginalized Group in Disaster Preparedness and Risk Reduction, – Mr Faizul Kabir, Handicap International, Bangladesh
10.25-10.50	<i>Coffee and Tea</i>	
10.50-11.15	(20 + 5 min)	The gender perspective in disaster risk reduction, Mr Deepesh Sinha, All India Disaster Mitigation Institute

11.15-11.30	(15 min)	Ms Jakia Akter, Centre for Environmental and Geographic Information Services (CEGIS), Bangladesh
11.30-12.15		Panel Discussion and Comments

### Session 5: Group Work

12.15-12.30	Introduction to Group Work – Manjari Mehta & Dechenla Sherpa
	<ul style="list-style-type: none"> <li>• Why do disasters affect more women/children/elderly/poor/Indigenous people?</li> <li>• How can we address these problems?</li> <li>• Who are responsible for the different roles? (Who does what?)</li> </ul>
12.30-13.15	<i>Lunch</i>
13.15-15.00	Group Work
15.00-16.30	Presentations of group work
16.30-17.30	Discussion and Summary – Brigitte Leduc & Manjari Mehta

## DAY 3, FRIDAY 11 MAY: Understanding Local knowledge and Practices for Disaster Preparedness

9.00-9.10	Summary from Day 2: Manjari Mehta
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### Session 6: Local Knowledge for disaster risk reduction, (Chair: Ahsan Uddin Ahmed)

9.10-9.55	Key note speech:	Identifying Local Knowledge for disaster preparedness, Julie Dekens, ICIMOD
9.55-10.20	(20 + 5 min)	Alternative Strategies for community based disaster Risk Reduction: A Case on Displaced Communities by River Erosion in Bangladesh Nazmul Chowdury, Practical Action, Bangladesh
10.20-10.45	(20 + 5 min)	Deepesh Sinha, All India Disaster Mitigation Institute
10.45-11.00	<i>Coffee and Tea</i>	
11.00-11.25	(20 + 5 min)	Disaster Risk Management: Indigenous Solutions Naheed Khan, Focus Pakistan
11.25-12.15		Panel Discussion and Comments

### Session 7: Group Work

12.15-12.30	Introduction to group work. – Julie Dekens and Xu Jianchu
12.30-13.15	<i>Lunch</i>
13.15-15.00	Working groups including coffee/tea
15.00-16.30	Group Presentations
16.30-17.00	Discussions – Xu Jianchu
17.00-17.30	Workshop summary and future directions – (Prof Ken Hewitt and Mats Eriksson)
17.30	Transport to hotel Himalaya
19.00	Workshop reception at Soaltee Hotel

# List of Participants – Regional Workshop on Social Inclusion in Disaster Risk Reduction in the Himalayan Region – Sharing knowledge and Bridging Gaps

## Bangladesh

### Mr. A.H.M Faizul Kabir

Project Manager  
Handicap International  
Bangladesh Office  
138 Gulshan Avenue (4th Floor) Flat # 402  
Gulshan-2, Dhaka-1212, Bangladesh  
Tel: + 88 (02) 8859794  
E-mail: pm\_hibgd@dominox.com  
www.handicap-international.org

### Dr. Ahsan Uddin Ahmed

Executive Director  
Centre for Global Change (CGC)  
Dhaka, Bangladesh  
Tel: +88-01818 46 82 24  
Email: ahsan.ua@gmail.com

### Mr. AZM Nazmul Islam Chowdhury

Programme Manager  
Reducing Vulnerability and Natural Resource  
Management Unit  
Practical Action Bangladesh (Former ITDG-B)  
Road # 13A, House # 32  
Dhanmandi R/A  
Dhaka, Bangladesh  
Tel: 0088 02 8111934, 9123671, 8111855  
Cell: 01715238662  
Fax: + 88 02 8113134  
Email: nazmul@practicalaction.org.bd

