

Climate priorities and action in the Hindu Kush Himalaya

Key messages

In the truest of senses, the Hindu Kush Himalaya (HKH) is the pulse of the planet. Being on top of the world, changes happen here before they happen anywhere else. The region has the highest reserves of ice outside the polar regions and provides ecosystem goods and services like food, water, and energy to some 240 million people living in the region and nearly 1.65 billion people in the river basins downstream.

Even a 1.5°C world is too hot for the region and its fragile systems due to elevation-dependent warming. This is likely to result in greater instances and frequency of climate-induced disasters, which, in turn, will have catastrophic impacts on all sectors, thereby affecting the mountain people and their climate-sensitive livelihoods.

The HKH countries have made commitments and put in place instruments to mitigate and adapt to the changing climate. Mitigation measures include investments in green and resilient energy infrastructure and in nature-based solutions like plantations and restoration. The adaptation priorities, among others, also include many nature-based solutions related to water management, resilient agricultural practices, sustainable forest management, and investments in disaster risk reduction.

The availability and mobilization of finance is pivotal in meeting mitigation and adaptation goals, but they must be available in time and in quantum to the needs. While some countries in the region have put in place fiscal measures and instruments, there is a need for this to be scaled up and there is ample space for cross-learning and cooperation.

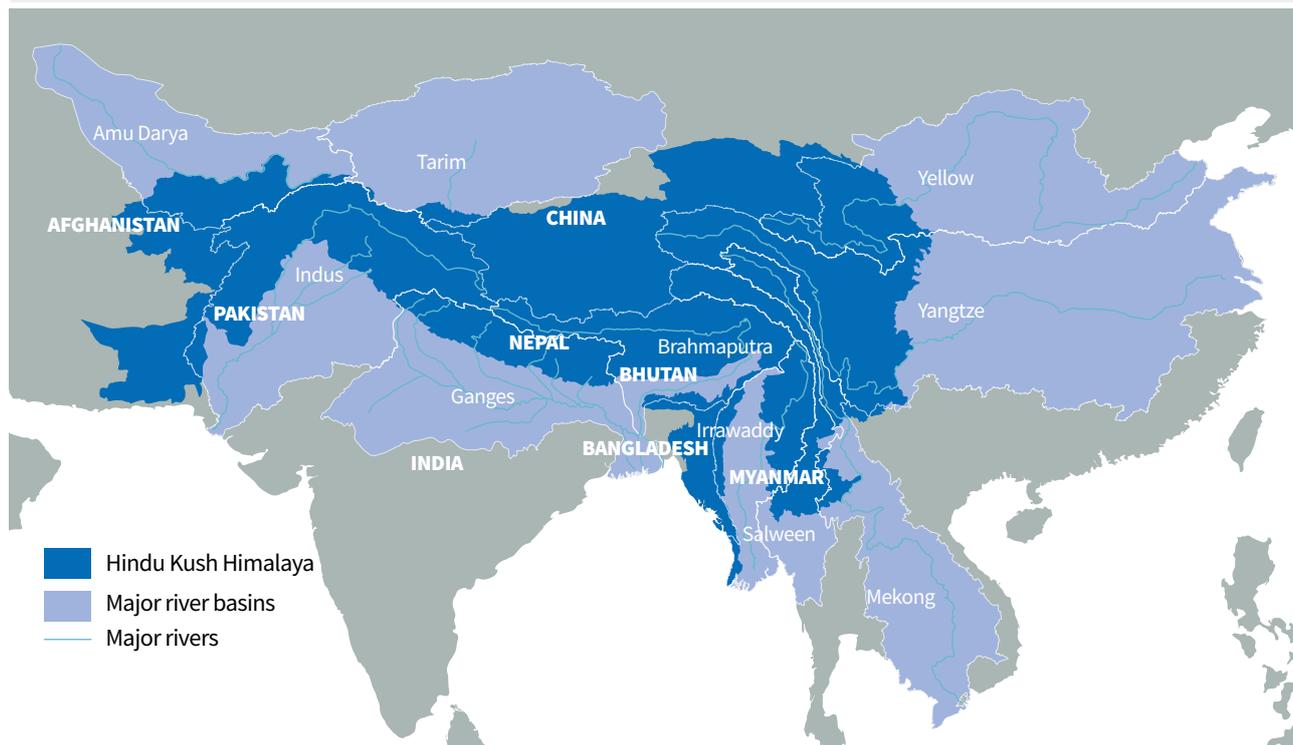
There is a huge potential for convergence and cooperation among the HKH countries regarding mitigation, adaptation, and financial measures as reflected in their national-level priorities. It is imperative for these countries to come together and discuss common concerns and priorities and work together to make a greater impact in the region.

