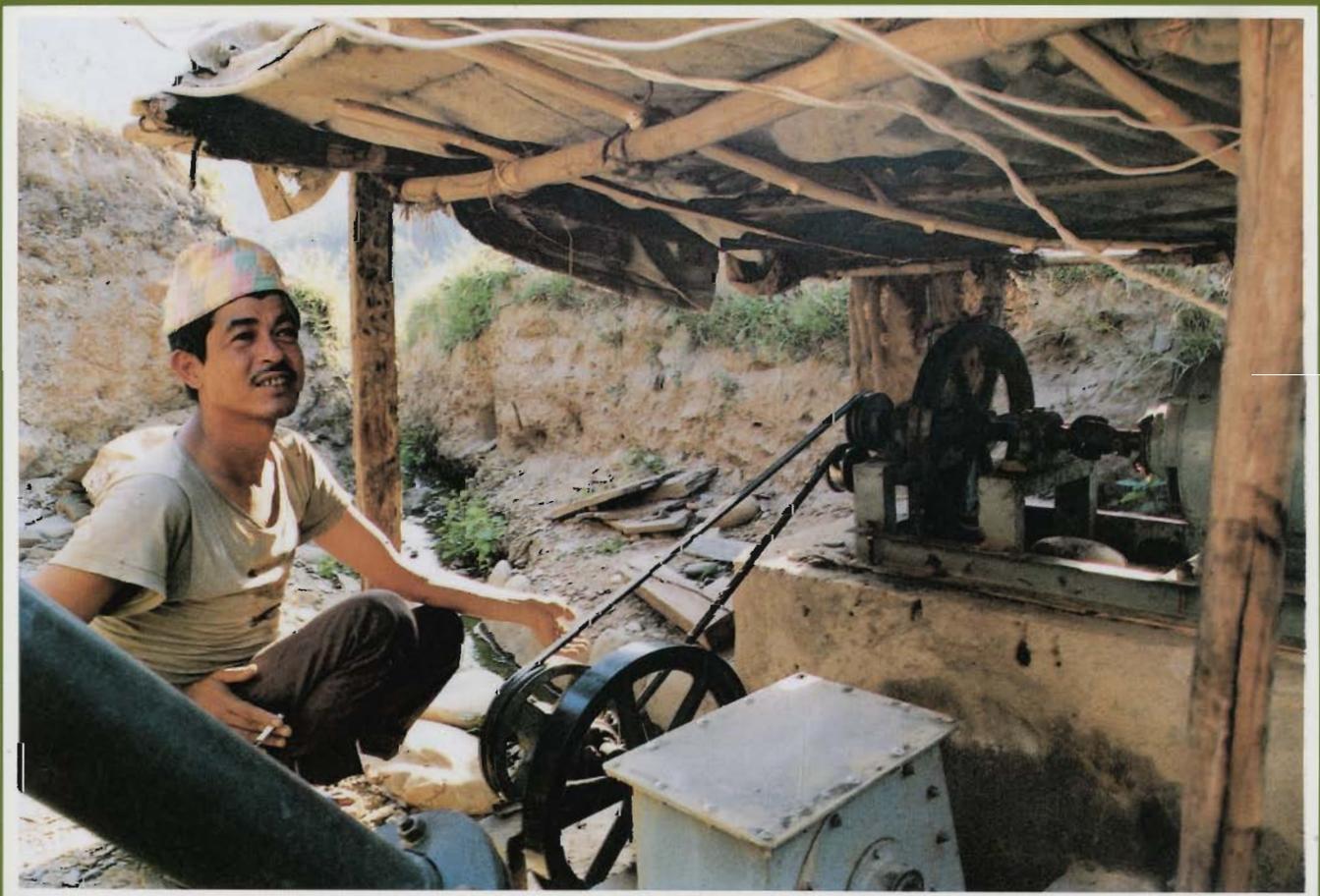


**DECENTRALISED ENERGY
PLANNING AND MANAGEMENT
FOR THE HINDU KUSH-HIMALAYA**



Deepak Bajracharya

ICIMOD OCCASIONAL PAPER No. 4

**Kathmandu, Nepal
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Foreword

During the Inaugural Symposium of ICIMOD, in December 1983, and at all subsequent discussions and consultations held in the countries of the Hindu Kush-Himalaya Region on the most urgent priorities in mountain development and environmental management for the concentrated attention of this new International Centre, the subject of rural energy demand and supply in mountain communities has ranked very high indeed.

It was frequently observed in these discussions that government and research attention in the field of rural energy seem to have focused almost exclusively on the design, testing, and dissemination of alternative technologies in rural energy supply and use -- 'alternative' of course, to the excessive dependency on wood fuel, which is so obviously one of the prime causes of environmental damage in the mountains. Without underestimating the importance of appropriate and innovative technology in this field, our many consultations with development experts throughout the Region, in and out of government, have strongly underlined the need for a more systematic and integrated approach to rural energy planning and management.

Our own growing understanding in this field over the last two years at ICIMOD has led us increasingly to focus on the district level (or the equivalent 'county' in China) as the most appropriate governmental level for the development of such an integrated approach, with the central focus on

'the energy components' of progressive and sustainable economic development with effective environmental resource management for mountain communities, both rural and urban, within an overall development system. These evaluations of existing knowledge and experience in rural energy, undertaken in collaboration with selected institutions in India, China, Nepal, Bhutan, Pakistan, and Bangladesh, culminated in May this year in a major International Workshop on District Energy Planning and Management in the Hindu Kush-Himalaya.

Based on the stimulating exchange of ideas and experience between the participants of this Workshop, and on his own direct participation in field research in rural energy in a number of countries of the Himalaya Region, Dr. Deepak Bajracharya has now made a significant new contribution to the formulation of this more integrated approach, which ICIMOD is most pleased to publish in its Occasional Paper Series.

His interesting, and very necessary, attempt to set rural energy planning and management within a comprehensive development framework is most welcome. It is hoped that this study will form one of the key contributions to the design and implementation of a major programme of regional cooperation in these mountains of practical research and training in Decentralised Energy Planning and Management for integrated mountain development. For this, ICIMOD owes special thanks to Dr. Deepak Bajracharya.

Colin Rosser
Director

Acknowledgements

Inspirations for writing this paper came while listening to stimulating presentations and discussions at ICIMOD's International Workshop on District Energy Planning and Management for Integrated Mountain Development, 3-5 May 1986, Kathmandu. I have unabashedly used many fundamental concepts expressed at the Workshop and tried to weave them into a comprehensive framework. Where credits are due, I have cited the authors of specific papers. I would like to express my gratitude to them and also to other Workshop participants who contributed during the discussions.

Sincere thanks are due to Dr. Colin Rosser, ICIMOD Director, who encouraged me to undertake this task. For reviews, criticisms, and helpful suggestions, I am grateful to my colleagues at ICIMOD, particularly Binayak Bhadra, Vinod Kumar, Shankar Sharma, Anis Dani, Prodipto Roy, and Richard Tucker. I would also like to thank the Editorial and Publications Unit of ICIMOD for assistance and suggestions on style.

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Introduction

Acronyms

ADB/N	Agricultural Development Bank of Nepal
ATDO	Appropriate Technology Development Organization
ATU	Appropriate Technology Units
CAS	Chinese Academy of Sciences
DAS	Development Assistance Committee
DEPM	Decentralised Energy Planning and Management
HMG/N	His Majesty's Government of Nepal
NWFP	North Western Frontier Province
ODA	Official Development Assistance
OECD	Organization for Economic Cooperation and Development
PAR	Participatory Action Research
SFDP	Small Farmers Development Programme