

## Focus Issue: The Global Energy Crisis: Opportunities and Challenges for Mountain Areas

Dear Readers,

At the beginning of 2011, the Fukushima nuclear disaster and the challenge of meeting ever-increasing energy needs worldwide led greater sustainability of the energy sector to become a dominant theme in political debates, the media, and civil society around the world. Today, the international financial crisis has replaced energy concerns in the headlines. But the energy challenge remains as acute as before. The Stakeholder Forum of the Earth Summit Rio +20 confirmed the urgency of the issue and placed the “energy crisis” on its agenda, also pointing out that it is a key issue in a “green economy”.

This issue of MRD is the third in 10 years that is devoted to sustainable production and use of energy in mountain areas (see also MRD vol 26 no 2 and MRD vol 21 no 1). It aims at contributing to the debate about how mountains are affected by the global energy crisis and whether the crisis might offer opportunities for mountain communities. The 6 papers devoted to the energy theme in this issue—1 MountainDevelopment, 3 MountainResearch, and 2 MountainNotes papers—cover a broad range of topics, thus reflecting the multidimensional challenge that mountain communities face today in light of the global energy crisis. The papers also highlight the need for a comprehensive understanding of the human–energy–environment nexus and for approaches that take into account the increasing connectedness between energy situations at the local, national, and global levels.

In his MountainDevelopment paper, Katsoulakos illustrates how energy saving and more efficient use of regional fuelwood could reduce dependency on external, non-renewable energy sources and thus contribute to overcoming energy poverty in a mountain area in Greece. In the MountainResearch section, the paper by Erlewein and Nüsser focuses on the challenges and opportunities of the Clean Development Mechanism (CDM). The authors investigate the effectiveness of large CDM hydropower projects in the Indian state of Himachal Pradesh and show that the CDM is a highly ambivalent strategy. In a paper on local energy resources and consumption patterns in the Pamir-Alai Mountains, Förster and co-authors use an innovative research approach to depict relations between energy resources, land use, and livelihood assets. Kaburi and Medley's paper provides insights into a totally different energy context in Africa: applying a cultural-political ecological viewpoint and an experiential learning process, the study assesses the fuelwood situation, the diversity of fuelwood resources, and local people's perceptions in the buffer zone of Mount Kenya Forest Reserve.

Two energy-related articles in the MountainNotes section take up policy issues: Abegg shows that mountain regions have the power to shape their own energy future. He presents the vision of “energy self-sufficiency” currently promoted by the International Commission for the Protection of the Alps (CIPRA) and applied in a few European Alpine regions already. Plets and co-authors describe how mountain regions—here the Altai region—can be affected by large international energy projects when planning and implementation are not guided by transparent and integrative strategies. Gazprom intends to construct a pipeline through the Altai region that endangers the rich cultural heritage of this area; the authors suggest a strategy to integrate heritage conservation in the construction plan. This paper is complemented by Yuri Badenkov's perspective on the planned pipeline in the MountainViews section.

Apart from these papers on the “global energy crisis,” the MountainResearch section contains 5 additional informative papers. Katel and Schmidt discuss how local residents use forest resources in a national park in Bhutan and how restricted access and inadequate incentive schemes shape their perceptions about the protected area. Yang and co-authors examine how recent developments in China are influencing indigenous Dongba papermaking in the Naxi Highlands and what role the montane forest plays in maintaining this traditional handicraft. Tang and co-authors investigate the habitat fragmentation and degradation of a highly endangered endemic tree, *Michelia coriacea*, in southeastern Yunnan, China. Onta and Resurreccion focus on the often neglected gender and cultural dynamics of climate change adaptation processes; they examine whether such processes exacerbate or alter gender inequalities and inter-caste dependencies in the Humla District, Nepal. Finally, Pütz and co-authors investigate tourists' attitudes towards artificial snow-making in 3 Swiss destinations. The results show that snow reliability is only one criterion for choosing a destination: the Alpine landscape and a wide choice of activities are even more important factors. This paper is a sequel to the paper by Rixen et al in MRD vol 31 no 1.

In a third paper in the MountainNotes section, a group of international researchers (McDougall et al), present management practices in 7 mountain regions around the world with the aim of drawing key lessons about how to prevent plant invasion in mountain areas.

We hope that you will find this Focus Issue on the global energy crisis and other sustainable mountain development themes useful and interesting.

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