

Promoting the Sustainability of Ecosystem Services

The ecosystems of the Hindu Kush-Himalayas allow plants and animals to adapt to climate change by providing horizontal and vertical connectivity. The ecosystem services provide resources and amenities for the livelihoods of vulnerable mountain communities as well as for large populations downstream. These vast ecosystems are interconnected and not confined within the borders of individual countries. Hence, ICIMOD is focussing on transboundary landscapes and biodiversity conservation. It aims to promote resilience to environmental changes through research and advocacy on issues related to mountain ecosystems.

In 2010, ICIMOD was active in raising awareness and contributing to the international process of drawing future global agendas. Working with regional partners and global players, it organised various programmes in the regional countries and internationally to celebrate the International Year of Biodiversity and draw attention to vital environmental issues.

ICIMOD was an observer at the Tenth Conference of the Parties (COP-10) to the UN Convention on Biological Diversity (CBD) in Nagoya, Japan. The Centre followed the negotiation processes on many CBD agendas especially those for mountain biodiversity and mountain protected areas. It participated in the scientific body meeting at Nairobi in May 2010 where it presented an 'Access and Benefit Sharing (ABS)' regional framework to the countries of the Hindu Kush-Himalayas. During COP-10, three side events were organised on transboundary conservation, challenges in mountain biodiversity conservation in the context of climate change, and the International Year of Biodiversity, and the CBD Secretariat recognised ICIMOD as a partner for the implementation of the Programme of Work for Mountain Biodiversity. This global recognition of ICIMOD's competence shows that it has been successful in taking the issues of the region to global discussions and forums related to policy and laws on biodiversity.

The trans-Himalayan transect approach, which ICIMOD has facilitated since 2008, was seen to have enormous potential to meet the challenges of adaptation to climate change and biodiversity conservation and management in the Hindu Kush-Himalayas. It was adopted as a pilot in the Kailash Sacred Landscape, where China, India, and Nepal are cooperating on developing effective landscape management.

ICIMOD worked with partner countries to complete a first-of-its-kind vulnerability assessment in the eastern Himalayas, and collaborated with international strategic partners, such as the Global Biodiversity Information Facility and Global Mountain Biodiversity Assessment, to train institutions in regional member countries in using global standard instruments. It also developed and launched a conservation portal for regional partners.

Action research on the economic valuation of ecosystem services provided valuable learning and enabled ICIMOD to develop a framework paper on valuation of ecosystems. The framework will be instrumental in building the capacity of partners with various tools and approaches.

Other activities focussed on enhancing enabling policies and the capacities of stakeholders, and increasing socioeconomic resilience, tenure security, and equitable access and benefit sharing of land and other natural resources in rangelands and shifting cultivation areas. The Centre has also been piloting schemes for REDD (reduced emissions from deforestation and degradation) in Nepal with forest user groups and civil society to develop REDD payment mechanisms.

Partners in research and advocacy

During the 2010 'International Year for Biodiversity', ICIMOD worked with partners to organise several events, especially three 'side events' during COP 10 of the Convention on Biological Diversity. The partners included the United Nations Environment Programme (UNEP), the World Conservation Union - World Commission on Protected Areas (IUCN-WCPA), Secretariat of the Convention on Biodiversity, Global Mountain Biodiversity Assessment, and ICIMOD member countries in the Hindu Kush-Himalayas.

The three events at COP10 highlighted the Mountain Biodiversity Agenda and provided a forum to discuss issues related to mountain biodiversity conservation and management and the approaches being applied. ICIMOD's regional member countries shared a common platform, committed to ICIMOD's work, and appreciated the Centre's regional cooperation approach, which they suggested was an example for replication elsewhere. Representatives from other mountain regions saw the 'Analysis of Implementation of the CBD' shared by ICIMOD as a good practice for replication. The COP-10 decision on the Programme of Work on Mountain Biodiversity identified ICIMOD as a centre for promoting the programme in the Hindu Kush-Himalayan region.

