



Landslide Hazard Management and Control in the Hindu Kush-Himalayas

A Report on the Regional Workshop
held in Kathmandu
July 12-14, 1995

Editors

S.R. Chalise
S. Karki



Organised by
International Centre for Integrated Mountain Development
Kathmandu, Nepal

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Cover Photograph: Landslide Hazard Management on Kodari Highway - B.N. Upreti
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Foreword

Introduction to the Workshop

The inherent unstable nature of mountain areas is a well recognised fact. Steep slopes, unstable geology, and the intense monsoon rains combine to make the Hindu Kush-Himalayas one of the most hazard-prone areas in the world. Historical and anecdotal evidence from local people suggest that natural hazards of varying intensity occurred frequently in the past. However, in the Hindu Kush-Himalayan countries hazard-prone areas are increasingly being occupied for human activities as a result of population pressure as well as improved accessibility through roads and other infrastructural development. Consequently, natural and man-made disasters are on the rise and each event affects an even greater number of people than before. Floods and landslides during the monsoon season are the most common natural disasters affecting this region every year, resulting in great economic and environmental losses as well as causing a great deal of suffering.

Despite such scenarios, the present levels of understanding and analysis of disasters are very poor and databases are virtually non-existent. There are no monitoring activities, not even where they can be of direct benefit to project-related management activities. Also, investment in developing practical guidelines for managing such events and in forecasting has been inadequate.

It is with these concerns that ICIMOD has recently initiated a programme on Landslide Hazard Management and Control. Several activities have already been undertaken in this programme and the Regional Workshop was one of the major activities to develop linkages and establish a long-term relationship among institutions and experts engaged in landslide hazard mitigation and control from the Hindu Kush-Himalayan countries, as well as those from outside the region.

The primary concern of the Regional Workshop was to identify priorities for a regional collaborative training programme on landslide hazard management and control in accordance with the needs and priorities of the Hindu Kush-Himalayan countries. The present document shows that much progress has been made in this context. Many thanks are due to the participants who used their combined knowledge and experience in designing a number of concrete activities in the field of Landslide Hazard Management.

ICIMOD will implement these activities in close cooperation and collaboration with national institutions of the Hindu Kush-Himalayan countries, relevant UN agencies, and international institutions in close liaison with global initiatives and programmes, e.g., the International Decade for Natural Disaster Reduction (IDNDR).

On behalf of ICIMOD, I would like to express my sincere appreciation to the Government of Japan for the generous support for the Landslide Hazard Management Programme, including this workshop.

ICIMOD's programme on "Landslide Hazard Management and Control" focuses on helping to protect valuable natural resources from different types of natural hazards. This programme is based on ongoing activities of ICIMOD which were introduced in 1994 with support from the Government of Japan.

The above-mentioned activities include the following:

- i) Preparation of a state-of-the-art review on "Landslide Management and Control" in the Hindu Kush-Himalayan countries (China, India, Pakistan, and Nepal) of the HCH.
- ii) A Regional Training Programme on Slope Instability Hazard Mapping using Remote Sensing and GIS.
- iii) Preparation of a Climatic-Hydrological Atlas of Nepal based upon available information.

Egbert Pelinck
Director General
ICIMOD

Of these three activities, the Regional Training Programme on Slope Instability Hazard Mapping using Remote Sensing and GIS was completed in 1994, while the other items will be finalised in 1995. As a follow up, a four-week training course in Landslide Hazard Management and Control is being designed and the first courses are scheduled to be held in 1996.