## Mountain Knowledge Solutions for Sustainable Green Economy and Improved Water, Food, Energy, and Environment Nexus

Organized by the International Centre for Integrated Mountain Development (ICIMOD), the Government of Nepal, Mountain Partnership, Stockholm International Water Institute (SIWI), EVK2CNR, Global Gender and Climate Alliance (GGCA)

Co-chaired by Keshab Man Shakya, Minister of Environment, Science and Technology, Nepal, and Pema Gyamtsho, Minister of Agriculture and Forests, Bhutan, this side event highlighted local, national and regional knowledge-based solutions that are inclusive and supportive to the water, food and energy nexus and have promoted green growth strategies and reduced poverty.

David Molden, Director General, ICIMOD, stressed the importance of clean energy to reduce glacier melt and to reduce black carbon from brick kilns, cookstoves, open burning, diesel vehicles and forest fires. The solutions he presented included: increased synergies and tradeoffs between hydropower, food, livelihoods and the environment; improved landscape management; reducing scientific uncertainties about diverse and interconnected human and ecological systems; and putting mountains on the global agenda.

Ram Prasad Lamsal, Joint Secretary, Nepal, presented forestry and watershed policies and practices in Nepal, including, *inter alia*, maintaining and expanding at least 40% of the land area under forests; managing sensitive watersheds; increasing income generating operations and improving livelihoods; and ensuring proper land use by employing rational land use planning. He emphasized the strong environment and poverty nexus and the need to up-scale from sub-watershed to basin levels.

Karin Lexén, Director, Swedish Water House, stressed the fundamental role of water in mountain regions and the importance of linking global and local contexts. Saying that climate change is water change, Lexén emphasized the need for water management to be fully integrated into climate adaptation and mitigation. She urged for Rio+20 to recognize the importance of integrated water resource management at all levels and to address inter-linkages between water, energy, food and climate change.

Madhav Karki, ICIMOD, presented regional aspects of sustainable development using a case study of the Asian mountains. He highlighted: the importance of traditional and scientific knowledge; mountain-specific policies; and the sustainability of community-based practices. Karki stressed that good environmental governance achieves livelihoods, equity and environmental integrity.

François Rogers, IUCN Global Gender Office, focused on livelihoods and gender equity issues. Rogers presented IUCN's Global Gender and Climate Alliance (GGCC) programme founded in 2007, aimed at addressing gender in climate policy and action. He said IUCN supported countries through developing Climate Change and Gender Action Plans (ccGAPs) and showed an example from Nepal.

Marco Onida, Secretary General, Permanent Secretariat of the Alpine Convention, stressed that improving the energy, water, food and environment nexus can only be done through integrating policies on energy, water and agriculture, and working on the basis of transnational and cooperative agreements. Onida applauded the fact that the Rio+20 draft outcome mentions strengthening agreements and sharing experiences between existing cooperative arrangements, such as mountain treaties.

Ania Grobicki, Executive Secretary, GWP, emphasized the importance of mountains as "the water towers of the world", with up to 50% of the global population economically dependent upon the water and energy from mountainous areas. Reminding that 30% of the world's freshwater is locked up in snow and ice, Grobicki said that, as the world warms, the glaciers and icecaps are melting and flowing into the oceans, contributing to sea level rise. She talked about GWP's work with Vox Naturae in raising global awareness about the cryosphere, and announced a global event in September 2013 in Iceland, showcasing the voice of the glacier itself as it cracks and melts. Grobicki expressed hope for the establishment of an Ice Fund to support this underresearched area.



Karin Lexén, Director, Swedish Water House at Stockholm International Water Institute, SIWI, said water is not a sector, instead it is a resource, but also a hazard due to flood risks.



Ania Grobicki, Executive Secretary, GWP, said that GWP's vision is for a water-secure world, achievable through integrated approaches to water resources management.

## More information:

http://www.icimod.org/ http://www.gwp.org/ http://www.voxnaturae.org/

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