

Report of a  
National Seminar on  
**Mini- and Micro-hydropower  
Development in the  
Hindu Kush-Himalayan Region -  
The Nepal Perspective**



Editors  
**R.D. Joshi  
and  
V.B. Amatya**



Jointly Organised by the  
Agricultural Development Bank of Nepal and  
International Centre for Integrated Mountain Development  
Kathmandu, Nepal  
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Prepared by  
**Dr. R.D. Joshi and Mr. V.B. Amatya**  
on behalf of  
**International Centre for Integrated Mountain Development  
Kathmandu, Nepal**

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Background:	Langtang and Ganesh Himal seen from Dhulikhel
Top left:	Hydro plant at Muktinath
Bottom right:	Workshop Participants

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# Foreword

This Report of the 'National Seminar on Mini- and Micro-Hydropower Development in the Hindu Kush-Himalayan Region : The Nepal Perspective', is a summarised version of the proceedings of the Seminar, including the speeches during the Inaugural Session, the papers presented, the discussions and the conclusions arrived at by the participants. Part A presents the highlights of the seminar and Part B contains the actual papers prepared for the seminar in a somewhat abridged form. The Seminar was held from 1-2 September, 1994, in Kathmandu, as one of the activities under a NORAD-sponsored project on mini- and micro-hydropower (MMHP) development in the HKH Region.

The seminar brought together promoters, planners, financiers, experts, and other interested persons to discuss ideas and concerns. The private/decentralised MMHP programmes in Nepal and elsewhere in the Region are at a critical juncture on many accounts, and the workshop also provided participants with opportunities for establishing contacts and new partnerships in the field of MMHP in Nepal.

ICIMOD is particularly interested in mini- and micro-hydropower development, as it is a mountain-specific source of energy that can be used as a tool for development in remote areas. The technology has been developed to such an extent in Nepal that it can be applied with little or no inputs from outside the country. In general, it is also a highly environmentally-friendly source of energy. Despite all these advantages, MMHP has not been adopted on the scale that was hoped for some 20 years ago when major efforts in Nepal commenced in this field. The analysis of constraints and opportunities which were identified during the seminar will serve as guidance for future interventions.

The seminar was organised in joint collaboration with the Agricultural Development Bank of Nepal (ADB/N), which also provided useful inputs and contributions. I am grateful to Dr Tilak Rawal, the then General Manager ADB/N, Mr. P. P. Lamsal, Division Chief (Loans), and Mr. D. P. Adhikari, In-charge, MHP cell, for their collaboration, and contributions. I would also like to thank Dr. R. D. Joshi, Dean, Institute of Engineering and Mr. V. B. Amatya of the Water and Energy Commission Secretariat (WECS) for preparing this report on behalf of ICIMOD. Thanks are also due to Dr. A. A. Junejo for coordinating the preparation of the Report in addition to his other work in implementing the MMHP Project. The support of the Norwegian government to these endeavours is especially acknowledged.

I hope that the publication and distribution of this Report will be helpful for the promotion and improvement of MMHP programmes in Nepal.

Egbert Pelinck,  
Director General

# Acronyms

<b>ADB/N</b>	Agricultural Development Bank of Nepal
<b>BEW</b>	Butwal Engineering Works
<b>BYS</b>	Balaju Yantra Shala (P.) Ltd.
<b>BPC</b>	Butwal Power Company
<b>DCS</b>	Development and Consultancy Services
<b>DIN</b>	German Industrial Norm
<b>HKH</b>	Hindu Kush-Himalayas
<b>ICIMOD</b>	International Centre for Integrated Mountain Development
<b>INGO</b>	International Non-Governmental Organisation
<b>ITDG</b>	Intermediate Technology Development Group
<b>I.Rs.</b>	Indian Rupees
<b>KMTNC</b>	King Mahendra Trust for Nature Conservation
<b>KMI</b>	Kathmandu Metal Industries
<b>MMHP</b>	Mini- and Micro-Hydropower
<b>MHP</b>	Micro Hydropower Plants
<b>MPPU</b>	Multipurpose Power Unit
<b>NORAD</b>	Norwegian Agency for Technical Cooperation
<b>NGO</b>	Non-Governmental Organisation
<b>NHE</b>	Nepal Hydro and Electric (P.) Ltd.
<b>NPC</b>	National Planning Commission
<b>N.Rs.</b>	Nepalese Rupees
<b>NEA</b>	Nepal Electricity Authority
<b>P.Rs.</b>	Pakistani Rupees
<b>SHP</b>	Small Hydropower
<b>SCECO</b>	Salleri-Chialsa Electricity Company Ltd.
<b>SDC</b>	Swiss Development Corporation
<b>SELUP</b>	Salleri-Chialsa Electricity Utilisation Project
<b>UMN</b>	United Mission to Nepal

