

Editorial

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Dear Readers,

*The theme of this issue of MRD is **biodiversity and mountains, with a particular focus on Latin America**. The geographical focus reflects discussions that took place at an international symposium of the Andean Mountain Association (AMA), with the aim of “understanding ecological interfaces of Andean cultural landscapes”. The symposium was organized by the President of AMA and Guest Editor of this issue, Professor Fausto Sarmiento, who is also MRD’s Regional Editor for Latin America. The AMA symposium was held in Quito, Ecuador, from 9-14 December 1998.*

The UN Convention on Biological Diversity (UNCBD) was developed in response to an urgent crisis facing humanity – the worldwide loss of natural and cultural diversity. The UNCBD was signed on 5 June 1992, soon after the UN Conference on Environment and Development, and entered into force on 29 December 1993. Biological diversity is defined as the variety and variability of life on Earth and its natural complex of relationships. Biodiversity is regarded as consisting of three main elements: (1) the genes of individual organisms and the genomes of species; (2) species – animals, plants, micro-organisms etc.; and (3) ecosystems and other larger “biomes” – the critical interrelationships formed by species. No one is certain just how many living species there are on Earth. Scientific estimates range from 10 to 50 million. To date, scientists have named and classified only about 1.5 million separate forms of life.

Mountain biodiversity is special in many ways. Due to their relief, mountains form very small patterns of variability. Mountain biodiversity, if measured on a large scale (eg a 10,000 km² grid), is among the highest of all ecoregions in the world – even as high as the diversity found in tropical rainforests. Natural factors such as altitude as well as slope gradient and aspect contribute directly or indirectly to mountain heterogeneity through their influence on climate, ecology, and human resource use. Human use, on the other hand, has been particularly intense in mountains, in both tropical and temperate zones. Thus mountains have not only fostered the development of natural biodiversity but also of cultural biodiversity, which is equally important. However, the present rate of intensification of human resource use, either in traditional terms or in terms of industry and infrastructure, puts both types of biodiversity at risk, particularly in mountain areas.

The articles in this issue focus on natural and cultural biodiversity in mountains – mostly in the Andes – and the sustainable protection and use of their resources. Several articles address the issue of deforestation – a problem that is all the more urgent today in light of the Framework Convention on Climate Change (FCCC). We hope you enjoy reading this issue, and we urge you to contact us with your comments!

Fausto Sarmiento, Guest Editor

Hans Hurni, Editor-in-Chief

Theodore Wachs, Managing Editor