

2 The Region at a Glance

The Hindu Kush-Himalayan (HKH) region stretches from Afghanistan in the west to Myanmar in the east and covers the mountain ranges from the Tibetan Plateau and other Himalayan mountain areas of China in the north to the Indo-Gangetic plains in the south. The mountain landscape, also known as the greater Himalayan region, extends over 3,500 kilometres. The region sustains close to 150 million people – nearly one-third of who live below the poverty line. The upstream ecological and socioeconomic conditions have an impact on the lives of another 500 million people living in the downstream plains and major valleys. The region contains the watersheds of major international river systems such as the Indus, the Ganges, the Brahmaputra, the Nu-Salween, the Lancang-Mekong, and the Yangtze (Jinsha). It is home to more than 100 ethnic groups and indigenous communities speaking as many languages and/or dialects. This remarkable socioeconomic and cultural diversity is matched by a high degree of environmental diversity; the region contains a myriad microclimates ranging from sub-tropical to cool temperate and from semi-arid in the west to wet tropical monsoon rainfall in the east, and there are huge variations in climate, soil, vegetation, and wildlife.

State of the Environment

The vast majority of people in the HKH region live in rural areas and depend directly on natural resources for sustenance, including land, water, forest, grasslands, minerals, plants, and animals. The growing demand for food, fresh water, timber, fibre, fuelwood, and other non-timber forest products, stemming from the steadily increasing population combined with industrialisation, market specialisation, and an ever-growing demand for material consumption, has created severe pressure on the natural resources of the region. Land, which is the prime source of livelihoods, is severely degraded in many instances. Forest is shrinking and agriculture is under stress, accelerating land degradation through nutrient leaching and soil erosion. It is estimated that more than 300 million hectares of land in the HKH region is degraded to some extent.

Forest resources are also in a degraded condition in many parts of the region. While experts argue that the ideal per capita forest area is close to one hectare, the actual amount available in all countries, except

The region is home to some 150 million people of diverse ethnic origins, religions, and cultures – one of the most challenging areas for fostering cooperation.



Xu Jianchu

Baima Snow Mountain Natural Park in northwest Yunnan; the tree line is moving up due to global warming.

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Bhutan, is far below this creating a serious imbalance between population and natural resources. In Afghanistan, Bangladesh, China, and India the figure is estimated to be only around 0.1 ha. The HKH region is Asia's largest storehouse of fresh water and the region is a source of major river systems. These rivers are critical for the welfare of millions of people both upstream and downstream. Although once considered abundant, water is now becoming a scarce resource as demand increases and supply becomes more erratic.

About 60% of the geographic area of the greater Himalayan region is classified as rangelands, and a large number of animals and people depend fully or partially on this resource. The rangelands support a large livestock and wildlife population that supplies meat and milk products, wool and leather, transport, and nutrient recycling. The rangelands also provide critical watershed and climate functions and preserve diverse biological and cultural resources. However, most rangeland is under heavy stress because of excessive animal pressure, over exploitation, and inappropriate grazing management. The Himalayan region contains one of the global biodiversity hotspots, the

Eastern Himalaya, but this hotspot is also under threat. Many biodiversity resources, especially faunal and floral species are either being lost or becoming endangered due to over exploitation and loss of habitat.

There are also positive developments. In recent years, regional member countries have been gradually reformulating policies, laws, and plans to institute community-based natural resource management (CBNRM) under the framework of decentralisation and devolution. In some areas, such as range management and community forests, there are positive trends with increased green cover and grazing resources.

Fragility and Vulnerability

The Himalayan mountain ecosystem is fragile and vulnerable. The degradation of natural resources, especially forests, rangelands, and soils, has exacerbated environmental hazards such as landslides, glacier lake outburst floods (GLOFs), and flash floods, and seriously undermined the livelihoods of the majority of rural people living in and outside the region. Despite impressive economic growth in some of the



Xu Jianchu

Mingyong glacier of Sacred Khawakarpo Mountain, Yunnan, China, showing glacier retreat due to climate change

countries in the region, poverty and inequality are still persistent and ubiquitous. Although poverty is widespread, its incidence and severity are disproportionately higher in the mountain areas of all the countries compared with the plains areas. A health survey conducted in 1996/97 in India found that the proportion of miscarriage is five times higher in the northern mountains as a result of women carrying heavy loads during pregnancy. The difficult condition of people's lives and the deprivation seen in many parts of the greater Himalayan region is comparable to the conditions prevailing in sub-Saharan Africa.

Many natural resources are degraded and water, once abundant, is becoming scarce.

Problems of biodiversity loss, land degradation, and deteriorating watershed quality will not remain confined to mountain areas but will spread to the region and beyond.