Background

The HKH region is spread across all or parts of eight countries – Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal, and Pakistan – covering an area of 4.2 million km² and provides ecosystem services that form the basis of livelihoods for 240 million people living in the mountains and nearly 1.65 billion people living downstream. It contains the headwaters of 10 major Asian river systems and is home to four global biodiversity hotspots.ⁱ These mountains are still young and fragile and face numerous environmental and anthropogenic changes – one of the biggest being climate change.

With 18.23 per cent of its landmass under snow cover, the HKH region has the largest ice reserves outside the polar regions, which makes it highly vulnerable to increasing temperatures. Recent assessments show that even in an optimistic scenario where global temperature rise is limited to 1.5°C, the HKH would lose nearly one-third of its glacial mass by the end of this century.ⁱⁱ This will trigger more climate-induced disasters and unleash negative impacts on lives and livelihoods in the region and beyond.

The United Nations Climate Change Conference (COP26) this year is expected to be a milestone event where countries will be submitting ambitious climate actions in terms of adaptation, mitigation, and financial alignments. The discussions and negotiations at the conference are expected to focus on increasing the ability to adapt to the adverse impacts of climate change and make financial flows consistent with climate-resilient and low-carbon development pathways. However, while the HKH countries have been gearing up and putting forward more ambitious targets, the targets, policies, and



efforts, have, as before, been restricted to the national level, without due consideration to the transboundary nature of climate change and its impacts.

The information presented here has been compiled and synthesized from various climate-related national documents like nationally determined contributions (NDCs) and national-level climate change policies, strategies, and action plans formulated by the HKH countries. It aims to present the current status of climate change targets and the actions of the HKH countries and uses a regional lens to examine climate priorities as outlined by the individual countries in their respective documents. This will provide a basis for these countries to review the shared priority/focus areas in order to explore and strengthen cooperation on climate action within the region.

Climate change mitigation and NDCs

The Paris Agreement requires each country to prepare, communicate, and maintain successive NDCs that represent pledges on climate action which strive to limit global warming to well below 2°C, and preferably to 1.5°C, over pre-industrial levels.ⁱⁱⁱ The NDC submissions follow a five-year cycle after which they are to be revised with more ambitious contributions. They embody the efforts by each country to reduce the national emission levels and adapt to the impacts of climate change. In this regard, all the eight HKH countries have submitted their

intended nationally determined contributions (INDCs) and their NDCs. However, only Bhutan and Nepal have submitted their second NDC, while Bangladesh has updated its existing NDC in the run up to COP26.

Target type and dates

The NDCs and some of the related national climate documents in the HKH countries differ vastly in terms of numbers and types of targets. The targets also differ in terms of clarity. All eight countries have economy-wide targets of which, Afghanistan, Bangladesh, Myanmar, Nepal, and Pakistan have baseline scenario targets. On their part, China and India have intensity targets, which are below the 2005 emissions intensity of their GDP, while Bhutan has a fixed level target of remaining carbon neutral (Table 1). The other targets are split sector-wise, with the greatest number of them being in the area of energy; followed by land use, land-use change, and forestry (LULUCF); and transport. Most of the targets set in these NDCs and other national-level documents are for 2030, with some exceptions like the years 2020 and 2022.

Mitigation priorities of the HKH countries

The greenhouse gas (GHG) emissions from the region were estimated at around 16,098 metric tons of carbon dioxide equivalent (MtCO₂e) in 2018;^{iv} most of these

TABLE 1 TARGET TYPE

Country	Target type		
	Baseline scenario*	Intensity**	Fixed-level***
Afghanistan	●	-	-
Bangladesh	●	-	-
Bhutan	-	●	●
China	-	●	-
India	-	●	-
Myanmar	●	-	-
Nepal	●	-	-
Pakistan	●	-	-

Source: Summarized from INDCs/NDCs and national policy instruments on climate change and www.climate-laws.org

*Baseline scenario: a future projected reference level of emissions against which a goal can be established, or progress can be measured. Targets are different for the respective countries as base years are different.; ** Intensity: intensity targets are policies that specify emissions reductions relative to productivity or economic output, for instance, tons CO₂/million dollars GDP.; *** Fixed-level: Where the target is fixed. In this case, Bhutan has a fixed target of remaining carbon neutral.