### Ms. Jakia Akter

Water Resources Engineer  
Center for Environmental and Geographic Information  
Services (CEGIS)  
House # 6, Road # 23/C,  
Gulshan-1, Dhaka-1212, Bangladesh.  
Tel: +880 2 8817648-52, 8821570-1  
Fax: 880-2-8855935,8823128  
Email: jakter@cegisbd.com ; jakia\_cegis@yahoo.com  
URL: http://www.cegisbd.com

### Mr. Md. Abdul Matin Sarkar

Bangladesh Water Development Board  
Dhaka, Bangladesh  
Tel: + 88-2-9122460  
Fax: + 88-2-9122460  
Email: engr.motin@gmail.com

**Ms. Mohsena Ferdousi**, Joint secretary  
Ministry of Food & Disaster Management  
Bangladesh Secretariat  
Dhaka-1000, Bangladesh  
Tel: +880-2-7168067  
Fax: +880-2-7165905  
Email: mohsena.ferdausi@gmail.com

### Mr. Nurul Amin Bagmer

Programme Manager  
Islamic Relief, H#24, R#5, Block – K  
Baridhara, Dhaka – 1212, Bangladesh  
Tel: +88-02-9893458, 8819392 ext.227  
Fax: +88-02-8825119  
Mobile: +88-0171-3031806  
E-mail: bna@islamicrelief-bd.org

### Ms. Sabina Yeasmin

Senior Assistant Secretary, Cabinet Division  
Cabinet Affairs Division  
Bangladesh Secretariat  
Dhaka-1000, Bangladesh  
Tel: +88-02-9566446  
Email: yeasmin.sabina@gmail.com

### Mr. Ushatan Talukder

Member  
Chittagong Hill Tracts Regional Council  
Rangamai, Bangladesh  
Tel: +88-0351-63129  
Fax : +88- 351-63278  
Email: chtrc@yahoo.com

## India

### Ms. C.C Wangdi

Additional Secretary  
LRD & DMD, Government of Sikkim  
Tashiling Secretariat  
Gangtok-737101, Sikkim, India  
Tel: +0091-3592-203850  
Fax: +0091-3592-202851  
Email: cc\_tall@yahoo.com

### Ms. Chandrani Bandopadhyaya

Assistant Professor  
National Institute of Disaster Management  
Ministry of Home Affairs, Government of India  
NIDM, 5B IP Estate, New Delhi - 110058, India  
Tel: +91-11-23702432  
Fax: 91-11-23702446/42  
Email: chandrani.b@gmail.com

**Mr. P.G. Dhar Chakrabarti, IAS**

Executive Director  
National Institute of Disaster Management  
Director, SAARC Disaster Management Centre  
Tel: 9818394225 (M)  
Postal Address: IIPA Campus, I.P.Estate, Mahatma  
Gandhi Road, Delhi- 110002  
Email: dharc@nic.in

**Dr. R.K. Mazari**

Scientist 'F' & Group Head  
Wadia Institute of Himalayan Geology  
33, Gen. Mahadeo Singh Road  
Dehra Dun - 248001, India  
Tel: +91-0135-2525409 (Direct), +91-0135-2624806,  
2627387 (EPABX)  
Fax: +91-0135-2625212  
Email: mazarirk@wihg.res.in, mazarirk@rediffmail.com

**Dr. Upendra Dhar**

Director  
G.B. Pant Institute of Himalayan Environment and  
Development  
Kosi-Katarmal, Almora 263 643, India  
Tel: +91-5962-241014, 241041, 241154, 224104,  
231507 (O)  
Fax: +91-5962-241014  
Email: uppdhar@gmail.com

**Mr. Deepesh Sinha**

Tsunami Recovery Coordinator  
All India Disaster Mitigation Institute, Gujarat, India  
411, Sakar 5, Near Nairaj Cinema Ashram Road  
Ahmdabad, 380051, Gujrat  
Tel: +91-79-26583607  
Fax: 091-79-26582962  
Email: dmi@icenet.co.in

