

# Help Save the Third Pole

ICIMOD

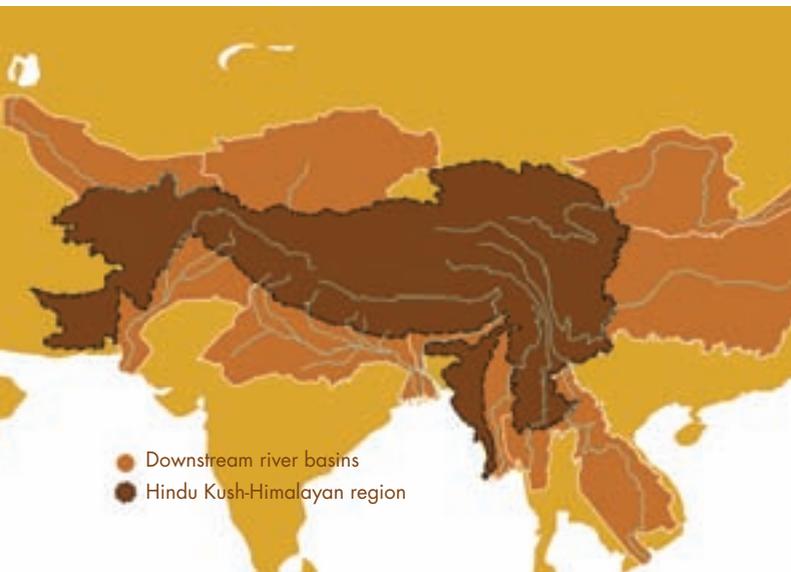
Climate is Your  
Corporate Social Responsibility

FOR MOUNTAINS AND PEOPLE



## What is the Third Pole?

The Hindu Kush-Himalayan region spans an area of more than 4.3 million square kilometres across Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal, and Pakistan. The region stores more snow and ice than anywhere else in the world outside the polar regions,



giving the name 'The Third Pole'. The Third Pole contains the world's highest mountains, including all 14 peaks above 8,000 metres, is the source of 10 major rivers, and forms a formidable global ecological buffer.

The Third Pole region has enormous socioeconomic and cultural diversity; it is home to many different ethnic communities speaking more than 600 languages and many more dialects. It is endowed with rich natural resources and contains all or part of four global biodiversity hotspots. The mountain resources provide a wide range of ecosystem services and are the basis for the livelihoods of the 210 million people living in the region, and provide services indirectly to the 1.3 billion people – one fifth of the world's population – living in the downstream river basins. More than 3 billion people benefit from the food and energy produced in the river basins that have their origin in the mountains.



## The Third Pole and Climate Change

Climate change has become a major concern in the Third Pole. Mountain systems are particularly sensitive to climate impacts and the Third Pole region is home to some of the people most vulnerable to these changes in the world. Changes in the river systems and their basins have impacted directly on the wellbeing of millions of people.

The rate of warming in the Third Pole region is significantly higher than the global average, and the rate is higher at higher altitude, suggesting a greater vulnerability of the cryosphere environment to climate change. This trend is expected to continue. Climate change projections suggest that all areas of South Asia are likely to warm by at least 1°C by the end of the century, while in some areas the warming could be as high as 3.5-4°C.

The life and livelihoods of the people in the Third Pole region is challenged due to climate change, and the stability and prosperity of the region affected by the Third Pole is at risk, which will have implications for all of Asia



and for the world. However, there is still little knowledge of this situation, and its potential implications, outside the immediate vicinity; a special effort is needed to raise awareness of the fragility of the mountain social-ecological system.

## Why is Climate Change Relevant for Business?

Climate change itself is a global problem requiring a global solution. Just as business operations are important, it is imperative to consider the impact of climate change on business operations, and potential impacts on sustainability. So how can you deal with climate change? What is the impact of climate change on business?

