



International Conference on

# Resilient Hindu Kush Himalaya

Developing Solutions towards a Sustainable Future for Asia

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## An integrated approach is the way forward

Speaking at the ongoing international conference on 'Resilient Hindu Kush Himalaya: Developing Solutions towards a Sustainable Future for Asia', Sir Partha Das Gupta of the University of Cambridge said factoring in multiple economic externalities is critical for building resilience.

Recalling the famous opening lines of *A Tale of Two Cities*, by Charles Dickens, Sir Gupta said, "on an average basis, we are living at the best of times and worst of times... We're living better, we're better educated, we're living longer and earning better, and yet we may be destroying productive capacity of our children and grandchildren."

Understanding this age of complexity requires multiple perspectives. For example, choosing standalone indicators such as the Gross Domestic Product or happiness could be misleading. Therefore, an integrated and inclusive measure should be the way forward. This includes factoring in all forms of capital – natural, social, and religious.



"It is remarkable how little governments know about wealth of their nations."

Sir Partha Das Gupta, University of Cambridge

(con't on p. 5)



## Plurality and inclusiveness for resilience

Building resilience to tackle the challenges of climate change requires a plurality of ideas, perspectives, and thoughts. Only then will the Hindu Kush Himalaya be able to build a new narrative for the mountains.

This idea was a recurring theme at the today's session on "Plurality of perspectives and approaches towards resilience building: Inclusive transformative change through different lenses." The panel of experts expressed diverse points of view about how communities approached the idea of resilience building.

While speakers identified social capital as a critical factor in building community resilience, others said creating and sharing knowledge was important too.

"Plurality of concepts, people, and institutions is necessary for resilience thinking," said Dr. Hans Hurni, University of Bern, Switzerland. "A common vision on where we should go is important."

An interconnected world with complex situations that demanded multiple perspectives was a major challenge that scientists, policymakers, practitioners, and communities faced today.



"Our lives are increasingly integrated, and this means policies and institutions cannot remain in silos," said Dr Arjumand Nizami of Helvetas Swiss Intercooperation. He added, "A common bridge is crucial to build resilience on the ground."

Panelists also expressed consensus about the importance of protecting women's rights to own property, cultivating talent in the younger generation, and collaborating with multiple agencies as crucial aspects of resilience building for transformative change.

**"A common bridge is crucial to build resilience on the ground."**

**Arjumand Nizami, Helvetas Swiss Intercooperation**



## Defining resilience

What is resilience? What can the countries in the Hindu Kush Himalaya do to build resilience?

At the day's opening plenary on "Setting priorities: The science of change and resilience, and policy preparedness for action," panelists discussed extensively how communities interpret resilience based on resources and capacities available to cope with shocks.

Rene Van Berkel of the United Nations Industrial Development Organization said resilience could mean different things to different people. However, regardless of these variations in understanding, learning from past disasters, designing local solutions, and transferring knowledge would be necessary to enhance community resilience in any situation.

The speakers acknowledged the growing recognition among scientists, policymakers, and practitioners that local communities in the HKH region need support to address multiple challenges.

Yanfen Wang of the Chinese Academy of Sciences said the focus should be on preparedness and not only recovery. This preparation means building capacities of government institutions and local civic bodies.

Asit Biswas of the Lee Kuan Yew School for Public Policy at the National University of Singapore, said science should be considered as a means to an end. He said scientists must learn to interact with politicians in their language. "This requires scientists to reframe questions and solutions according to the priorities identified by politicians."

Asun St. Clair from DNV GL, the chair of the plenary session, summarized the discussions. She stressed the need for an integrated research approach across sciences to co-create knowledge and share it with all relevant stakeholders.

## Ending energy poverty in the HKH

The Hindu Kush Himalaya continues to face severe energy deficits despite huge potential for hydropower and other renewables. A large majority of its rural population has limited access to electricity and clean cooking facilities.

The speakers of the breakout session on “Supporting access to clean energy in the HKH” recounted the many challenges that thwart the replication of innovative business models of renewable energy solutions. Moreover, the private sector to date shows minimal interest in investing in the energy sector, citing low profits.

The speakers said the HKH region needs an ambitious new vision to address the multifaceted challenge of energy security. This must involve building an inclusive, green, and resilient society and economy.