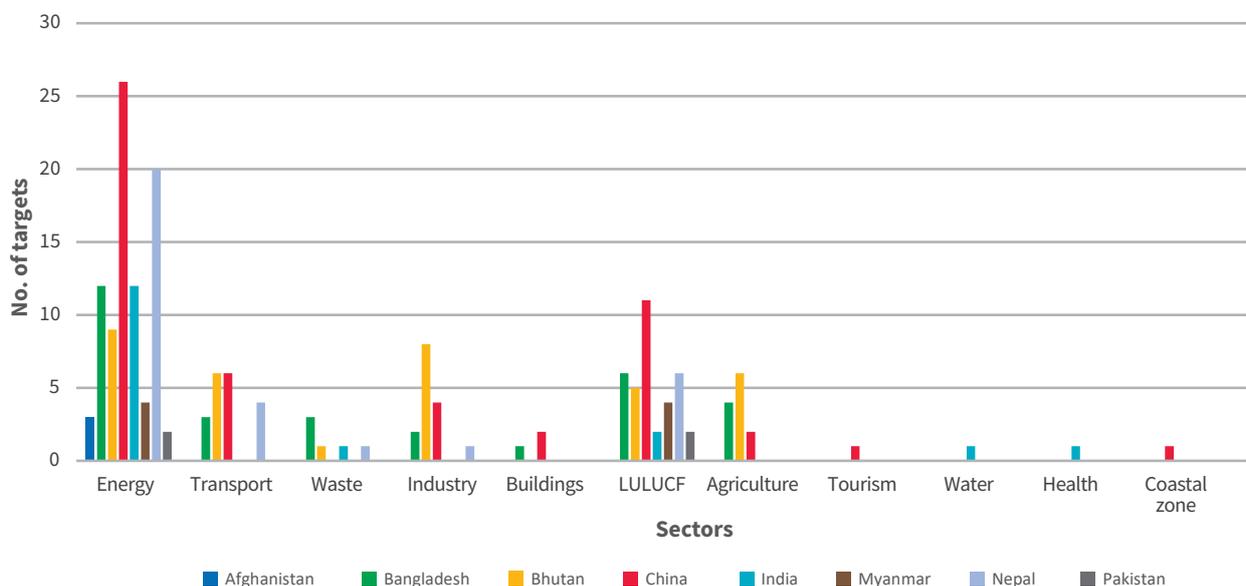
were from the energy and agriculture sectors, and from industry. The HKH countries have pledged to reduce these emissions and have submitted their INDCs/NDCs highlighting some priority sectors and actions. These targets are well reflected in national policy documents and strategies. However, the countries in the region are at different stages of

development and as a result have different priorities in terms of economic development. Similarly, shares of GHG emissions from the eight countries also vary based on the size of their economies; so, they have expressed their commitment based on development status and differential responsibility. Bhutan is the only country within the HKH region that is carbon negative, and it has strongly committed to maintaining carbon neutrality by 2050.^v In the case of China, it has pledged to achieve its peak GHG emissions by 2030 and become carbon neutral before 2060,^{vi} while Nepal has pledged to reach the goal of net-zero emissions by 2050.^{vii}

Worldwide, the energy sector accounts for nearly three-quarters of global emissions, followed by agriculture and industry.^{viii} This situation is no different within the HKH region and thus calls for major actions to reduce emissions from these sectors. Figure 1 presents a regional perspective on mitigation priorities.

The major sectors in focus are those related to energy – which is cross-sectoral in nature, encompassing infrastructure, transport, and industry – and LULUCF. The targets and priorities in the energy sector revolve around diversification, especially in terms of increasing renewable energy (RE) capacity and promoting the use of RE and improving energy efficiency across the eight HKH countries. The targets and priorities for LULUCF broadly cover afforestation and restoration efforts, related to increasing carbon sinks for carbon sequestration, and are mostly nature-based solutions in tune with mitigation efforts.

FIGURE 1 MITIGATION PRIORITIES IN THE HKH



Source: Summarized from INDCs/NDCs and national policy instruments on climate change

In sum, the targets for the energy and LULUCF sectors are:

ENERGY

- Augmenting and diversifying power generation capacity, with an emphasis on RE sources
- Reducing (carbon dioxide) CO₂ emissions from rail, air, and waterway transport systems, and ensuring strong commitment from all the HKH countries to switch to low carbon and more efficient transport systems
- Achieving energy efficiency in the industry sub-sector
- Ensuring installation of improved cook stoves, specifically in the rural areas
- Protecting generation, transmission, and distribution facilities from climate-related disasters
- Increasing the share of RE by investing in infrastructure

LULUCF

- Increasing forest cover and grassland vegetation, and reforesting degraded land
- Creating additional carbon sinks and enhancing the annual level of CO₂ sequestration
- Fostering economic resilience among forest-dependent communities, which would mean combining aspects of forestry and livelihoods
- Initiating community and social forestry programmes that reduce emissions from deforestation and forest degradation, and using this to gain access to financing

There are also some additional priorities that include the areas of improved waste management and electricity generation from waste. However, there is quite little in terms of defined targets for the agriculture sector, one of the highest GHG contributors, where the focus is only on promotion of organic fertilizers and reduction in emissions through improved farming techniques.

