



# **Rural Energy Planning for The Indian Himalaya**

Editors

**T M Vinod Kumar  
Dilip R Ahuja**

## Rural Energy Planning for The Indian Himalaya

This book is perhaps the first effort to focus on energy issues in the Indian Himalaya. Though a lot has been written on the ecological consequences (of energy related activities), these energy issues by themselves have not received sufficient attention. The papers in this volume have been selected from those commissioned by the International Centre for Integrated Mountain Development, and the Tata Energy Research Institute as a part of their collaborative programme on rural energy planning. As it was found that critical gaps exist in knowledge and experience in the area of effective diffusion of energy technologies for promoting Himalayan development, it was felt that a collection of papers on the existing states-of-the-art would be a useful first step before embarking on practical interventions.

There are papers that have focussed on technologies, planning issues and economic welfare aspects relevant to development in all the different regions of the Himalaya. Some authors have focussed instead on the *regions* and have looked at the status of the three subject areas (technologies, planning and welfare) as they pertain to their regions.

The major value of this book is that in addition to a clear articulation of problems, issues and possible solutions, it represents a comprehensive collection of information existing for this region. The authors have also brought out the gaps that exist currently and have established priorities for further research and direction for programmes to promote sustainable development of energy resources and their use in the Himalayan region.



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**INTERNATIONAL CENTRE FOR INTEGRATED  
MOUNTAIN DEVELOPMENT**



**TATA ENERGY RESEARCH INSTITUTE**



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## FOREWORD

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This volume represents perhaps the first effort to focus on energy issues in the Indian Himalaya. Much has been written on the ecological and forest problems that have grown over the years in the Himalaya, and while energy problems are at the core of some of these concerns, not much has been done to explain and focus attention on energy issues per se in the region. This book was conceptualized and jointly implemented by the International Centre for Integrated Mountain Development (ICIMOD), Kathmandu, and the Tata Energy Research Institute (TERI), New Delhi. Each chapter is based on a state-of-the-art study, authored by professionals in the field.

The chapters presented in this volume have approached energy issues by looking both at the broad geographical characteristics of different sections of the Himalaya region in India, as well as by analyzing technologies, planning issues and regional economic development. Necessarily, the task of putting together such a variety of material and ensuring consistency between different chapters was a complex challenge, but the editors have done a splendid job. Having reviewed the development of this volume at various stages, it is satisfying to observe how changes and modifications have been made at different stages of the writing of each chapter, leading towards an overall logic and consistency of the whole, without diminishing the value of each part.

It is presumptuous, and perhaps an oversimplification, to distil major issues that emerge from a large and varied effort of this nature. But some observations regarding the contributions in this volume are perhaps pertinent. Firstly, the role of energy in economically and ecologically sustainable development in the Himalaya region of India is paramount and requires efforts at every level of government and society. Almost every effort that can be conceived of in developing this region has to come to grips with the energy problem, if development plans and programs are to prove successful. Secondly, the fragility of the mountain ecological system relates to energy problems as well, particularly since mountain communities in India are still overwhelmingly dependent on fuelwood as the major source of energy. Thirdly, the potential for using new technologies based on renewable forms of energy is important as a matter of extreme priority and relevant enough to require a large-scale effort in areas such as dissemination of information and knowhow, development of local institutions to handle these new technologies, and provision of adequate funds.

The major value of this book lies not only in a clear articulation of problems, issues, and possible solutions in mountain development with a focus on the Indian Himalaya, but also in presenting a comprehensive collection of existing information and data on the subject. The authors have brought out

in very specific terms the information gaps for further research, demonstration projects, and directions for programs to promote sustainable development of energy resources and their use in the Himalaya region.

A common goal of promoting economically and environmentally sound

development in the Indian Himalaya and raising the quality and standards of living is articulated in many ways by the authors. It is hoped that this book will furnish a knowledge base for development planners and administrators, and may help in unveiling new areas of research in mountain energy planning.

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