“Appropriate institutional arrangements are just as important as technology for improving access to energy,” said Ramesh Vaidya of ICIMOD.

The speakers said that critical issues confronting the energy sector must be mapped out to design appropriate solutions. Regional cooperation at different levels would also go a long way to overcome energy poverty in the HKH. They said success would depend on creating and supporting enabling conditions for removing existing barriers that perpetuate energy poverty and vulnerability in mountain communities.

## No room for complacency

People living in the Hindu Kush Himalaya face an existential dilemma. Its glaciers are shrinking. The region is seeing increasing number of floods and droughts. And its springs, a major source of water for drinking and domestic use, are drying up at an alarming rate.

These factors leave no room for complacency, according to the speakers of the parallel session that discussed water security within the larger context of the Sustainable Development Goals. They warned water-related issues in the region could seriously impact its socio-economic development.

The speakers said that regional cooperation on flood management must take into account perspectives on hydropower and agricultural development with mechanisms to share benefits. Cooperation also calls for a deeper understanding of high-altitude environmental processes, particularly related to water availability in the context of climate change and its uncertainties.



“It takes an enormously long time to get to the poorest people in the country. Why can't we reverse this, start at the bottom of the pyramid, and then work our way up?”

**Leena Srivastava**, TERI University, India

The panel closed the session identifying several action points, including building capacity and investment in the HKH region, and establishing a dedicated regional institution to address existing barriers related to the policy and regulatory environment. A supportive enabling environment to replicate and upscale successful and sustainable business models was also recommended.



This scenario means additional work is needed from all sectors of society. For example, more attention must be paid to local water management. There is also the need to adopt better technologies to access water at local levels without compromising social, ethical, and traditional practices.

The speakers called for more collaborative research for advancing knowledge on transboundary water resources management in the context of upstream-downstream relationships. They recommended formulating demand management policies and plans and engaging the private sector for innovations and investment.

## Achieving gender and social equity

In his opening speech to the conference this week, Director General David Molden stressed the need for mountain societies to be inclusive of women and marginalized groups. Only through this encompassing approach could resilience building be effective and durable.

Building on this theme, today's breakout session on 'Achieving Gender and Social Equity' focused on the challenges before creating a more welcoming society for all groups. Several panelists urged the audience to think about gender beyond ideas like quotas and other 'box-ticking' approaches to development.

With rising outmigration of men throughout the HKH, the panelists cited the need to give women greater voice in decision-making at all levels of government. Furthermore, they emphasized the importance of designing community-based approaches to resilience building for future work. In

## Sustaining mountain ecosystems and biodiversity

The role of mountain ecosystems and biodiversity in maintaining the socio-ecological resilience of mountain communities cannot be understated. But the concern today is the rate at which these ecosystems are coming under tremendous pressure.

With this in mind, the speakers at the breakout session on 'Sustaining mountain ecosystems and biodiversity' highlighted the significance of the HKH to national, regional, and global communities. They discussed the state of the ecosystem, major drivers of change, and best practices for contributing to socio-ecological resilience.

Professor Yang Yongping of the Kunming Institute of Botany talked about the best practices in China and emphasized the need for regional cooperation to intensify and sustain



**“If gender is not considered in technology development, it can be disastrous.”**

**Dr. K.S. Murali, IDRC**

this way, women can enhance their social capital leading to appropriate gender-responsive adaptation. For all these ideas expressed, they said, the same would apply to including other marginalized ethnic groups.

**“Since biodiversity and the living earth are inseparable, a holistic understanding of anthropocene is the need of the hour.”**

**Annamraju Rajanikanth, Birbal Sahni Inst. of Paleosciences**

mountain ecosystem services through technology transfer, financial investment, expertise exchange, and facility sharing.

The speakers agreed that the ecosystem of the HKH would contribute to achieving many of the Sustainable Development Goals. However, this would require strategies to enhance the contribution of mountain ecosystems to the SDGs. The most important strategy, they agreed, would be to increase investment in the mountain ecosystems for collective and transformative change.

Marc Foggin of the University of Central Asia said inclusive biodiversity conservation is critical. “This involves actions at multiple scales with multiple perceptions and priorities aimed at present and future generations.”



## Reducing risk, increasing resilience

Mountain communities in the HKH have a long history dealing with natural hazards such as floods and landslides, but climate change is increasing extreme weather events in the region, making these disasters more challenging to maintaining livelihoods.