Climate change mitigation in the HKH

While the above sections provide a national-level perspective on emissions, targets, and priorities, in the case of the HKH region, GHG emissions from the mountains are miniscule in comparison to the area they cover and so are the needs and priorities which involve less carbon-intensive processes. For instance, the estimated GHG emissions from the Indian Himalayan states for 2015 was around 130–135 MtCO₂e,^{ix} while for Bhutan and Nepal, which are primarily mountainous countries, the combined

GHG emissions were only around 55 MtCO₂e as per estimates in 2018.^x

Remoteness, poor accessibility, and high dependence on natural resources are some of the major characteristics of most areas in the HKH.^{xi} Hence, the priorities of mountain and hill areas are usually different from other parts of the country. So, both targets and actions need to have mountain-specific focus in order to arrive at mountain-specific solutions. For instance, despite having an estimated 500 GW in hydropower potential, the majority of the population still rely on traditional biomass fuels for cooking, and about 400 million people in the HKH countries still lack basic access to electricity.^{xii} Hence, although national priorities may lie in large hydropower projects and other RE sources, the focus on energy generation and access in the mountains should be on locally available energy resources such as micro-hydro power or wind or solar power, based on topography, capacity, and related infrastructure. In addition, in terms of infrastructure for renewable sources of energy and other basic infrastructural requirements, they need to be green and resilient, which can create sources of income for mountain communities while also maintaining environmental standards by ensuring low emissions.

While emissions from large carbon-intensive energy sources, large-scale agriculture, and transport are major contributors to GHG emissions, in the case of the mountains the emissions result from changes in land use and land cover. Hence, the solutions to reduce GHG emissions should holistically focus on agriculture, forestry, and other land use (AFOLU).^{xiii} That would mean better governance and exploration of nature-based solutions which include inclusive forest management, afforestation, and avoided deforestation and degradation. According to research, the cumulative emissions reduction from avoided deforestation and degradation alone could range from 3000 to 4000 MtCO₂e in the HKH region,^{xiv} thereby contributing significantly to the overall national emission reduction targets.

Adaptation priorities of HKH countries

Adaptation targets are not clearly outlined in the NDCs and also seem nominal across the HKH countries. However, some countries have highlighted their priority areas for adaptation in their NDCs. For implementation of Article 4.9 of the UNFCCC, the COP, in 2001, established the least developed countries (LDCs) work programme. Recognizing their particular vulnerability, the programme assists LDCs in addressing climate change.^{xv} One of outcomes from



The Hindu Kush Himalaya region is the pulse of the planet - a region that is most vulnerable to the impacts of climate change. It is a microcosm of the world around us and the source of water for close to two billion people.

the meeting was the preparation and implementation of NAPAs by the LDCs. There are five NAPAs that have been prepared by five HKH countries^{xvi} so as to identify the priority activities that can help in responding to urgent and immediate needs regarding adaptation to climate change. The HKH countries are now preparing their National Adaptation Plans (NAPs), a process established under the Cancun Adaptation Framework (CAF) as a means of identifying medium- and long-term adaptation needs and developing and implementing strategies and programmes to address those needs.^{xvii} However, as of now, none of the HKH countries have submitted their NAPs and, in most cases, are only in the process of preparing them.

The HKH countries that have submitted their second NDC have included a long set of adaptation priorities. However, the details related to specific adaptation actions and targets are expected to be highlighted in the NAPs. Figure 2 presents a regional perspective on adaptation priorities based on a review of NDCs, NAPAs, climate policies, strategies, and action plans.

