



Side Event at the 5th Global Meeting of the Mountain Partnership

***Science and research for evidence-informed policy and action on the ground:
experiences and outlook in mountain-specific cases***

Tuesday 12 December 2017, 17:30-19:15, Lebanon Room (D20), FAO.

As we reflect on the theme of this year's MP Global Meeting, *Mountains under Pressure*, there are calls to take stock of how, and with what effect, is key knowledge exchanged between science and practice to address pressing issues in mountains regions and communities. In this side event, convened and chaired by the Mountain Research Initiative (MRI), invited academics and practitioners from diverse backgrounds share their experiences with science and research in addressing key policy and practice-relevant problems in mountain-specific contexts. Covering topics such as water, land degradation, migration, waste and natural resource management for emissions reduction, each presentation will also reflect on the role of knowledge and information exchange in the domains of their respective work both within global and in specific cases in Latin America, Africa, and Papua New Guinea. The session concludes with a thought-provoking exchange and dialogue with the audience present, and jointly deliberate on the contributions of science and research in supporting knowledge and information for policy and practice, also highlighting key gaps that will feed into an agenda for joint work between scientists, practitioners and society at large.

The four invited speakers and their presentations include:

1. Multiple use of water in mountains in the face of climatic and non-climatic stressors

Christian Huggel - University of Zurich and MRI Science Leadership Council, Zurich, Switzerland.

A multitude of climatic and non-climatic stressors act on mountain ecosystems and people. Water is one of the most important resources of mountains, also for millions of people in the regions downstream of mountains. Multiple factors affect quantity and quality of water. Shrinking glaciers can increase the variability, shift timing or simply decrease water availability in dry season. Improved and adapted water management becomes an imperative in many mountains regions worldwide. Here we draw on experiences in the tropical Andes on climate adaptation and multiple use of water involving a co-design of new types of institutional and research frameworks considering a variety of knowledge forms.

2. Knowledge based restoration of mountain ecosystems: for building community resilience, improving livelihoods, and providing alternatives to irregular outmigration

Aster Gebrekirstos - World Agroforestry Centre (ICRAF) and MRI Science Leadership Council, Nairobi, Kenya.

Most mountain areas in Africa are experiencing environmental degradation. The process of restoring degraded land to a healthier and more productive landscape needs a synergy of integrated landscape approach, science based interventions, enabling government policy and effective partnerships. Most of all, people and communities should be at the heart of the restoration effort, to transform barren or degraded areas of land into healthy and functional landscapes, thereby to enhance livelihoods, resilience to climate change and reduced irregular outmigration. Success case stories e.g. from Ethiopia and the potential for scaling up will be presented.

3. Waste Management in mountain regions

Matthias Jurek - UN Environment

Pollution in the mountains is growing dramatically from increased tourism, agriculture, urban expansion and mining. Mountains face unique challenges for litter management due to steepness, remoteness, transboundary landscapes, natural hazards and sensitive ecosystems. To tackle global waste issues the entire waste cycle must be addressed, from Everest to the Mariana Trench. Furthermore, how waste management relates to other emerging downstream issues, such as climate change and biodiversity loss, will be addressed.

This presentation will be followed by a short reflection from the International Climbing and Mountaineering Federation (UIAA), with Mr Pier Giorgio Olivetti, UIAA Board member, and Mr Ang Tshering Sherpa, UIAA Honorary Member.

4. Biodiversity for REDD+. The Papua New Guinea case study

Prof. Fabio Attorre - Department of Environmental Biology, Sapienza University of Rome, Italy

Papua New Guinea is building its first multipurpose National Forest Inventory (NFI) under the arrangements for Reducing Emissions from Deforestation and forest Degradation (REDD)+. The inventory includes not only activities for measuring timber volume and estimating carbon stocks and greenhouse gas emissions but also, significantly, a protocol for the first survey of the nation's forest biodiversity. The combined inventory will make it possible to assess the trade-offs between protecting biodiversity and reducing emissions, in order to promote sustainable forest management and improve local forest community livelihoods. Sapienza University of Rome has been supporting the government of PNG since 2014 in the development of the methodology for biodiversity assessment and in the implementation of the multipurpose NFI.