**Ms. Deepthi Sukumar**

Christian Aid, New Delhi  
Fax: +91-112626871  
Email: dsukuma@christian-aid.org

**Mr. Prayag S. Jangpangi**

Additional Secretary Disaster Management  
Govt. of Uttarakhand India  
4. Subash Road, Dehradun 248001 India  
Tel: 0135-2712013  
Fax: 0135-2712013  
Email: add\_secydm@rediffmail.com, add\_secydm@  
yahoo.co.in

**Pakistan****Dr. Arifa Alvi**

Islamic Relief Pakistan  
H.# 8, Park Road, F-8/2  
Islamabad, Pakistan.  
Tel: 051 - 111-237-237  
Fax: 92-51-2260938  
Email: arifa.alvi@irp.org.pk

**Mr. Nawazish Ali Khan**

Deputy Director  
Earthquake Reconstruction & Rehabilitation Authority  
Room 203D, ERRA, Prime Minister's Secretariat,  
Islamabad, Pakistan  
Tel: +92-51-9030980  
Fax: +92-51-9030843/846  
Email: nawazish@erra.gov.pk, nawazish67@gmail.com

**Mr. A. Karim Nayani**

Coordinator DRR/HFA  
National Disaster Management Authority (NDMA)  
124 Street 11, Sector E/7, Islamabad, Pakistan  
Tel. 92 51 265 2840 Ext 208  
Fax: 0092 51 2652536  
Email: kn@ndma.gov.pk  
<http://www.ndma.gov.pk/>

**Mr. Manzoor Hussain**

Infrastructure and WES Program Manager  
Mercy Crops, Islamabad, Pakistan  
House No. 36, Street No. 1, Sector F-6/3  
Tel: +00-92-51-2878082  
Fax: +92-512878081  
Email: mhussain@mercycorpsfield.org

**Ms. Asia Aman**

DM & E Manager (Design, Monitoring and Evaluation  
Manager)  
International Rescue Committee  
Country Office, 33 - B, Street # 16, F - 7/2, Islamabad  
Tel: +92 (51) 265 4086  
Fax: +92 (51) 265 4088  
Email: ircpa@irc-pk.org  
URL: [www.theIRC.org](http://www.theIRC.org)

**Ms. Nahida Khan**

Training Officer,  
Focus Humanitarian Assistance,  
Naveed Shaheed Road Zulfiqarabad, Islamabad,  
Pakistan  
Tel: +92+05811-55804  
Fax: +92+55804  
Email: neeha\_khan98@yahoo.com

**Ms. Razia Sultana**

Gender and Development officer  
Aga Khan Rural Support Programme  
Chitral Regional Office, Pakistan  
Tel: +92-943-470002  
Fax: +92-943-470408, 470002  
Email: razia\_akrsp@yahoo.com

**Mr. Syed Pervaiz Hussain**

Pakistan Meteorological Department  
Flood Forecasting Division  
46-Jail Road, Lahore, Pakistan  
Tel: + 92-42-9200139  
Fax: +92-42-9200208  
Email: loin786@yahoo.com

## Nepal

**Mr. Shambhu Prasad Marasini**, MOHA  
Section Officer

Ministry of Home Affairs,  
Singha Darbar, Kathmandu, Nepal  
Tel: +977-1- 4211200  
Fax: +977-1-4211282  
Email: smarasini@hotmail.com

**Mr. Pratap Kumar Pathak**, MOHA  
Joint Secretary  
Ministry of Home Affairs,  
Singha Darbar, Kathmandu, Nepal  
Tel: +977-1- 4211200  
Fax: +977-1-4211282  
Email: pratap.pathak@gmail.com

**Mrs. Archana Shrestha**, DHM  
Meteorologist, Department of Hydrology and Meteorology  
Babermahal, Kathmandu  
Tel: +977-1-4255920  
Fax: +977-1-4254890  
Email: archanamet@yadoo.com, archana@dhm.gov.np

**Mr. Binesh Roy**, CARE  
Institutional Capacity Building Officer, DIPECHO/  
Samadhan, CARE Nepal  
Krishna Galli, Pulchowk, Lalitpur, Nepal  
Tel: +977-1-5522800, 977-041-523309  
Email: binesh@carenepal.org

