









# **A Pro-poor Policy Agenda for Sustainable Agricultural Development in the Hindu Kush- Himalayan Region**



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# **A Pro-poor Policy Agenda for Sustainable Agricultural Development in the Hindu Kush-Himalayan Region**

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**International Centre for Integrated Mountain Development**  
Kathmandu, Nepal  
July 2007

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**Published by the**

International Centre for Integrated Mountain Development  
GPO Box 3226  
Kathmandu, Nepal

**ISBN** 978 92 9115 044 1

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**Printed and bound in Nepal by**

Hill Side Press (P) Ltd.  
Kathmandu

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# **preface**

The agricultural sector has made tremendous progress in the lowlands of Asia including Bangladesh, China, India, Nepal, and Pakistan. The productivity of major crops such as rice, wheat, pulses, and other cereal and non-cereal crops has increased considerably through the use of green revolution technologies such as high-yielding varieties, inorganic fertilisers, pesticides, and irrigation. The mountain regions of these countries have, however, gained little from these technologies and other agricultural advances. In general, mountain farmers have been plagued by problems and constraints of low productivity, erosion of soil nutrients, extreme poverty, and rapid environmental degradation. Compared to the plains, mountain communities face formidable difficulties in improving the conditions of their lives as well as the prime source of their livelihoods which remains to be agriculture.

A key challenge facing policy makers and development practitioners of the region is how to increase agricultural productivity and reduce poverty without degrading the natural resource base on which mountain farmers largely depend. To achieve this multiple goal, it is necessary to understand the characteristics of mountain agriculture: how it differs from agriculture in the plains, where green revolution strategies have worked; and the types of policies, programmes, and institutional arrangements needed to overcome the different nature of the problems characterising mountain farming. There is a dearth of research and knowledge development in this area, a gap which organisations like ICIMOD are making the effort to fill in.

Drawing from the experiences in mountain areas in the eight countries of the HKH region, this study attempts to enhance our understanding by analysing extant policies and programmes targeted towards mountain areas. Most countries of the region are pursuing almost similar agricultural policies and strategies in mountain areas as used in the plains, ignoring mountain specificities such as fragility, marginality, inaccessibility, and underharnessed niche-based resources and environmental services. As a result, agricultural services such as research, extension, credit, marketing – designed to promote green revolution technologies – have largely failed to deliver the kind of information, knowledge, and extension services needed by mountain farmers to overcome their unique constraints.

This book raises important policy and institutional issues and provides some analysis-based explanation for the poor state of agriculture in mountain areas in general. It suggests a multiple-stakeholder, multi-disciplinary approach in designing and implementing policies and setting up institutions to achieve the twin goal of agricultural development in mountain areas, and sustainable management of natural resources. The book is intended for study and use by those responsible for designing and implementing agricultural policies and setting up agriculture and planning-related institutions.

It is our sincere hope that the publication raises awareness and generates new interest in critical policy and institutional issues concerning mountain agriculture. We hope it stimulates discussion to contribute to shaping the views and perspectives that can lead to improved planning and implementation of integrated agriculture, natural resources, and rural development programmes in mountain areas.

# acknowledgements

We extend our sincere thanks to Dr Michael Kollmair and Dr N.S. Jodha, and Dr Ganesh Siddi, Ministry of Agriculture and Cooperatives, Government of Nepal, for their valuable comments on an earlier version of this publication. Thanks are also due to Mr Prem Manandhar for his support during the preparation of this paper. Special thanks also to the Information Management, Communication and Outreach division of ICIMOD, especially Dr A. Beatrice Murray, Publications and Outreach Committee Secretary and Senior Editor, for facilitating peer review and processing of the document for publications, Joyce M. Mendez and Susan Sellars-Shrestha for editing, Punam Pradhan and Dharma Ratna Maharjan for layout design, and Asha Kaji Thaku for editorial assistance.

This study was supported by ICIMOD through the project 'Promotion of Sustainable Policy Initiatives in the Management of Natural Resources in the Hindu Kush-Himalayas', funded by GTZ. The views expressed in this paper are those of the authors and do not necessarily reflect the views of ICIMOD or GTZ.

# executive summary

The vast majority of people in the Hindu Kush-Himalayan (HKH) region live in rural areas and depend primarily on agriculture for their survival and wellbeing. Mountain farmers have gained little from agricultural development during the Green Revolution, which has been the programme pursued by most governments in the region during the 1970s and '80s. Since then, and in order to meet the increasing demand for agricultural products for subsistence as well as cash incomes more marginal lands have been being brought under cultivation. This has accelerated deforestation, soil erosion, and environmental degradation, creating a vicious cycle of poverty, degradation, and deprivation. There has not been enough research on land-use practices suitable for mountain areas, and available mountain land use practices have failed to gain wider acceptance. The question is why?

By analysing policies, programmes, and institutional arrangements (such as research, extension, input delivery including credit and marketing), this paper attempts to identify key policy and institutional factors that constrain the wider adoption of sustainable agriculture and sound land-use practices in the HKH region. The analysis shows that agricultural policies and strategies in most countries in the region target agriculture for the plains, particularly for field crops. By ignoring mountain-specific biophysical and socioeconomic factors and diversification potentials and constraints, most countries in the region are pursuing the same agricultural policies and strategies in mountain areas as used in the plains. Public organisations, based on narrow disciplinary mandates that promote green revolution technologies and services oriented toward the needs of the plains, have largely failed to deliver the kind of focus and services required by mountain farmers. Drawing evidence from different parts of the HKH region and other similar regions, this Talking Points paper concludes that agricultural development and resource conservation goals can be achieved simultaneously by removing existing policy biases, and imperfections, and reorienting institutions towards mountain agriculture. Such an approach, however, would require a fundamental change in policies, institutions, strategies, and programmes. This paper develops a framework for such a change or paradigm shift and discusses the concepts.

# acronyms and abbreviations

|        |   |
|--------|---|
| ADB    | Asian Development Bank  |
| APP    | Agricultural Perspective Plan                                   |
| ARMP   | Agricultural Research Management Projects                       |
| BRS    | Bangladesh Bureau of Statistics                                 |
| CHT    | Chittagong Hill Tracts  |
| GR     | Green Revolution  |
| GRTs   | green revolution technologies                                   |
| GTZ    | German Technical Cooperation                                    |
| HKH    | Hindu Kush-Himalayan region                                     |
| HYV    | high yielding varieties   |
| ICIMOD | International Centre for Mountain Development                   |
| MAD    | medicinal, aromatic and dye plants                              |
| NTFP   | non-timber forest products                                      |
| NWFP   | North-West Frontier Province of Pakistan                        |
| SALT   | sloping agriculture land technologies                           |
| SRDM   | sustainable agriculture and rural development in mountain areas |



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