Therefore, a large component of resilience building in the HKH relates to minimizing risk from these hazards. This was the theme of the disaster risk reduction session earlier yesterday.

The panellists discussed best practices for instituting climate change adaptation in vulnerable communities. There was general consensus that knowledge transfer needed to be shared across borders for truly effective disaster risk reduction. One example cited was ICIMOD's community-based flood

“Scientific research need to be integrated with local and indigenous knowledge for resilience and sustainable development.”

**Ang Tshering Sherpa**, Climate Alliance of Himalayan Communities

early warning system, which has been implemented on rivers that run between Nepal and India. The system—also called CBFEWS—has helped thousands of residents save possessions in advance of flood waters.

While interventions like CBFEWS were generally lauded as successful, Stefan Schneiderbauer of Eurac Research reminded the audience that time was of the essence for disaster risk reduction: “We have to act very soon. Actions on the ground supported by policy in the region at various levels is important to integrate DRR and CCA in sustainable development goals to save life and livelihoods of vulnerable people in HKH region”.



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### An integrated approach *(con't from p. 1)*

Achieving this, Gupta told the audience, would mean integrating thinking among economists and natural scientists, because very little is known and being talked about when it comes to natural capital. “It is remarkable how little the governments know about wealth of their nations,” he said.

Delivering the introductory keynote address, ICIMOD's Deputy Director General, Dr Eklabya Sharma, said mountains deserve to be seen in a more global context. He said about 50% of the world's goods come from mountains, but there is little investment in the mountains.

In the HKH, also known as the water tower of Asia, glaciers are retreating, while floods and droughts are increasing. Yet the region is extremely rich in unknown genetic resources and biodiversity. The expected global temperature rise of

1.5 degree Celsius spells major impact for the region. “All these aspects point to the reason why regional cooperation is important,” Sharma told the audience of more 300 participants from around the world. “Resilience can only be built with good science, and knowledge is the basis for resilience.”

This is where regional inter-governmental bodies like ICIMOD can play a meaningful role. ICIMOD has conducted studies across the HKH on resilience building and developed frameworks to design relevant interventions. Some of these include the community-based flood early warning systems and the mobile application for forest fire detection and reporting. “At ICIMOD, we are committed to an integrated approach to address the host of challenges facing the HKH,” Sharma said.





“Fusion of traditional and modern scientific knowledge is crucial for building resilience of communities and countries.”

**Kazuhiko Takeuchi**, IGES, Japan



“If you let HKH weep, then the world will land up crying .”

**Damchae Dem**, BAOWE, Bhutan



“We need ‘wealth equalizing institutions’ and value-based approach in the HKH for poverty reduction and resilient development.”

**Carolina Adler**, MRI



“Too often, we find a solution, and then we go looking for the problem.”

**Jivan Acharya**, Asian Development Bank



“Genetic diversity is the basis for building resilient food systems for the present and future generation.”

**Golam Rasul**, ICIMOD



“There is no such thing as one size-fits-all solution, so we have to start with mapping out the problems.”

**Dasho Rinzin Dorji**, Secretary, Ministry of Agriculture and Forests, Bhutan





ICIMOD's Deputy Director General Dr Eklabya Sharma with the participants of the HKH Youth Forum

## Youth leads the way

ICIMOD engages young professionals to build their understanding of climate change science and to develop their capacity to bring about positive change in society. As agents of change in local communities, young people can engage at the grassroots, national, regional, and international levels and be instrumental in communicating climate change knowledge and its impacts to a wider public.

With this vision in mind, ICIMOD brought together 20 youths to participate in its satellite event called the "HKH Youth Forum" held from 30 November to 2 December.

"As agents of change, young people have an important role in engaging people at the grassroots," said Udayan Mishra, coordinator of the HKH Youth Forum. "Youth are also very instrumental in communicating the science of climate change to a wider public."

The participants observed various climate change adaptation technologies showcased at the ICIMOD Knowledge Park at Godavari and learned about traditional and modern approaches to water management at the ancient city of Patan.

"Youth have the energy to change minds, for which an inter-generational cooperation is a must," said Ashra Kunwar from Nepal, one of the participants in the HKH Youth Forum.



"Youth have the energy to change minds, for which an inter-generational cooperation is a must."

Ashra Kunwar, Nepal



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