**Ms. Christina Chan**, CARE  
DIPECHO Manager, CARE Nepal  
Krishna Galli, Pulchowk, Lalitpur, Nepal  
Tel: +977-1-5522800,  
Email: christina@carenepal.org

**Mr. Naveen Mangal Joshi**, DWIDP  
Senior Divisional Engineer  
Department of Water Induced Disaster Prevention  
Pulchowk, Lalitpur, Nepal  
Tel: + 977-1-5539451  
Fax: + 977-1-5523528  
Email: namanjos@hotmail.com

**Ms. Savitri Tiwari**, NCDM  
General Secretary,  
Nepal Centre for Disaster Management  
GPO Box: 4058, Pulchowk, Lalitpur, Opposite to UN  
Building  
Tel: + 977-1-5530668  
Fax: + 977-1-5528493  
Email: ncdm@wlink.com.np

**Ms. Megh Rajani Rai**, DCA  
Project Co-ordinator  
Danish Church Aid (DCA)  
DIPECHO-CPDRR (based at Lutheran World Federation  
Office)  
Tel: +977-1-4720217  
Email: meghrai@gmail.com

**Mr. Rajnish Raj Ojha**,  
Programme Officer  
Nepal Red Cross Society  
National Headquarter, Kalimati Kathmandu, Nepal  
Tel: + 977-1-4270650,  
Fax: + 977-1-4284611  
Email: disaster@nrcc.org, rajanishrajojha@yahoo.com,  
rajanishrajojha@gmail.com

**Mr. Krishna Hari Paneru**, Action Aid  
Programme Coordinator  
Prerana/Actionaid International Nepal  
Satdobato, Lalitpur/Malangwa, Sarlahi  
Tel: +977-1-12121081, 977-046-520442  
Email: prerana@wlink.com.np, khpaneru@gmail.com

**Mr. Shyam Jnavaly**, Action Aid  
Sr. Theme leader – Emergency and Disaster  
ActionAid Nepal, 80 Apsara Marg, Lazimpat, Kathmandu  
Tel: + 977-0-4436477 (Ext. 205)  
Fax: 977-1-4419718  
Email: shyam.jnavaly@actionaid.org

**Mr. Kunda Dixit**, Editor, Nepali Times  
GPO Box 7251, Kathmandu, Nepal  
Hatiban, Godavari Road, Lalitpur  
Tel: +977 - 1 - 5543333-6  
Fax: +977 - 1 - 5521013  
Email: kunda@nepalitimes.com

**Mr. Gahendra Gurung**, Practical Action  
Team Leader-Reducing Vulnerability  
Practical Action Nepal  
PO Box 15135, Kathmandu, Nepal  
Pandole Marg, Lazimpat  
Tel: + 977-1-4446015  
Email: gehendra.gurung@practicalaction.org.np

**Ms. Hima Shrestha**, NSET  
Structural Engineer,  
National Society for Earthquake Engineering Nepal  
1133 Devkota Sadak, Mahadevsthan, Baneshwor  
Kathmandu, Nepal  
Tel: +977-1- 4486444/ 4490359 / 4474192 / 4473656  
Fax: +977-1- 4490943  
Email: nset@nset.org.np

**Ms. Amrita Sharma**, DPNET  
Ex. Member, Disaster Preparedness Network Nepal  
DP Net Secretariat, C/O NRCS, Red Cross Road  
Kalimati, PO Box 217, Kathmandu Nepal  
Tel: +977-1-4672165  
Email: amritasuedi@gmail.com, dpnet@dpnet.org.np

**Mr. Akmal Shareef**  
Save the Children – Sweden  
Reg. Programme Co-ordinator  
Save the Children Sweden  
GPO Box: 5850, Sanepa Road, Kupandol, Lalitpur  
Tel: +977-1-5531928/9  
Email: akmals@sca.savethechildren.se