Climate change has environmental, social, political, and economic repercussions. Extreme and unpredictable weather conditions, floods, droughts, rapid snowmelt, changes in growing seasons and growth patterns, and rising sea levels are among the major climate change challenges for business operations, and have direct implications for commerce globally. Companies in developing nations are particularly vulnerable. Climate change will have a domino effect on agricultural and production operations. For example, a reduction in the supply of agricultural products and scarcity of water may lead to a reduced food supply and threats to food security, a rapid global increase in commodity prices, social and political unrest, inflation, and finally economic slowdown. With such a scenario, business will not be as usual.

Business will face challenges as never before if climate change impact is not better understood and no steps are taken towards appropriate solutions. Now is the time for corporate leaders to rethink very carefully their business models, business priorities, and business sustainability, and to consider what climate change may mean for their objectives. How can companies minimise the impact of climate change, lower their risk, adapt to the change, and take advantage of the opportunities that are available?

Acknowledging climate change as an inevitable factor and recognising the need to adapt involves bold decisions by business. The core message is to know that adaptation adds costs, but lack of adaptation will cost far more. So are you looking for a better understanding of climate change and want to work toward solutions? How can you engage your surplus in climate change to make a fundamental change in your business approach?



## Climate is Your Corporate Social Responsibility

Climate change is real, it is here, and its impacts will remain with us for longer if we do not make it our business today. As an issue of increasing concern, climate change is the priority agenda of many of us in the world today. The impacts of climate change threaten to destabilise our



whole world and way of life. Especially in the developing world, the ongoing social, economic, and environmental challenges are intensifying the impacts of climate change on a poor and vulnerable population.

The International Centre for Integrated Mountain Development (ICIMOD) is ready to help you contribute to possible solutions. ICIMOD is seeking partners to guide and provide opportunities to assist interested individuals and organisations to become actively involved, and to discover how climate change can become their business too, in their own way.

Corporate Social Responsibility (CSR) is a significant step; the corporate sector has rightly understood the approach as offering a vehicle to help society, among others, to combat the impacts of climate change and help make a difference in the lives of the vulnerable communities affected by this inevitable global phenomenon.

Climate change and adaptation are now a global agenda. ICIMOD has been involved in related activities in the Third Pole region for close to three decades, and is keen to establish partnerships to help businesses understand climate change better and to engage and deal with this global challenge in a more meaningful way – **to make climate your CSR.**



## Highlights – Climate Change Impacts in the Third Pole

- **Natural disasters:** In 2007, seven of the top 10 natural disasters by number of deaths occurred in the Third Pole region, accounting for 99% of total deaths (UN International Strategy for Disaster Reduction 2008). These incidents not only indicate the prevalence of disasters in the region, but also the extreme susceptibility of the Third Pole region.
- **Mountain poverty:** Poverty is widespread and pervasive in the mountains. The poor access, the complexity and fragility of mountain conditions, and the marginalisation of mountain communities from the mainstream, coupled with climate stresses and proneness to natural disasters, all contribute to the high levels of income and food poverty. As a result, mountain people are increasingly exposed to growing physical, social, and economic risks and vulnerabilities.
- **Vulnerability and livelihoods:** Climate change has made the future of mountain indigenous people and their livelihoods more vulnerable and uncertain. The available scientific evidence suggests that climate change will place significant stress on the livelihoods of rural mountain people.
- **Glacier retreat:** The most widely reported impact is the rapid receding of glaciers; the loss of water storage capacity and reduced meltwater in the dry season will have profound implications for downstream water resources. Glacier retreat is also likely to lead to an increase in the size and number of glacial lakes, and thus increased risk of glacial lake outburst floods (GLOFS), with their potential to destroy lives, livelihoods, and infrastructure downstream.
- **Water decline:** Glacier recession and reduced snow cover could disrupt the hydrological regime of the river basins. Snow and glaciers play a modulating role in the hydrology; changes in the hydrology could lead to an overall decline in water availability. Reduced ice volumes and snowcover mean reduced water storage. Increased temperatures will result in rain falling in the winter instead of snow – with no snow left to melt and give water in the spring. Changes in the monsoon regime could also mean less water being available when it is most needed. Decline in water availability has potential impacts on all aspects of the social and ecosystem infrastructure. With water systems going from plenty to scarce in a few decades, the mountain peoples' food production and economic growth will be adversely affected, and local and regional tensions over water supplies may increase.
- **Biodiversity loss:** Mountains are rich repositories of biodiversity with many endemic species, and they provide the ecosystem goods and services on which downstream communities depend. Climate change threatens the continued existence of some of the world's rarest species that occupy small climatically influenced niches; larger and more specialised species are likely to be lost due to habitat destruction.
- **Food security and agricultural sustainability:** Changes in water availability have a direct impact on mountain agriculture. According to the Food Policy Research Institute, the negative impacts of climate change on global cereal production may vary from 0.6% to 0.9%, but in the Third Pole region the impact could be as high as 18% to 22%. Irrigation water from rivers sustains nearly 55% of Asia's cereal production and around 25% of world cereal production, feeding over 2.5 billion people in Asia. The UN report 'The Environmental Food Crisis' warned that the melting glaciers and reduced snow could jeopardise world food security and drive food prices to unprecedented levels.

