



# ICIMOD

FOR MOUNTAINS AND PEOPLE



**ICIMOD, UNEP, IUCN-WCPA Event, 22 October 2010**

## Transboundary Cooperation for Biodiversity Conservation A strategy towards the 'ecosystem approach' of the CBD and adaptation to climate change

Venue: Nagoya Gakuin University, Aichi Prefecture

Time: 18:15 to 19:45

Most of the important mountainous areas are transboundary and managed under different political systems. In recent years, there has been a growing impetus to identify transboundary landscapes and promote biodiversity conservation and management through an ecosystem approach. ICIMOD, its regional member countries, and partners such as UNEP and IUCN have been instrumental in introducing these concepts to the Hindu-Kush Himalayan region, with seven transboundary landscapes identified so far. The broad objectives are:

- to facilitate an 'ecosystem management approach' in conservation, including inter-sectoral policy coordination through regional mechanisms that address transboundary issues such as wildfires, poaching, illegal trade, and climate change phenomena;
- to develop interconnectivity between the mosaic of protected area habitats in order to allow species to cope better and/or adapt to the stresses brought about by climate change;
- to increase ecological and socioeconomic resilience by promoting ecological integrity over a larger landscape, giving species a greater chance to move in response to climate change and helping the environmental processes and functions that maintain the ecosystem services;
- to promote international scientific collaboration and capacity enhancement in disciplines that will help to support mitigation activities.

ICIMOD, UNEP, and IUCN-WCPA are inviting global and regional organisations, government representatives, and experts working on transboundary landscapes from across the globe to this side event in order to share experiences among global conservation organisations, governments, and experts; use the example of 'mountain biodiversity' to discuss the challenges of climate change impacts and adaptation; and raise awareness about the importance and role of ecosystem and landscape approaches in transboundary areas for achieving global conservation targets.

### Provisional Agenda

- 18:15-18:20 **Introduction:** Ekla Bya Sharma, ICIMOD
- 18:20-18:40 **Keynote Speech** by Christian Körner, Professor, University of Basel, Switzerland, on 'Mountain biodiversity: Response to climate change'
- 18:40-18:55 **Panellist:** Ibrahim Thiaw, Director of Policy, UNEP-Nairobi, on 'Ecosystem management approach: From concept to reality'
- 18:55-19:10 **Panellist:** Penelope Figgis AO, Vice Chair-Oceania, IUCN World Commission on Protected Areas on 'Connectivity approaches in conservation: A global perspective'
- 19:10-19:25 **Panellist:** Andreas Schild, Director General, ICIMOD on 'Transboundary landscape and transect approaches for biodiversity conservation and management in the Hindu-Kush Himalayas'
- 19:25-19:40 **Discussion**
- 19:40-19:45 **Closing Remarks**

Refreshments will be provided

## Conservation and management of biodiversity; and the special needs of mountain areas

The Earth is facing its sixth great extinction event and the first perpetrated by a single species, thanks to human impacts on natural ecosystems and life-support processes. As population growth, consumption rates, waste production, and demand for resources continue to skyrocket, so do the multiple threats to biodiversity. Further, the alteration of the climate poses new, unforeseen threats to biodiversity, and therefore to humankind.

Protected areas (PAs) are an integral element of global biodiversity conservation. More than 100,000 PAs have been established worldwide, covering 12.2% of the global land area. However, it is likely that several important habitat types and species are not covered by the current PA network, while many existing PAs face severe habitat loss and fragmentation. Integrated management of land, water and resources is becoming increasingly urgent to ensure an ecological and socioeconomic balance.. Particularly in view of climate change, It is important to protect large areas of habitat and maintain connectivity between natural habitats and across altitudinal gradients to help maintain the flow and movement of organisms. Biodiversity conservation requires a comprehensive approach that makes use of both reserve and non-reserve areas across ecological and political boundaries. The ecosystem approach (EA) in conservation has been developed to do just this. It is designed to conserve entire ecosystems, especially in areas where there is much human activity; in order to reach a balance between ecological, social, and economic needs. It can help develop a strong link between people and conservation through inclusion of CBD article 8j. Many global and regional conservation organizations such as IUCN, UNEP and ICIMOD are playing a pivotal role on promoting transboundary conservation across the globe. Nevertheless, implementation of the EA remains limited.

Mountains are complex and fragile ecosystems that cover almost a quarter of the Earth's land surface and host 12 per cent of its people. Due to the extreme heterogeneity of mountain environments (climates and soils), rapid elevational changes (altitudinal vegetation belts), and variable directional orientation (aspect), mountains have diverse vegetation and varied microclimatic and ecological conditions. As a result, they exhibit high biodiversity, often with sharp transitions in vegetation sequences, and equally rapid changes from vegetation and soil to snow and ice. In addition, mountain ecosystems are often rich in endemics, because many species remain isolated at high elevations, unlike lowland vegetation communities, which can occupy climatic niches spread over wider latitudinal belts. Mountain functions affect the wellbeing of half of humanity, well beyond the immediate vicinity, benefiting entire river basins. In addition, natural and semi-natural vegetation cover on mountains helps to stabilise headwaters, preventing flooding and maintaining steady year-round flows by facilitating the seepage of rainwater into underwater aquifers. As a result, mountains have often been referred to as 'natural water towers', because they contain the headwaters of rivers, which are vital for maintaining biodiversity and human life in the densely populated areas downstream. Mountains also represent unique areas for the detection of climatic change and the assessment of climate-related impacts. One reason for this is that as climate changes rapidly with height over relatively short horizontal distances, so does vegetation and hydrology. In other words, mountains have also been recognised as being particularly vulnerable to the negative impacts of climate change; especially for those species with narrow ecotone and/or in high altitude ecosystems.

Poverty in the mountains is a fundamental issue that needs attention. The majority of people living in mountain areas are poor. While a globalised and more affluent world increasingly values biodiversity, for mountain dwellers the daily demands of making a living in a harsh environment often takes precedence over biodiversity conservation. There is a strong linkage between biodiversity resources use and livelihood enhancement of the mountain people. In the past biodiversity management through the lens of livelihood development has largely been overlooked, which in futuristic approach needs a special attention especially in the mountains.

### For further information please contact

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