# Contents

## PART A: PROCEEDINGS

Introduction .....	1
Inaugural Session .....	5
Keynote Speech .....	5
Inaugural Speech .....	6
Working Sessions .....	9
Session 1: New Approches and Activities .....	9
Session 2: New Approches and Activities .....	12
Session 3: Problems & Redressal .....	14
Session 4 : Directions for the Future .....	18
Concluding Session .....	21
Conclusions and Discussions .....	21
Chairman Remarks .....	24

## PART B: SEMINAR PAPERS

Mini- and Micro-Hydropower Development in the Hindu Kush-Himalayan Region : Achievements, Impacts, and Future Prospects, <b>Dr. A.A. Junejo</b> .....	27
Agricultural Development Bank Contribution to the Development of Micro Hydropower Achievements, Problems and Prospects, <b>Mr. D.P. Adhikari</b> .....	37
Salleri-Chialsa Electric Company - An Experience of a New Approach for MMHP Management, <b>Mr. R.S. Thapa</b> .....	41
The Role of Nepal Hydro and Electric Company and Butwal Engineering Works in Developing Hydropower, Equipment, <b>Mr. N.R. Shrestha</b> .....	45

# Contents

## PART A: PROCEEDINGS

Introduction .....	1
Inaugural Session .....	5
Keynote Speech .....	5
Inaugural Speech .....	6
Working Sessions .....	9
Session 1: New Approaches and Activities .....	9
Session 2: New Approaches and Activities .....	12
Session 3: Problems & Redressal .....	14
Session 4: Directions for the Future .....	18
Concluding Session .....	21
Conclusions and Discussions .....	21
Chairman Remarks .....	24

## PART B: SEMINAR PAPERS

Mini- and Micro-Hydropower Development in the Hindu Kush-Himalayan Region : Achievements, Impacts, and Future Prospects, <b>Dr. A.A. Junejo</b> .....	27
Agricultural Development Bank Contribution to the Development of Micro Hydropower Achievements, Problems and Prospects, <b>Mr. D.P. Adhikari</b> .....	37
Salleri-Chialsa Electric Company - An Experience of a New Approach for MMHP Management, <b>Mr. R.S. Thapa</b> .....	41
The Role of Nepal Hydro and Electric Company and Butwal Engineering Works in Developing Hydropower, Equipment, <b>Mr. N.R. Shrestha</b> .....	45

Experiences in End-Use Development and Small Industry Promotion in Salleri, <b>Mr. H.P. Shrestha</b> .....	49
Development of Mini-Hydropower in Remote Areas -Some Experiences and Challenges, <b>Mr. A. Karki</b> .....	53
Problems Associated with the Private/Decentralised MMHP Plants and Some Redressals, <b>Dr. A.A. Junejo</b> .....	57
Balaju Yantra Shala Experience in MHP Technology Development, <b>Mr. S. Devkota</b> .....	63
State-of-the-Art Technologies Appropriate for MMHP, <b>Mr. B. Pandey</b> ...	67
Viability and Desirability of Mini- and Micro-Hydropower, <b>Dr. R.D. Joshi</b> .....	73
Viability and Dissemination of Mini- and Micro-Hydropower in Nepal: Development Consultancy Services' Experience, <b>Mr. G.P. Devkota</b> ....	79
Micro-Hydro : Institutional Issues, <b>Mr. V.B. Amatya</b> .....	83
Perspective on Mini- and Micro-Hydropower Development, <b>Dr. K. Rijal</b> .....	89

## ANNEXES

Programme of the Seminar .....	95
List of Participants .....	97
Bibliography .....	101