Professor Christian Körner, Chair of the Global Mountain Biodiversity Assessment, offered these comments:

"The Global Mountain Biodiversity Assessment (GMBA) of Diversitas that I am chairing aims at advancing knowledge about the organismic richness in the world's mountains, the causes of this richness, and the threats. GMBA is not able to conduct this global assessment and the associated research with its own resources and personnel, but rather acts as a facilitator or advocate.

I can say with no exaggeration, ICIMOD became our strongest partner in these attempts in Asia and perhaps worldwide. With its excellent infrastructure and trained personnel and the outstanding logistics, ICIMOD was able to advance the biodiversity agenda in the Hindu Kush-Himalayan region.

GMBA was able to directly translate its current action plan of advancing digital archives on mountain biodiversity into real working programmes and projects in the region, such as the Kailash Sacred Landscape project. The workshop organised jointly by ICIMOD, GBIF, and GMBA in 2010 started a new era of biodiversity sharing, providing a regional node to publish, harvest, and use biodiversity data in international data formats. It is to be hoped that the attempts of ICIMOD to foster sustainable land use and livelihoods and conservation in the Hindu Kush-Himalayan region will profit from the power of such new tools in biodiversity research and conservation.

To perform activities like these successfully, you need a partner that is well organised, has a critical mass of experts and resources, and, most importantly, has built trustful partnerships with the regional authorities and people. On its own, GMBA could never have had such an impact on the biodiversity agenda, or use synergies, such as implementing the mountain work programme for the CBD. "

Collecting wild herbs in Manang, Nepal



Towards transboundary cooperation

ICIMOD has piloted a transboundary landscape conservation project in the Kailash Sacred Landscape (KSL). The area is the source of four of Asia's great rivers and covers over 31,000 sq.km in the remote southwestern part of the Tibetan Autonomous Region (TAR) of China, adjacent areas of northwestern Nepal, and northern India.

The approach discussed focuses on enhancing biodiversity and cultural conservation, ecosystem management, sustainable development, and climate change adaptation. Through scientific and technical cooperation, it will enhance information exchange among the member countries to help in developing and managing a knowledge base that facilitates transboundary biodiversity, environmental, and cultural conservation.

The main strategic partner of the initiative is the United Nations Environmental Programme (UNEP). The regional member countries China, India, and Nepal are represented by focal ministries, such as the Chinese Academy of Sciences (CAS) in China, Ministry of Environment and Forest (MOEF) in India, and Ministry of Forest and Soil Conservation (MoFSC) and Ministry of Environment (MoE) in Nepal.

During the 18-month project, each country team completed a feasibility assessment, conservation strategy, and comprehensive environmental monitoring plan, which are being synthesised into documents for the whole

Village in the Karnali gorge, Kailash Landscape, Nepal



Mt Kailash, PR China

landscape. The researchers visited the project sites, developing direct contacts with the local communities and an understanding of the situation, and shared the results of studies on traditional knowledge, ecotourism, and community-based environmental assessment. Bringing scientists and policy makers from the three countries together helped in the development of a close working relationship and cooperation and created a platform for advocacy for KSL.

One important lesson learned was that the countries are at different stages of development, and a longer time span and greater understanding of the dynamics and mechanics of the countries will be needed. ICIMOD is now developing a long-term programme for the conservation and sustainable management of the fragile ecosystems in the KSL area.

As **Mr Surya Prasad Joshi** (Nepal) says:

"This KSLCI will have its own importance in Nepal. In the Conservation Strategy, we identified problems and gaps. Somehow, most are similar across the countries and it may be good to have a common strategy, but each country can have its own priorities. On behalf of our delegation, we express sincere thanks to the experts from China and India for their sharing of information, ICIMOD and UNEP for supporting the work, and to my colleagues for hard work."



Weaving on a hand loom, Chittagong Hill Tracts, Bangladesh