



Editorial

Author: Hurni, Hans

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Dear Readers,

Early this year the Millennium Ecosystem Assessment Synthesis Report warned that, given the strain put on the Earth's natural functions, "the ability of the planet's ecosystems to sustain future generations can no longer be taken for granted." Part of this strain comes from activity that contributes to climate change—one of the four themes on which the Commission on Sustainable Development (CSD) will focus next year. The impacts of climate change are arguably greater, more rapid, and more unpredictable in mountain environments than in lowland areas. While the precision of short-term climate predictions is increasing thanks to technical innovations and large databases—thus allowing communities and governments to prepare earlier and better for extreme events due to global warming—this is more difficult to achieve in mountains, especially in developing countries. The complex topography and lack of data in mountainous regions make modelling a very demanding and costly task for science. The challenge of dealing with the impacts of climate change is even greater for governmental institutions and mountain communities, as discussed in this issue of MRD.

The Development section begins with a look at how the scientific community can address the development challenges of climate change in mountains, in an interview with Greg Greenwood, Director of the Mountain Research Initiative. An article by Hallie Eakin, Catherine Tucker, and Edwin Castellanos shows how the coffee crisis in Central America is the result of global change, in both economic and climatic terms. Bernard Owuor, Siri Eriksen, and Wycliffe Mauta discuss the institutional challenges of adapting to climate change in Kenya. Sandeep Rai and Aarati Gurung survey the importance of raising local to global awareness of the impacts of climate change in the Himalayas, and intervening at the policy level. Finally, Walter Hauenstein looks at hydropower and climate change, with a focus on institutional challenges faced by the Swiss energy sector.

In the Research section, Sadao Takaoka discusses the impact of El Niño rains in the Mt Kenya region. Ken Hewitt examines the so-called "Karakoram anomaly" of glacier expansion (rather than retreat) at high elevations. He Yunling and Zhan Yiping focus on long-term observation of climate change in the Chinese Himalaya. The other papers are not on climate change: Mark Kachmar, Arturo Sánchez-Azofeifa, Benoit Rivard, and Yoshitaka Kakubari look at forest cover classification in an industrialized mountain area of Japan, and the last 2 papers focus on land use change under changing socioeconomic conditions—in Venezuela, where Eliézer Arias considers potato farmers' strategies, and in Yunnan, China, where Yong-Neng Fu, Hui-Jun Guo, Ai-Guo Chen, and Jin-Yun Cui examine fallow agroecosystems and socioeconomic development.

The MountainPlatform statement by a major MRD stakeholder, co-publisher United Nations University (UNU), focuses on a UNU initiative concerned with biodiversity and climate change in the Tajik Pamirs. The MountainNotes section starts with a presentation by the GLOCHAMORE project of physical indicators of global change and corresponding monitoring recommendations worldwide. A contribution from the Swiss Agency for Development and Cooperation shows SDC's position vis-à-vis climate change in relation to natural resource management, livelihoods, and food security; and the Mountain Forum contributes a summary of members' views on climate change in the Himalaya. Finally, the MountainViews section contains an exchange of views on the threat posed to the Himalayas by global warming—in a piece by Jack Ives, and a response by Peter Roderick.

Overall, this issue presents a differentiated view of institutional and other impacts of climate change on mountain environments. We hope that this issue will help to sharpen our readers' awareness of the problems of climate change in mountain regions and inspire them to confront this question in a meaningful fashion.

*Hans Hurni, Editor-in-Chief
Susanne Wymann von Dach, Assistant Editor*