## Why Partner with ICIMOD

### As a climate change expert

For close to three decades, ICIMOD has focused on responding to the challenges of global change and especially climate change by enhancing the resilience and supporting adaptation of mountain communities. Almost all of ICIMOD's activities are involved in some way with climate change in mountain areas; whether measuring change per se and gathering good information to help understanding – the essential basis for good planning – or helping communities to recognise, respond, and adapt to such changes.

### As a facilitator of knowledge transfer

ICIMOD is a facilitator of knowledge transfer across the region and has served as a knowledge, learning, and enabling centre for the past quarter of a century. ICIMOD works within the mountain perspective framework, characterised by an understanding of the imperatives of mountain conditions such as fragility, inaccessibility, marginality, diversity, specific niche opportunities, and the human adaptation practices that hill and mountain communities have evolved while making livelihood-related decisions.

### As an agent for sustainable mountain development

ICIMOD has a comparative advantage as a regional organisational that can bring key partners from local national and regional levels to the table to share experience and solve common problems, while still maintaining close links to the grassroots. ICIMOD does this by working together with a wide range of organisations and communities at national and local levels, including governments, NGOs, development researchers, and practitioners.

### As a catalyst for promoting regional transboundary cooperation

ICIMOD's statutory non-political nature is essential for its regional role. ICIMOD works with and through regional partners. Its independent position creates a platform for scientists, professionals, and policy makers to contribute to the integrated approaches that are essential to success. Since natural phenomena are transboundary in nature, ICIMOD is uniquely positioned to act in this capacity, since it is a facilitator and enabler for developing and enhancing regional solutions.

With ICIMOD as your CSR partner, you can Help Save the Third Pole by supporting these activities and much more

#### 1. Water, the Essential Resource

- Monitoring and assessment of ice and water resources
- Disaster risk reduction and community resilience
- Strengthening upstream-downstream linkages
- Helping save high altitude wetlands

#### 2. Promoting the Sustainability of Ecosystem Services

- Integrated management of watersheds
- Conservation and management of biodiversity
- Management of rangeland resources
- Support of community and livelihood forestry

#### 3. Sustainable Livelihoods and Poverty Reduction

- Helping communities benefit from high value products and value chains
- Development of innovative livelihood options
- Support of gender and governance approaches

#### 4. Managing Knowledge and Communicating

- Communicating with stakeholders and the public
- Providing technology for communication and collaboration
- Gathering knowledge to share among partners
- Facilitating external networks
- Helping the region benefit from geodata and remote sensing