**Mr. Thatparan Jeganaithan**

Save the Children – Sweden  
Regional Programme Co-ordinator,  
Lalitpur, Kupandol, Nepal  
Tel: +977-1-5531928/29  
Email: jeganathant@savethechildren.org.se

**Mr. Mahendra L. Sharma, CECI**

Gender and Social Inclusion/Institutional Development  
Specialist  
Canadian Cooperation Office Nepal, Baluwatar,  
Kathmandu  
Tel: +977-1-4414430  
Fax: +977-1-4413256  
Email: mahendras@ceci.org.np

**International Organisations****Mr. Aslam Perwaiz**

Project Manager, DMS  
Asian Disaster Preparedness Center  
PO Box -4, Klong Luang Pathumthani 12120, Thailand  
Tel: +66-0516-5900,  
Fax: +66-524-5354  
Email: aslam@adpc.net

**Ms. Tharuka Dissanaikie**

Communications consultant  
Duryog Nivaran  
Practical Action South Asia Program  
No. 5, Lionel Edirisinghe Mawatha  
Colombo 5  
Sri Lanka  
Tel: +94-11-2829412  
Fax: 0094-11-285 6188  
Email: tharuka@eol.lk, tharuka.dissanaikie@  
practicalaction.org.lk

**Prof. Kenneth Hewitt**

28 Rhodes Ave, Toronto, Ontario, Canada M4L 2Z9  
Tel: +416-778-9232  
Email: hewittken@yahoo.ca

**Ms. Katie Oven**

Postgraduate Student  
Department of Geography, Durham University, UK  
Tel: +00441913341957  
Email: k.j.oven@dur.ac.uk

**ICIMOD**

**International Centre for Integrated Mountain  
Development (ICIMOD)**  
GPO Box 3226  
Kathmandu, Nepal  
Tel: +977-1-500 32 22  
Fax: +977-1-500 32 99

**Dr. Jianchu Xu**

Email: jxu@icimod.org

**Dr. Mats Eriksson**

Email: meriksson@icimod.org

**Dr. Manjari Mehta**

Email: mmehta@icimod.org

**Ms. Julie Dekens**

Email: jdekens@icimod.org

**Mr. Vijay Khadgi**

Email: vkhadgi@icimod.org

**Mr. Santosh Nepal**

Email: sanepal@icimod.org

**Ms. Dechenla Sherpa**

Email: dsherpa@icimod.org

**Dr. Beatrice M. Shrestha**

Email: bmurray@icimod.org

**Mr. Pradeep Mool**

Email: pmool@icimod.org

**Ms. Brigitte Leduc**

Email: bleduc@icimod.org

**Ms. Kesang Renchen**

Consultant  
Email: kayren@wlink.com.np



## Project Documents (Links)

1. Disaster Preparedness for Natural Hazards: Current Status in Bangladesh  
<http://dev.icimod.org/elibrary/index.php/search/publication/289>
2. Disaster Preparedness for Natural Hazards: Current Status in India  
<http://dev.icimod.org/elibrary/index.php/search/publication/291>
3. Disaster Preparedness for Natural Hazards: Current Status in Nepal  
<http://dev.icimod.org/elibrary/index.php/search/publication/287>
4. Disaster Preparedness for Natural Hazards: Current Status in Pakistan  
<http://dev.icimod.org/elibrary/index.php/search/publication/288>
5. Gender Matters: Lessons for Disaster Risk Reduction in South Asia  
<http://dev.icimod.org/elibrary/index.php/search/publication/145>
6. The Snake and the River Don't Run Straight: Local Knowledge on Disaster Preparedness in the Eastern Terai of Nepal  
<http://dev.icimod.org/elibrary/index.php/search/publication/143>
7. Herders of Chitral: The Lost Messengers? Local Knowledge on Disaster Preparedness in Chitral District, Pakistan  
<http://dev.icimod.org/elibrary/index.php/search/publication/144>
8. Local Knowledge for Disaster Preparedness: A Literature Review  
<http://dev.icimod.org/elibrary/index.php/search/publication/290>