Here is a synthesis of the major sectors and their adaptation priorities:

AGRICULTURE

- Shifting to crop cultivation systems with better water- and nutrient-use efficiencies

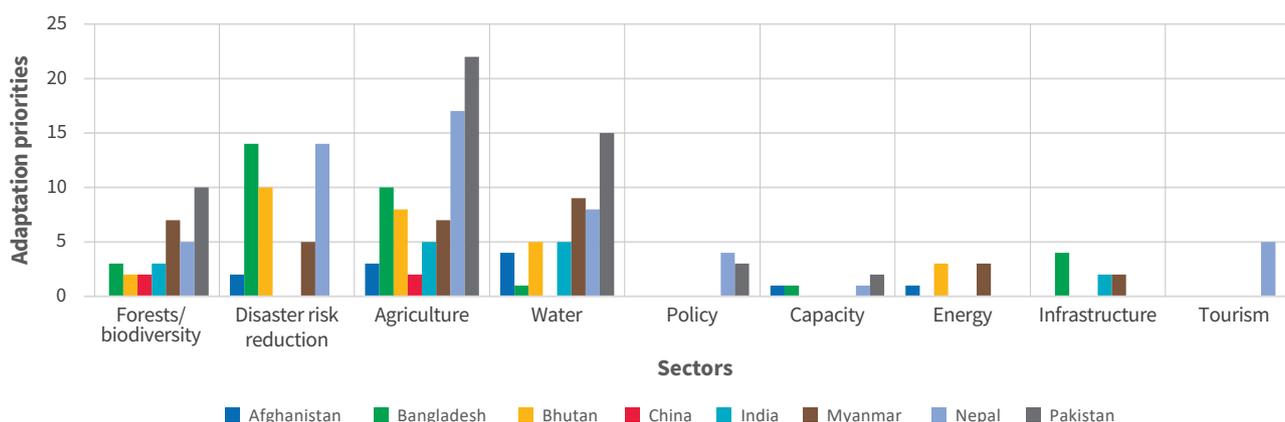
- Developing new varieties of crops which are high yielding and resistant to the anticipated impacts of climate change
- Modifying cropping calendars to adjust to climate change and improving seasonal weather forecasts
- Introducing, developing, and expanding the use of technologies that protect crops from climate-induced disasters like droughts and cold waves
- Improving soil organic matter
- Horizontal expansion of cultivated lands through development of wastelands and rainwater harvesting with the involvement of local communities
- Optimizing the use of water resources through efficient water management

WATER

- Adopting and implementing efficient water management and governance practices through integrated watershed management
- Developing and promoting technologies for storage, multiple use, and efficient use of water in risk-prone areas and other settlements considering the effects of climate change on water availability

FIGURE 2

ADAPTATION PRIORITIES IN THE HKH



Source: Summarized from INDCs/NDCs and national policy instruments on climate change

- Improving the system of access to water for rural communities and farmers so as to ensure food security, reduce poverty, and improve agricultural production
- Protecting water sources and developing and expanding rainwater harvesting, storage, and water-efficient technologies in order to increase access to and enable easy availability of drinking water

DISASTER RISK REDUCTION

- Installing weather forecasting, comprehensive hazard/disaster mapping, and early warning systems
- Improving DRR capacity and formulating DRR plans at national and local levels to reduce risk and increase resilience
- Setting up post-disaster infrastructure such as shelters and building embankments for disaster preparedness
- Scaling up and strengthening social protection schemes, especially for the most vulnerable, in order to prepare them and help them recover from and adapt to slow- and rapid-onset climate change impacts

FORESTS AND BIODIVERSITY

- Setting up community and social forestry systems to protect livelihoods and improve resilience
- Promoting ecosystem-based adaptation mechanisms

Climate risks and adaptation in the mountains

Climate change and its impacts are already having devastating effects on the HKH region. While the optimistic global goal of 1.5°C warming will have different implications globally, the warming rate in the HKH region will likely be higher by at least 0.3°C–0.7°C, which will have overwhelming impacts on both the mountain people and their ecosystems.^{xviii} This is expected to result in increased instances and frequency of climate-induced disasters such floods, glacial lake outburst floods (GLOFs), avalanches, droughts, and landslides,^{xix} which will have adverse impacts on climate-sensitive sectors like agriculture on which most of the livelihoods of the HKH depend.

As in the case of mitigation, the HKH countries in their national documents have highlighted national-level adaptation responses and priorities. While most of the adaptation priorities mentioned above do match and are applicable to the mountains, climate risks and realities vary. However, while efforts have been made, the responses to climate shocks lack institutional capacity, which leads to major gaps between policy goals and actual implementation of adaptation actions.^{xx} In addition, factors such as remoteness and lack of access present challenges by way of basic infrastructure and services that can enhance the adaptive capacities in the mountains. The examples of mountain-specific adaptation priorities and actions include: springshed management for better access to and availability of water; community-based forest fire prevention and management; GLOF monitoring; disaster preparedness; and climate-resilient food and agricultural systems. Similarly, changes in land use and land cover can contribute to enhancing



The ‘mountains of opportunity’ investment framework aims to promote investment in mountain-specific climate priorities to enhance the resilience of mountain communities.

the adaptive capacity in the mountains where the populace is primarily engaged in eking out livelihoods that depend on natural resources. Taking all these factors into account, forest and natural resource governance can play a vital role in climate adaptation.

