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Authors: Wester, Philippus, Singh Rathore, Brij Mohan, Vasily, Laurie Ann, Sharma, Eklabya, and Molden, David

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The Hindu Kush Himalaya Call to Action: Sustaining Mountain Environments and Improving Livelihoods



Philippus Wester, Brij Mohan Singh Rathore, Laurie Ann Vasily, Eklabya Sharma, and David Molden

International Centre for Integrated Mountain Development (ICIMOD), GPO Box 3226, Kathmandu, Nepal; Eklabya.Sharma@icimod.org

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The Hindu Kush Himalaya (HKH) is the pulse of the planet. Being at the top of the world, changes happen here before anywhere else, and its beat vibrates across the globe. But urgent actions are required to ensure the health of this global asset and the wellbeing of its people. The uniqueness of HKH mountain people should be recognized and prioritized, and ecosystem services protected by halting biodiversity loss and land degradation. The implementation of the Sustainable Development Goals in the HKH needs to become a global top priority, and keeping global warming below the ambitious 1.5°C target is especially urgent here. To achieve all of this, more sharing of information and more robust regional cooperation are required. These 6 urgent actions summarize the HKH Call to Action, formulated through a rigorous consultative process coordinated by the International Centre for Integrated Mountain Development in the 8 HKH countries, based on the key findings of the Hindu Kush Himalaya Assessment report [<https://link.springer.com/book/10.1007%2F978-3-319-92288-1>].

The pulse of the planet

The Hindu Kush Himalaya (HKH) is a critically important global asset with its water, food, energy, biodiversity, forest, and carbon resources. Extending 3500 km over 8 countries, from Afghanistan in the west to Myanmar in the east and crossing Pakistan, India, China, Nepal, Bhutan, and Bangladesh, the HKH is one of the world's greatest mountain systems. The HKH forms the largest area of permanent ice cover outside of the North and South Poles and is home to 4 global biodiversity hotspots. The region provides ecosystem services (eg water, food, energy) that directly sustain the livelihoods of 240 million people in the mountains and hills of the HKH. The HKH is a source of 10 major river basins (Figure 1), with 1.9 billion people living in the mountains and downstream who benefit directly and indirectly from its resources. The region is also home to some of the most diverse cultures, languages, religions, and traditional knowledge systems in the world (Sharma et al 2019).

The HKH region is under threat. The *Hindu Kush Himalaya Assessment* (hereafter *HKH Assessment*; Wester et al 2019) showed that the region is facing many sustainable development challenges and stands on the front line of the climate crisis. Poverty rates in the mountainous areas of the HKH, at around 33%, are higher than the national average

of 25% in the 8 HKH countries (Gioli et al 2019). Food and nutritional insecurity remain a serious challenge in the HKH region; more than 30% of the population suffers from food insecurity, and around 50% face some form of malnutrition, with women and children particularly vulnerable (Rasul et al 2019). The region experiences high rates of outmigration, mainly of males, and gender equity and social inclusion issues urgently need to be addressed (Resurrección et al 2019; Siddiqui et al 2019).

The HKH mountains are a hotspot of climate change, where temperature amplification by elevation-dependent warming is evident. Even a 1.5°C global temperature rise by 2100 is too hot for the HKH region, which will warm more rapidly at higher elevations to increase above 2°C by 2100. At current emission trends, temperatures are expected to increase above 5°C by 2100 in the HKH region (Krishnan et al 2019). Two thirds of the region's glaciers will melt by 2100 under current emission trends, with one third melting with an increase of 1.5°C (Bolch et al 2019).

These significant challenges are compounded by other looming issues of sustainability, including the overexploitation of natural resources, unplanned economic growth and growing inequality, and current governance systems (Ojha et al 2019). As a result, there are now greater risks and impacts on ecosystems, agricultural systems, weather patterns, and disease vectors that bring with them profound consequences for the mountain people and people downstream in the 8 countries. In the face of these clear challenges, there is an urgent need to build social-ecological resilience both in the mountains and downstream.

