AGRICULTURAL DEVELOPMENT IN THE MOUNTAINS

**Report of the
International Symposium on Strategies for Sustainable Mountain Agriculture**

**Organised by International Centre for Integrated
Mountain Development (ICIMOD)**

**Kathmandu, Nepal
September 10-14, 1990**

ICIMOD Workshop Series

The International Centre for Integrated Mountain Development began professional activities in September 1984. The primary concern of the Centre is to search for more effective development responses to promote the sustained well-being of mountain people. One of the continuing activities of ICIMOD is to review development and environmental management experiences in the Hindu Kush-Himalayan Region. Accordingly, International and National Workshops were organized in major fields to review the state of knowledge and practical experiences and also to provide opportunities for the exchange of professional expertise concerning integrated mountain development. Some of the workshops, related to mountain agriculture, included:

- **International Workshop on Watershed Management in the Hindu Kush-Himalaya**
14-19 October, 1985, Chengdu, China
- **International Workshop on Off-farm Employment Generation in the Hindu Kush-Himalaya**
17-19 May, 1986, Dehra Dun, India
- **International Workshop on Mountain Agriculture and Crop Genetic Resources**
16-19 February, 1987, Kathmandu, Nepal
- **International Expert Meeting on Horticultural Development in the Hindu Kush-Himalayan Region**
19-21 June, 1989, Kathmandu, Nepal
- **International Expert Meeting on Apicultural Development in the Hindu Kush-Himalayas**
21-23 June, 1989, Kathmandu, Nepal
- **Workshop on Agricultural Development Experiences in Himachal Pradesh, India**
11-13 April, 1988, Manali, India
- **Workshop on Agricultural Development Experiences in West Sichuan Xizang, China**
6-10 October, 1988, Chengdu, China
- **Workshop on Agricultural Development Experiences in Nepal**
14-16 November, 1988, Kathmandu, Nepal
- **Workshop on Agricultural Development Experiences in Pakistan**
15-18 February, 1989, Swat, Pakistan

These Workshops were attended by experts, from the countries of the Region, in addition to concerned professionals and representatives of international agencies. A large number of professional papers and research studies were presented and discussed in detail.

Workshop Reports are intended to represent the discussions and conclusions reached at the Workshop and do not necessarily reflect the views of ICIMOD or other participating institutions.

Copies of the reports are available upon request from :

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**International Centre for Integrated Mountain Development
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TABLE OF CONTENTS

	Page
FOREWORD	
CHAPTER 1: INTRODUCTION AND OBJECTIVES	1
Background	1
Objectives	2
Thematic Coverage	2
Workshop Participation and the Programme	3
CHAPTER 2: THE SYMPOSIUM PROCEEDINGS	5
The Inaugural Session	5
Technical Sessions	6
Session I : Approaches to Agricultural Development in Mountain Areas	6
Session II : Resource Characteristics and Zonation	8
Session III : Transformation of Mountain Areas: Some Successful Initiatives	10
Session IV : Public Interventions with a Mountain Perspective: Some Imperatives	14
Session V : Farmers' Strategies and Responses to Development Interventions : Sustainability Implications	17
Session VI : Some Basic Issues Affecting Mountain Agriculture and Long-Term Sustainability	19

	Page
CHAPTER 3: GROUP DISCUSSIONS AND RECOMMENDATIONS	22
Discussion Topics and Their Rationale	22
Discussion Group I : Mountain Perspective Sustainability Framework for Mountain Development	23
Discussion Group II : Resource Characterisation and Zonation in the Mountains	25
Discussion Group III : Replicable Experiences	28
Discussion Group IV : Farmers' Strategies and Responses	32
CHAPTER 4: MAJOR INFERENCES	35
Theme I : Framework for Development Strategies	35
Theme II : Zonation for Mountain Development	35
Theme III : Success Stories and Their Rationale	36
Theme IV : Perspectives for Public Intervention	36
Theme V : Farmers' (Farm Households') Strategies and Responses	37
Theme VI : Some Basic Issues in Mountain Development	38
Summary	39
ANNEXES	40
1. SYMPOSIUM PROGRAMME	41
2. LIST OF PARTICIPANTS	43
3. LIST OF SYMPOSIUM PAPERS	48
4. ABSTRACTS OF PAPERS	51
TABLES	
1. Participation in the International Symposium on Strategies for Sustainable Mountain Agriculture	4

Foreword

ICIMOD is the first International Centre with a mandate to facilitate ecologically and economically sound and sustainable development of mountain areas with a focus on the well-being of mountain people.

ICIMOD carries out its assignment through problem-oriented, applied research, focussed training, organised exchange, and dissemination of information relevant to mountain development. Of the four thematic research areas, mountain agriculture is the dominant one. In this research area, ICIMOD has conducted knowledge reviews and site-specific field studies to examine the factors and processes associated with sustainability/unsustainability of mountain agriculture. The work was conducted in close collaboration with the national organisations and experts in China, India, Nepal, Pakistan, and, to a lesser extent, Bhutan. The financial support for the work was provided by the Asian Development Bank, the Ford Foundation, and ICIMOD itself.

The studies, initiated in late 1987, were concluded in early 1990. Since the focus of ICIMOD thematic research is to present decision makers (policymakers, planners, researchers, and donor groups) associated with mountain areas with up to date knowledge and analyses, the results of the above studies were shared with these same groups through the International Symposium on Strategies for Sustainable Mountain Agriculture, held from 10-14 September, in Kathmandu. This Symposium was preceded by National Workshops in China, India, Nepal, and Pakistan to share some of the results with the policymakers and researchers in the respective countries.

This five day Symposium was attended by over 90 experts representing various fields, including international development aid agencies, voluntary organisations, and representatives from other mountain regions such as the Andes. The intensive deliberations during the Symposium were marked by critical analysis of each theme resulting in concrete suggestions for the future work of ICIMOD.

It was a great honour to ICIMOD that the Symposium was inaugurated by the Rt. Hon'ble Mr. K. P. Bhattarai, the Prime Minister of Nepal, and that the Hon'ble Mr. J. N. Khanal, Minister of Agriculture and Forests, chaired the first session. Major issues of concern in mountain agriculture, raised by both of them in their respective addresses, contributed to setting the tone for Symposium deliberations.

This Symposium Report summarises the major highlights of the discussions and outlines the key ideas for the future direction of research and action for sustainable agriculture in mountain regions.

I would like to thank the Asian Development Bank and Ford Foundation for supporting the studies and the Symposium and the UNDP, the Swiss Development Cooperation, and the Rockefeller Foundation for sponsoring the participation of experts from different countries.

This report was prepared by N.S. Jodha and Tej Partap with important contributions from Mahesh Banskota, Pitamber Sharma, Suresh Sharma, Sugandha Shrestha, and L. R. Verma. Thanks are due to them and to other members of the ICIMOD Staff who were instrumental in preparing this report for publication.

E.F. Tacke