Aligning financial flows to meet climate targets

The total cost of mitigation for six HKH countries – Afghanistan, Bangladesh, Bhutan, India, Nepal, and Pakistan – is estimated at USD 1085 billion^{xxi} whereas the estimated cumulative cost of adaptation is USD 270

billion as outlined in their NDCs (Table 2). Moreover, most of the targets set by the HKH countries, except for China and India, are conditional and based on external support. This is a huge concern as there is already a wide gap in the current available finances in the area of climate change,^{xxii} more so with the current annual commitment of USD 100 billion from the year 2020 onwards, which is yet to be delivered.^{xxiii} Sources of finance range from national budgets, international (bilateral and multilateral) green bonds, loans, other public finance sources (clean development mechanism funds), and the private sector. The major sources of external finance include the Global

MEASURES	AFGHANISTAN	BANGLADESH	BHUTAN	CHINA	INDIA	MYANMAR	NEPAL	PAKISTAN
Fiscal measures	●	●		●			●	
Funds		●	●	●				
Innovative financial instruments (e.g., bonds, equity, loans)	●	●	●	●	●	●	●	●
COSTS								
Adaptation and mitigation costs (USD, billions)	17.2	216	3.45	NA	1,039	NA	28.4	54

● In place ● In progress

Source: The calculations are based on estimated costs as mentioned in the respective NDCs



Climate change has strong direct and indirect impacts on rangelands and on the pastoralists who depend on them.

Environment Facility (GEF) and the Green Climate Fund (GCF) for international climate financing under the UNFCCC.

As the targets and actions of most of the HKH countries are dependent on international support, developing sound fiscal frameworks and systems is essential to aligning financial resources with the targets. Most HKH countries are in the process of developing frameworks or establishing proper monitoring systems for climate finance. Some good examples of the systems already in place are the climate fiscal policy framework in Bangladesh and the establishment of climate-specific trust funds by Bhutan. In the case of Bangladesh, it has established the Bangladesh Climate Change Trust Fund and the Bangladesh Climate Change Resilience Fund; it has also been investing around USD 2 billion annually since 2010 on climate action.^{xxiv}

Similarly, some examples from China illustrate a strong emphasis on green finance and investments, especially in the area of infrastructure development. For instance, the China Clean Development Mechanism Fund (CCDMF) is a national climate fund that supports low carbon growth and climate resilience. It is a revolving fund that receives regular capital injections from levies collected by the government on clean development mechanism projects.^{xxv} Similarly, China's Green Development Fund proposes to provide green investments worth USD 12.66 billion to the Yangtze River Economic Belt, which will support initiatives like environmental

protection, ecological restoration, pollution control, clean energy, and green transportation.^{xxvi} Lastly, in the case of the Belt and Road Initiative (BRI), the latest developments include the Green Development Guidelines for Foreign Investment and Cooperation, which focuses on both investment and trade as per international green rules and standards.^{xxvii} Green finance and bonds in past few years has picked up momentum not only in China but have become quite popular among Indian issuers making India the second-largest emerging green bond market after China in 2021.^{xxviii} Meanwhile, Nepal has developed climate change budget codes to allow for the tracking of climate expenditure. In addition, Nepal, in its second NDC, has outlined targets for a Climate Finance Strategy and the formulation of what is called the National Capacity on Climate Finance Management.^{xxix}

Areas of convergence and regional cooperation

As is well known, climate change and its impacts are not bound by national borders. Climate-induced disasters like floods are usually transboundary in nature. Similarly, the mitigation and adaptation measures adopted by one country can have a cascading impact on other countries. Even so, the HKH countries, while developing targets, plans, and actions, usually tend to consider only national circumstances and priorities and devise plans to counter national-level risks.

Figure 3 shows areas of convergence based on a review of national-level mitigation, adaptation, and finance priorities, and combining them at a regional scale. These have been broadly categorized into four areas: resilient infrastructure, nature-based solutions, DRR, and scaling up of climate finance.