Inequalities are widening between the socioeconomic indicators prevailing in the plains and mountains as well as within the different parts of the mountains. There is also a wide gap in the socioeconomic condition of different castes, ethnic groups, and economic status groups of mountain peoples. For example, gender inequalities are worsening among some ethnic groups as families devote scarce cash to educating sons while daughters are kept at home to provide labour for family farms; sons are often perceived as social security by mountain families. Income poverty, social and gender inequity, environmental degradation, deforestation, soil erosion, land degradation, and watershed deterioration are interplaying in mountain areas in a threatening manner maintaining vicious circles of poverty, and contributing to environmental degradation and hunger. Large sections of the region are now subject to unacceptable levels of social, physical, and economic vulnerability. Violent conflicts and political upheavals are prevalent and related to the growing marginalisation and disenfranchisement of many mountain peoples.



A mountain child and sibling

Pradeep Tulachan

Need for Long-term Solutions

It is important to address these problems sustainably if the world is to achieve the globally set development targets such as the Millennium Development Goals. The ramifications of the problems of rampant loss of natural biodiversity, rapid land degradation, and deterioration in watershed quality will not remain limited to mountain areas but will spread to the whole region and beyond. For example, rising temperatures, the shrinking of glaciers, and disruption of hydrological cycles will impact on agricultural productivity and biodiversity in the plains due to increasing drought, floods, and sedimentation. Therefore, mountain problems that exist in the Himalayan region deserve special attention and urgent action. The success of international efforts to promote sustainable development and environmental conservation in the region may be critical to alleviate poverty, malnutrition, gender inequity, and to environmental conservation in the entire area of South,

Southeast, and East Asia by improving water, air, and environmental quality and promoting long-term sustainability. Unless the nexus between the prevailing problems of persistent poverty, environmental degradation, and increasing social inequality can be broken, the future well-being of the whole region is at risk as a result of increasing socio-political conflict, and marginalisation of ethnic minorities and weaker sections of society.

A major challenge faced by policy makers, professionals, development practitioners, and researchers in the region is how to improve the quality of lives of mountain people without degrading the natural resource base and reducing environmental quality. The International Centre for Integrated Mountain Development (ICIMOD) was established by the international community in 1983 precisely to address this and other related challenges in the Himalayan region. ICIMOD's mission of developing and providing integrated and innovative solutions, in collaboration with national, regional, and international partners, and of fostering collective action and socially inclusive policy change, aims to transform mountain people's economic, social, and physical vulnerability into ecological, social, and livelihood security.

ICIMOD's Regional Advantage

Many mountain specific problems, such as deforestation, land conversion, hazardous mining, soil erosion, land and environmental degradation, biodiversity loss, and watershed deterioration, transcend in one way or another the local and national boundaries and require a broad regional approach and transboundary collaboration to achieve effective solutions. ICIMOD, as an independent, non-political, and international organisation, staffed with multi-disciplinary professionals of many nationalities, and with more than two decades of experiential learning on mountain development, is in an appropriate and unique position to play the role of neutral player and honest knowledge broker. The Centre can bring a regional perspective into addressing the multiple and complex problems and provide necessary technical and policy support to RMCs in designing appropriate policies, programmes, and projects for developing, piloting, and testing innovative solutions. The potential for regional cooperation in addressing mountain issues has so far been under-utilised, as a result of various geo-political problems and tensions. ICIMOD, as an independent intergovernment organisation founded by the Hindu Kush-Himalayan countries, brings together the diverse stakeholders including policy makers onto a common platform to discuss, debate, and explore sustainable solutions for addressing complex issues. Regionally implemented projects lead to synergy and the exchange of ideas and lay the foundation for future collaboration and cooperation among countries.

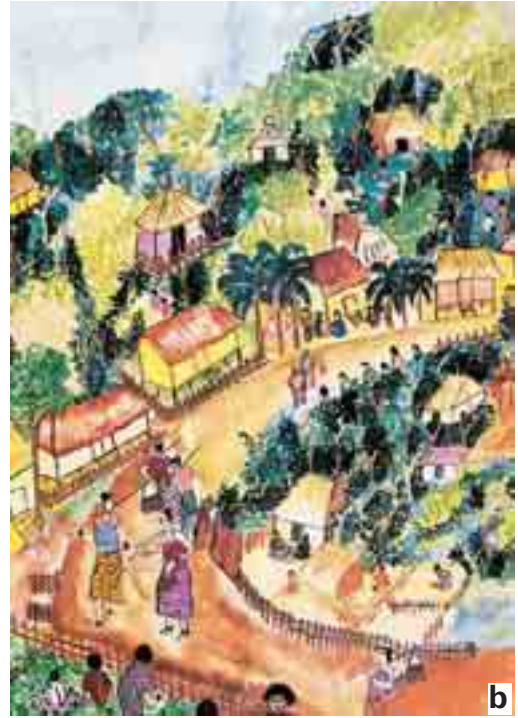
Many mountain specific problems transcend national boundaries and require a broad regional approach and transboundary collaboration to address adequately.



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Posters portraying various aspects of ICIMOD's evolving work and vision

- a) Threats to the sustainable mountain environment
- b) Diversified mountain economies
- c) Empowered mountain women and
- d) Conservation of biological and cultural heritage



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