The HKH region has experienced a rapid increase in air pollution in recent decades, with far-reaching and hazardous consequences for environmental health and the health of poor people. In many places, both urban and rural, pollutants have reached alarming levels, threatening the health of millions of people in the region, particularly women, children, the elderly, and the poor (Saikawa et al 2019).

People in mountain and downstream communities in the region live in a multihazard environment. As a result of climate change and other drivers, disaster events have increased in frequency and intensity. The region is especially prone to floods, avalanches, and landslides, but also to

FIGURE 1 The Hindu Kush Himalaya region and 10 major river basins. (Map by ICIMOD)



droughts, sometimes resulting in cascading disasters with upstream–downstream linkages and transboundary impacts (Vaidya et al 2019). The speed and scale of more recent changes concurrently demand a speed and scale of disaster preparedness, risk reduction, and resilience building among communities especially in the context of river basins and transboundary landscapes.

Vision for a prosperous HKH

The current time is a precarious moment for the HKH. Environmentally, socially, and economically, there is no single likely future for the HKH. Between now and 2030, the HKH may *run downhill*, the region may continue doing *business as usual* and muddle through, or it may *advance toward prosperity*, as outlined in the scenarios chapter of the *HKH Assessment* report (Roy et al 2019).

Evidence-based actions to reduce disaster risk, to mitigate and adapt to climate change, and to adopt good governance, are central to ensuring prosperity in the HKH region, as well as collaboration among state and nonstate actors. Two potential pathways—large-scale investment in sustainable development with regional cooperation and bottom-up investment with local and national cooperation—in tandem may assist in moving toward prosperity. However, both also require substantial collaboration at different levels (regional, national, or subnational). For example, large-scale investment in hydropower infrastructure development in the HKH region may be helpful given the region's huge potential of ~500 GW, yet without locally viable low-cost renewable energy solutions, people in the region remain energy poor and vulnerable.

To move toward prosperity in the HKH, institutional mechanisms must confront the main challenges and resolve conflicts at various levels and among various social groups. Globally, much more ambitious actions for climate change mitigation and adaptation are urgently needed. Regionally,

actions for sustainable livelihoods and economic growth should consider maintaining and improving the diversity and uniqueness of transboundary HKH natural assets, sociocultural richness, and ecosystem services, as well as the need for political collaboration and information sharing.

The *HKH Call to Action*, to be published in the second half of 2020, envisions a future for the HKH region in which its societies and its people—children, women, and men—are given the chance to be the following:

- Prosperous, healthy, peaceful, and poverty-free;
- Food, energy, water, and environment secure;
- Climate and disaster resilient.

To achieve this vision, the *HKH Call to Action* outlines 6 urgent actions, detailed below.

The HKH Call to Action

The *HKH Assessment* report and its companion summary for policymakers (Sahasrabudhe and Mishra 2019) provided the foundation for the *HKH Call to Action*. The call was formulated through a rigorously consultative process with the International Centre for Integrated Mountain Development's (ICIMOD's) regional member countries and partners, starting at the International Conference on Resilient Hindu Kush Himalaya in December 2017 (Figure 2) and continuing with country consultations in 2019. The key findings of the *HKH Assessment* report were shared with a larger audience during the country consultations to jointly define the *HKH Call to Action* and to promote the mountain agenda. In closed briefings with high-level decision makers, the *HKH Call to Action* was validated, focusing on more robust regional cooperation around mountains to sustain this globally critical region. These consultations were led by ministries or government agencies, and thus the call reflects the national priorities of the 8 countries, as well as regional

FIGURE 2 Dignitaries and Members of ICIMOD's Board of Governors at the International Conference on Resilient Hindu Kush Himalaya, December 2017. (Photo taken at ICIMOD, Kathmandu, Nepal)



and global actions that will be implemented in the 8 countries, regionally, and globally.