In addition, most of the HKH countries in their national documents have mentioned areas where they seek regional cooperation (Table 3). For instance, Afghanistan seeks engagement with neighbouring partners on cooperation to mitigate the adverse effects

of climate change across the trans-Himalaya region. Bhutan seeks to use relevant mechanisms under the Paris Agreement such as “cooperative approaches”, “mitigation and sustainable development”, the “framework for non-market approaches to sustainable development”, and other such measures to contribute to the goal of remaining carbon neutral. Myanmar seeks cooperation in water- and energy-related matters, while Nepal seeks cooperation with its neighbours in the areas of DRR and adaptation, which overlaps with Pakistan’s interest in exchange of hydro-met data.

FIGURE 3 AREAS OF CONVERGENCE BASED ON CLIMATE PRIORITIES

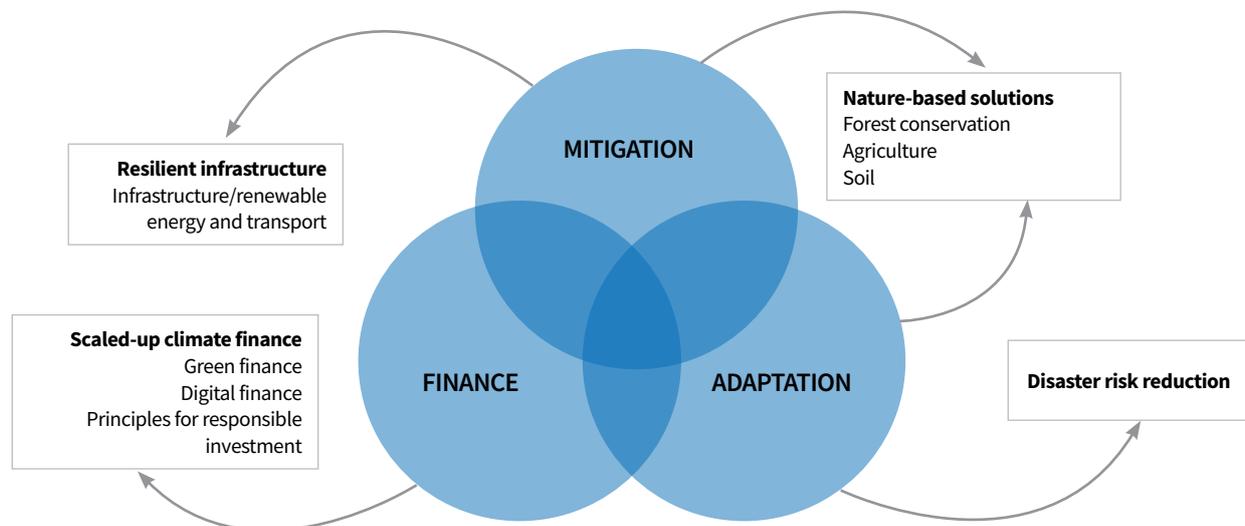


TABLE 3 HIGHLIGHTED AREAS FOR REGIONAL COOPERATION

Countries	Areas for cooperation
Afghanistan	Step up our engagement with neighboring partners, South Asia Co-operative Environment Programme (SACEP), and The International Centre for Integrated Mountain Development (ICIMOD), on cooperation to mitigate the adverse effects of climate change across the trans-Himalayan region (<i>Peace and Development Framework 2017-21</i>)
Bhutan	Utilize relevant mechanisms under the Paris Agreement such as ‘cooperative approaches’ the ‘mechanism for mitigation and sustainable development’, and ‘framework for non-market approaches to sustainable development’ and other measures to contribute to the goal of remaining carbon neutral (<i>CC Policy, 2020</i>)
India	Regional cooperation with neighbouring countries in glaciology (<i>NMSHE</i>)
Myanmar	Facilitate greater cross-border, regional and international collaboration on water related matters in partnership with subnational governments Facilitate greater cross-border, regional and international collaboration in energy matters in partnership with State and Region governments (<i>Sustainable Development Plan 2018</i>)
Nepal	Develop and expand cooperation for disaster risk reduction and adaptation to the effects climate change during international cross-border movement of people (<i>CC Policy, 2019</i>)
Pakistan	Exchange of hydro-met data, including that obtained from high altitude monitoring stations, and flood forecasting; work with Nepal, Bhutan and other mountainous countries to develop initiatives on mountain ecosystems, particularly glaciers and their contribution to sustainable development and livelihoods, and to highlight the region’s vulnerability to climate change; establish institutional linkages among national institutions in the South Asia region (SAR) to facilitate sharing of knowledge, information and capacity building programmes in climate change related areas (<i>CC Policy, 2012</i>)



The conservation and sustainable use of wetlands can help humans to live in harmony with nature. Wetlands help to store carbon, contribute to reducing greenhouse gas emissions, and reduce the impacts of floods.

