

The Global Change Research Network in African Mountains

Mountain Research Initiative



Moonlight on the typical sandstone rock formations in the Cederberg mountains, Western Cape , South Africa. Photo: Fran Hunziker

What makes the sub-Saharan African mountains and highlands different from others?

First, unlike temperate or boreal mountains, they are often highly productive agriculturally and prime human habitats. There is a high degree of correlation between population density and elevation, especially in drier regions and in Eastern and Southern Africa. While the importance of mountains in temperate regions frequently relies on that which is exported from them (e.g. water or tourist experiences), African mountains are important because a vast number of people live there, deriving much of their livelihood from them. Global change in African mountains will directly impact a large number of people.

Second, African mountains exist within a development context. While the conservation ethos is not absent in Africa, economic development remains the dominant discourse within which the response to global change is embedded. While one frequently reads that global change has human dimensions, in African mountains it is more appropriate to state that the development trajectory has a global change dimension.

Third, many of the more comprehensive research programs are run by universities outside of Africa. They reflect the concerns of the funding nation, not necessarily those of African stakeholders. The lack of longer term base funding within Africa renders African researchers more dependent on the vagaries of international agencies or NGO funding, where priorities are set in contexts distant from African realities. As a result the knowledge of different mountain ranges in Africa is fragmented and often subject to loss over time. The prospects for large improvements in understanding simply through better coordination and communication among researchers is perhaps greater in Africa than anywhere else.

The Network

The Global Change Research Network in African Mountains (GCRN_AM) was launched at the Kampala Workshop in July 2007. Its origins are many. After the Perth Open Science Conference “Global Change in Mountain Regions” in 2005, the Mountain Research Initiative (MRI) committed itself to launching regional research networks in different regions of the world. At the same time, MRI understood that other organisations had related interests in global change and African mountain regions: The Global Mountain Program of the CGIAR, UNESCO, the African Highland

Initiative, the Center for International Forest Research, the Global Mountain Biodiversity Assessment of DIVERSITAS, as well as the universities of Makerere (Kampala, UG), Egerton (Nakuru, KE), Bern (Switzerland), and Witswatersrand (Johannesburg, ZA).

The MRI and its partners have now assembled a network consisting of 450 members with the following objectives:

- promote research on global change in African mountains,
- create synergies between research and on-going local, regional and global initiatives,
- support data sharing by means of conferences and workshops, mailings, and database access,
- provide scientific based information to stakeholders and policy makers,
- influence policy and decision-making to improve livelihoods and the environment of African mountains and highlands,
- establish a transboundary network of global change research sites.

MRI hosts the GCRN_AM website and produces a bi-monthly GCRN_AM Newsflash. The MRI experts' database and the "Who is Who" list of African scientists working in mountain regions gives access to more than 6,000 global change scientists around the world, with 450 of them in Africa.

Products

The network has already catalysed new activities. For instance, the planning workshop on "Establishing High Altitude Climate Observatory Systems in the Ethiopian Highlands" held in January 2008 at Addis Ababa University occurred because of contacts made in Kampala. It was co-organised by the Faculty of Science, Addis Ababa University; the Global Mountain Programme; the Horn of Africa - Regional Environment, Centre/Network; and the University of the Witwatersrand.

The first aim of the workshop was to deliberate on climate change trends and its impacts on various sectors (livelihood, environment, agriculture, energy, management, etc.) of the Ethiopian Highlands. The second objective was to launch a working group for the establishment of high altitude climate observatories in Ethiopia. The workshop was a success, with 40 delegates attending, including representatives from the Global Mountain Programme, FAO, UN/ECA, UNDP, UNEP and the Netherlands Embassy. It concluded with two major outputs:

- i) The participants agreed that a proposal would be drafted during 2008 for the establishment of high altitude climate observatories on at least six summits in Ethiopia.
- ii) A climate change research network for Ethiopia was established and will be hosted and coordinated by the Science Faculty of Addis Ababa University.

For further information on the Ethiopian mountain research initiatives contact Dr Gete Zeleke g.zeleke@cgiar.org. The organisations supporting the GCRN_AM hope that other research institutions and programmes will follow this example and start initiatives in their respective fields. To get involved in the Global Change Research Network in African Mountains, please contact Dr. Bob Nakileza (nakilezab@yahoo.com) Mountain Resource Centre, Makerere University, Kampala, Uganda or Claudia Drexler (drexler@giub.unibe.ch) Communication and Event Management, The Mountain Research Initiative, Switzerland.