## 10 Benefits from Joining the HELP SAVE THE THIRD POLE Campaign

Become ICIMOD's partner today and make climate your CSR. By partnering with ICIMOD, you will:

1. Demonstrate that you are taking a stand for a global cause,
2. Engage in a meaningful global issue that is affecting our planet,
3. Be involved in long-term solutions for climate change,
4. Understand a wide range of issues related to climate change,
5. Show genuine concern about the sustainability of mountain communities,
6. Look at local problems and transboundary solutions for global issues,
7. Be accountable with involvement in a rapidly growing global concern,
8. Change public perception that businesses don't care about society at large,
9. Boost the morale of the stakeholders in your business, as well as of your employees,
10. Customise strategic activities of mutual interest for a long-term 'win-win' strategic partnership.



The **'Too Much Water, Too Little Water – Adaptation Strategies to Climate-induced Water Stress and Hazards in the Greater Himalayan Region'** project is supported by Swedish International Development Cooperation Agency (Sida), Himalayan Climate Change Impact and Adaptation Assessment (HICIA), and the Norwegian Ministry of Foreign Affairs. The project is identifying adaptation strategies used at local level in areas of China, India, Nepal, and Pakistan. It highlights people's efforts to respond, cope, and adapt to the current rapid changes, focusing in particular on the impact of climate-induced changes on water availability, which overlays other drivers of change, and providing lessons for the future and ways for others to learn.

**China, India, and Nepal agree on a common way forward for conservation and sustainable development of the Kailash Sacred Landscape** – ICIMOD, supported by UNEP, is facilitating the development of a regional cooperation framework for the Kailash Landscape. The Landscape includes the southwestern portions of the Tibet Autonomous Region of China, and adjacent parts of India and Nepal. It is one of the most culturally and ecologically diverse areas in the world, and has sacred significance for hundreds of millions of people in Asia and the world. The initiative is a pilot for ICIMOD's 'Trans-Himalayan Transects Programme' (seven landscapes and four transects) which aims to focus and increase the effectiveness of research and development activities in the region.



**Medicinal Plants and Herbs in the Eastern Himalayas: Developing a Sustainable Supply Chain and Enhancing Rural Livelihoods** – This project promotes conservation of medicinal and aromatic plant resources while increasing the benefits to local communities through a combination of sustainable utilisation, streamlining of supply chains with quality raw materials, and expansion of economic opportunities for the rural poor. It focuses on improving the livelihoods of highland communities in Bangladesh, Bhutan, and Nepal by targeting nine high-value, indigenous, and commercial medicinal and aromatic plant species that have a large export market demand.

**Livelihoods and Ecosystem Services in the Himalayas: Enhancing Adaptation Capacity and Resilience of the Poor to Climate and Socioeconomic Changes** – This project is supported by the International Fund for Agricultural Development (IFAD), a specialised agency of the United Nations, and aims to reduce rural poverty and enhance the adaptation capacity and resilience of the rural poor to climate and socioeconomic changes in mountain areas of Bhutan, India, and Nepal.





**Pakistan floods** – In July 2010, Khyber Pakhtunkhwa province in northwestern Pakistan was hit by massive flooding due to extreme monsoon rains, the worst since 1929. Flood waters moved south through Punjab and Sindh provinces down the Indus River valley. ICIMOD was asked by UN SPIDERAID to support SUPARCO, Pakistan, and took up rapid response mapping for the flood affected areas with the support of Sentinel-Asia partners. Daily flood products were generated to support teams involved in disaster management. The satellite maps provided timely information to monitor the flood wave, enabling agencies to identify communities at risk and identify problems such as the number of affected hospitals. This technical support was much appreciated by Pakistan's Flood Forecasting Division.