Conclusion

The HKH provides ecosystem goods and services that support the lives and livelihoods of close to two billion people living in the region and beyond. In the present situation, climate change and its impacts are unavoidable, and we are likely to experience more cascading impacts in the future, especially in the mountains that are already challenged by issues of fragility and limited accessibility. As climate change impacts and hazards increase in terms of frequency and intensity, they are having damaging impacts on both the environment and the people of the HKH. However, while climate change mitigation and adaptation priorities, and the alignment of finances with climate targets are quite clear for the region, adaptation priorities and targets need to be realistic and quantifiable in order to monitor progress and impacts. In addition, mountain-specific information, targets, and measures need to be put in place to inform and guide mountain-specific strategies and actions. In this regard, the availability, access to, and mobilization of finances can play a key role in setting and achieving mitigation and adaptation priorities.

Countries usually work in isolation when identifying climate risks and preparing climate-related plans and policies. However, there are clear overlapping priorities in the areas of mitigation, adaptation, and finance. This provides a platform for regional cooperation which could be further strengthened by the HKH countries and highlighted as areas of cooperation in their respective national documents. These broad areas of cooperation, as pointed out by various studies, relate to resilient and basic infrastructure in the energy sector, nature-based solutions, weather information, data sharing, DRR, and the efficient mobilization of finances for climate action. Working together will help in timely response, allow greater coverage in terms of scale, and enable a common and coherent response to shared risks and challenges in transboundary landscapes and river basins.

ENDNOTES

- i <https://lib.icimod.org/record/34450/files/SummaryofHKHAssessmentReport.pdf>
- ii P. Wester, A. Mishra, A. Mukherji, and A.B. Shrestha (eds). (2019). *The Hindu Kush Himalaya Assessment—Mountains, Climate Change, Sustainability and People*. Switzerland AG, Cham: Springer Nature.
- iii <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>
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- v <https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Bhutan%20Second/Second%20NDC%20Bhutan.pdf>
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- viii https://www.climatewatchdata.org/ghg-emissions?end_year=2018&start_year=1990
- ix <http://www.ghgplatform-india.org/data-and-emissions/energy/GHGPI-PhaseIII-Methodology%20Note-Energy-Sep%202019.pdf>
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- xi Gioli G. et al. (2019). Understanding and Tackling Poverty and Vulnerability in Mountain Livelihoods in the Hindu Kush Himalaya. In Wester P., Mishra A., Mukherji A., and Shrestha A. (eds), *The Hindu Kush Himalaya Assessment*. Cham, Switzerland: Springer. https://doi.org/10.1007/978-3-319-92288-1_12
- xii Dhakal S. et al. (2019). Meeting Future Energy Needs in the Hindu Kush Himalaya. In Wester P., Mishra A., Mukherji A., and Shrestha A. (eds), *The Hindu Kush Himalaya Assessment*. Cham, Switzerland: Springer. https://doi.org/10.1007/978-3-319-92288-1_6
- xiii ICIMOD 2009 Potential for Carbon Finance in the Land Use Sector of the HKH Region.
- xiv Calculated from estimates of the ICIMOD 2009 Potential for Carbon Finance in the Land Use Sector of the HKH Region.
- xv <https://unfccc.int/topics/resilience/workstreams/national-adaptation-programmes-of-action/introduction>
- xvi NAPAs were to be prepared by the LDCs in order to address the challenge of climate change given their vulnerability. Afghanistan, Bhutan, Myanmar, and Nepal are four LDCs from the region who have prepared and submitted NAPAs, while Bangladesh, despite not falling in the LDC category, has also prepared its NAPA.
- xvii Mishra A. et al. (2019). Adaptation to Climate Change in the Hindu Kush Himalaya: Stronger Action Urgently Needed. In Wester P., Mishra A., Mukherji A., and Shrestha A. (eds), *The Hindu Kush Himalaya Assessment*. Cham, Switzerland: Springer. https://doi.org/10.1007/978-3-319-92288-1_13
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- xxi Calculated from figures mentioned in the NDCs.
- xxii <https://www.unep.org/resources/adaptation-gap-report-2020>
- xxiii <https://unfccc.int/news/un-climate-chief-urges-countries-to-deliver-on-usd-100-billion-pledge>
- xxiv <https://pubs.iied.org/sites/default/files/pdfs/migrate/16643IIED.pdf>
- xxv <https://cop23.unfccc.int/climate-action/momentum-for-change/financing-for-climate-friendly/china-clean-development-mechanism-fund>
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For more information contact:

Pradyumna JB Rana pradyumna.rana@icimod.org

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