The consultations built on the key messages from the *HKH Assessment* report that (1) there is sufficient evidence now for taking urgent action; (2) not taking action will exacerbate challenges and result in negative consequences for the people in the mountains and the large populations downstream, as well as globally; and (3) the HKH is a global asset, and the region urgently deserves more attention and investment for ensuring resilience and sustainable development. The *HKH Call to Action* outlines 6 urgent actions that jointly implemented by the 8 HKH countries will lead to a prosperous HKH:

- **Action 1:** Promote and strengthen cooperation at all levels across the HKH region and take actions at national, regional, and international scales to sustain the HKH as a global asset, focusing on more investments and building momentum for more robust regional cooperation to sustain mountain environments and improve livelihoods in the HKH.
- **Action 2:** Recognize and prioritize the uniqueness of HKH mountain people in national, regional, and global decision-making institutions and processes.
- **Action 3:** Take concerted climate action to keep global warming to 1.5°C by 2100, with regional, national, and local actions on sharply reducing short-lived climate pollutants and achieving carbon-neutral societies in the HKH by 2035.
- **Action 4:** Take accelerated actions to achieve the Sustainable Development Goals in the HKH based on 9 mountain priorities, focusing on transformative adaptation, tackling poverty, inclusive development, and leaving no one behind.

- **Action 5:** Take decisive action to enhance ecosystem resilience for sustained flow of services by halting biodiversity loss and land degradation, and sustainably managing forests and other ecosystems in the HKH through promoting transboundary cooperation for landscapes and river basins.
- **Action 6:** Promote regional data and information sharing and science and knowledge cooperation to fill data gaps and develop actionable knowledge that is mountain focused and HKH specific.

A way forward

The HKH is a vital regional lifeline—but human drivers and climate change pose immediate threats to the region's livelihoods, biodiversity, and ultimately sustainability. Changes on the roof of the world are having and will continue to have major consequences, not only for the region but globally as well. National, regional, and global actions are urgently needed to sustain this global asset, *focusing on substantially increasing investments and strengthening regional cooperation for sustaining mountain environments and improving livelihoods in the HKH, combined with ambitious climate action to keep global warming below 1.5°C by 2100.*

Although more data, information, and communication will lead to better decision-making, the *HKH Assessment* report concludes that we know enough to take action, and its findings make clear the necessity for urgent action now. The 6 urgent actions contained in the *HKH Call to Action*, jointly implemented by the 8 HKH countries, will lead to a prosperous HKH. All 6 urgent actions will require regional cooperation—as well as mountain-specific policies at local, national, and regional levels—to realize the vision of a prosperous, healthy, peaceful, and poverty-free HKH.

Dimensions of this vision will evolve over time but include those detailed below, generated through collaborative drafting processes in all 8 HKH countries.

Prosperous, healthy, peaceful, and poverty-free

By 2030, the people in the HKH will be doing the following:

- Living healthy and productive lives, with dignity and equitable access to social capital, and a quality of life that ensures wellbeing;
- Pursuing diversified livelihoods that integrate cultural identities with the maintenance of vibrant ecosystem services;
- Breathing clean air, accessing clean water, and conserving a healthy, natural resource base, including biodiversity;
- Enjoying equal opportunities and equal access to benefits from resources—regardless of gender, social class, or other historical drivers of socioeconomic inequity.

Food, energy, water, and environment secure

By 2030, people in the HKH will have universal and affordable access to the following:

- High-quality, nutritious food in adequate quantities;
- Reliable, renewable, and sustainable energy;
- High-quality water for domestic and productive uses;
- A vibrant and sustainable environment.

Climate and disaster resilient

By 2030, people in the HKH will be assured of the following:

- Long-term stabilization of global warming, with global temperature rise kept well within 1.5°C by 2100;
- Protection from and adaptation to extreme events (such as floods and droughts) and reduction of disaster risks;
- Minimal loss of ecosystems and their services, and reduced risk of other anthropogenic drivers of change;
- Access to adequate means for climate change mitigation and long-term adaptation, including finance and technology, with the knowledge and capacity building needed to use them.

Further reading

ICIMOD website: <https://www.icimod.org/initiative/himap-hkh-calltoaction>; accessed on 5 April 2020.

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