**High-level meeting prepares a road map for climate summit, Kathmandu** – A high-level consultative meeting on the climate change impact on the southern slopes of the Eastern Himalayas in 2010 in Kathmandu prepared a roadmap for the planning of activities leading to the proposed 'Climate Summit for a Living Himalayas – Bhutan 2011'. Experts from ICIMOD, FAO, UNDP, and WWF contributed thematic papers. The delegates from Bangladesh, Bhutan, India, and Nepal expressed their appreciation to ICIMOD for successfully organising the meeting.



**Improving Livelihoods Through Knowledge Partnerships and Value Chains of Bee Products and Services in the Himalayas, by 2012** – Supported by the Austrian Government, ICIMOD's honeybee programme has been addressing issues related to bees for more than 20 years, focusing on poverty reduction, agricultural productivity, and biodiversity conservation, and especially maximising the benefits for poor rural communities. After perfecting technologies and carrying out field tests, the programme has been expanded through national extension and development networks in the region.

**The Hindu Kush-Himalayan countries will use a global platform to share biodiversity data** – Some 25 representatives from the Himalayan countries met to discuss 'Open access to and publishing of mountain biodiversity data from the Hindu Kush-Himalayan region' at an event organised by ICIMOD together with the Global Biodiversity Information Facility and the Global Mountain Biodiversity Assessment. The workshop introduced international data and metadata standards, geo-referencing of biodiversity data, and use of data in policy making.



# The ICIMOD Foundation

The ICIMOD Foundation is a not-for-profit organisation that supports the efforts of ICIMOD to be a regional knowledge, learning, and enabling centre for the Hindu Kush-Himalayan region. The Foundation's vision is that through ICIMOD it can make a significant contribution to the stability of this fragile mountain system and the resilience of its people for their benefit and for the benefit of the people living downstream and beyond.

The Foundation is supported by contributions from those who have an interest in the region and its people. With the Foundation's support, ICIMOD will be able to implement its programmes using a consistent long-term approach. While strong regional ownership is imperative, non-regional stakeholders give the Centre a greater international presence in recognition of the implications its Mission has for all the people of the mountains. It was with this goal in mind that the ICIMOD Foundation was originally created. Overall, the ICIMOD Foundation pursues the development of an economically and ecologically sound ecosystem in the mountain regions to improve the livelihoods of the poor population of the Himalayas.

Established in 2003, the ICIMOD Foundation is registered in Berne, Switzerland. The Foundation has a Board of Governors composed of selected members of the Board of Governors of ICIMOD and distinguished, reputable individuals in mountain development.



## Take Climate Action Now!

ICIMOD is convinced that you can make a difference by joining the HELP SAVE THE THIRD POLE Campaign. Make climate your corporate social responsibility (CSR) through the ICIMOD Foundation. The ICIMOD Foundation is the most reliable way to sustain ICIMOD's work for mountains and people. The Foundation proposes two different ways for you to support ICIMOD's engagement for the Save the Third Pole Campaign: **endowment** and **programmed-focused contributions**.

Your contribution will help the ICIMOD Foundation's endowment fund or programme to provide a continuous and adequate flow of funds to preserve the Third Pole region as a water tower for the entire region. It will allow ICIMOD to finance the enhancement of its activities with maximum reliability and to help communities adapt both to save our cultural and environmental heritage and to reduce socioeconomic tensions. The Foundation enables ICIMOD to perform its mission with maximum effectiveness. With the yield of the funds for the Foundation, ICIMOD will be able to work effectively as a change agent and promoter of technical innovation for the whole region.

## Make Climate Your Corporate Social Responsibility Join the HELP SAVE THE THIRD POLE Campaign With ICIMOD – For Mountains and People

For further information, please contact:

**Naina Shakya**, Fundraising and External Relations Officer  
Email: [nshakya@icimod.org](mailto:nshakya@icimod.org)

GPO Box 3226, Kathmandu, Nepal

Tel +977-1-5003222 email [info@icimod.org](mailto:info@icimod.org) web [www.icimod.org](http://www.icimod.org)

[www.icimodfoundation.org](http://www.icimodfoundation.org)

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