

Countries covered by the LAKI in the Hindu Kush Himalayan subregion





Hindu Kush Himalayan subregion

Partnership with the International Centre for Integrated Mountain Development (ICIMOD)

Context

The adaptation knowledge gaps of the Hindu Kush Himalayan subregion were analyzed during the fourth LAKI priority-setting workshop from 20-22 October 2016 in Colombo, Sri Lanka. The twelvemember MSG was composed of experts affiliated with government agencies, academia, and civil society organizations. In addition, a support group of three professionals specializing in adaptation challenges related to forest and biodiversity, health, and agriculture provided inputs during the workshop.

Scoping paper

The scoping paper for the Hindu Kush Himalayan subregion included an initial list of 64 adaptation knowledge gaps categorized into the following thematic areas:

- > Agriculture
- > Water resources
- > Health
- > Forest and biodiversity
- > Cross-cutting

Priority-setting workshop

Step 1

Refining the pool of knowledge gaps

Collectively, the MSG reviewed, refined and amended the gaps identified in the scoping paper to produce an updated pool of 46 adaptation knowledge gaps.



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Step 2

Prioritizing the knowledge gaps

The MSG agreed on four criteria and their relative weights for prioritizing the adaptation knowledge gaps (see annex I). Over the course of two Delphi rounds, MSG members used these criteria to prioritize the 46 adaptation knowledge gaps identified in step 1, resulting in 16 priority gaps (see Table 4).

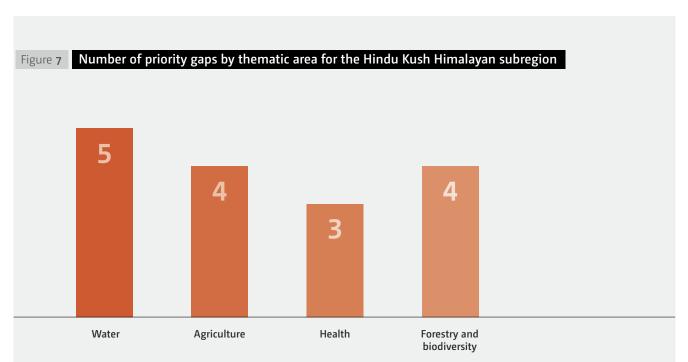
The distribution of priority gaps by thematic area is shown in Figure 7. Several priority gaps were included for each of the four areas of water, agriculture, forest and biodiversity, and health. The highest number of priority gaps (five) are related to water. Over half of the priority gaps were determined to be the result of a lack of actionable knowledge (cluster 3), while one third related to a lack of access to existing data (cluster 2). In contrast to other subregions, several of the priority gaps in the Hindu Kush Himalayan subregion are highly geo-specific and related to local and indigenous knowledge.

Step 3

Designing possible response actions

For the third step of the workshop, the MSG members were invited to provide potential response actions and share expressions of interest to implement these actions, or recommend other organizations well placed to do so. Regarding priority gap one, for example, the MSG recommended pre-monsoon workshops on weather and seasonal forecasting be organized in Myanmar for decision makers, planners, and civil society. In Pakistan, text alerts and announcements for farmers were recommended as a helpful response action. The full list of response actions for each priority gap can be found in the workshop report.

Additionally, the Adaptation learning highway and the Educational Partnerships for Innovation in Communities Network (EPIC-N) Model were presented to illustrate innovative approaches to closing knowledge gaps during the workshop.



Thematic areas of priority gaps

Implementing actions to close knowledge gaps

The outcomes of the Hindu Kush Himalayan prioritysetting workshop and the full workshop report were disseminated through the Adaptation knowledge portal⁹ and by the subregional coordination entity ICIMOD.¹⁰ They were also shared with national delegates and stakeholders from around the world during a joint side event at the Bonn Climate Change Conference in May 2017. The event was organized by the UNFCCC secretariat, UN Environment and ICIMOD to discuss progress of the LAKI in the Hindu Kush Himalayan subregion and collect further expressions of interest to close priority knowledge gaps.11

ICIMOD has taken action to close priority gap three by improving access to awareness-raising products and early warning systems for multiple hazards and is working in partnership with UN Environment, the UNFCCC secretariat, and several regional partners to catalyze action around the remaining gaps. 12 In December 2017, a satellite event was convened in Kathmandu during the International Conference on Resilient Hindu Kush Himalaya to examine opportunities for repackaging scientific research into usable formats for adaptation practitioners. Following discussions on available technologies for improving water and agriculture resilience, participants developed proposals to close related priority gaps in the subregion. These proposals will be converted into action pledges for the Nairobi work programme's Adaptation knowledge portal.

In March 2018, a round-table meeting was organized with the Global Development Network in New Delhi as a pre-event to the 18th Global Development Conference. The meeting discussed the establishment of a regional interdisciplinary research consortium to close agriculture priority gaps. The proposed consortium would pool intellectual and institutional resources to scale-up policy.

- 9. see: www4.unfccc.int/sites/NWP/Pages/LAKI-Asia.aspx
- 10. see: www.icimod.org/?q=24782
- 11. see: www4.unfccc.int/sites/NWP/News/Pages/LAKI-sideevent-SB46.aspx
- 12. See: http://www.icimod.org/?q=30221

Table 4 Priority knowledge gaps for the Hindu Kush Himalayan subregion

No.	Thematic area	Gap description	Cluster	Knowledge user
1	Agriculture	Limited access to adequate, locally usable knowledge and information on weather and seasonal forecasting to assist farm production operations	Lack of access [2]	Extension workers, national hydro-met services, agriculture experts
2	Water	Weak dissemination of evidence and successful water management practices, adaptation technologies, and water allocation and management during periods of scarcity and abundance	Lack of actionable knowledge (e.g., in need of repackaging existing knowledge) [3]	Water resource planners, policymakers, communities project managers
3	Water	Lack of access to awareness-raising products and early warning systems for multiple hazards (drought, landslide, debris flow, flooding, glacier lake outburst flood in the Himalayas and downstream communities)	Lack of access [2]	Early warning system designers, town and provincial planners/ watershed managers, communities
4	Agriculture	Inadequate information and knowledge on adaptation options and technologies suitable to address context-specific climate extremes, impacts and risks for agriculture and the net effect of climate change at the local level	Lack of actionable knowledge (e.g., in need of repackaging existing knowledge) [3]	Farmers, extension agencies district agriculture officers and experts, technology users, policymakers, local non-governmental organizations
5	Health	Limited access to weather and seasonal forecasting data for public health preparedness (heat waves, cold waves, thunderstorms, disease epidemics)	Lack of access, Lack of actionable knowledge (e.g., in need of repackaging existing knowledge) [Mix]	Health professionals and public
6	Agriculture	Limited access to traditional knowledge and indigenous knowledge on agricultural adaptation	Lack of access [2]	Village elders, farming families, researchers, policymakers, agricultural extension workers, civil society organizations
7	Water	Poor translations of climate data and models into understandable formats	Lack of actionable knowledge (e.g., in need of repackaging existing knowledge) [3]	National–subnational planning departments, project managers, community leaders and members
8	Health	Lack of awareness/sensitization among public and media about climate change health impacts and adaptation/response measures	Lack of access [2]	Public

No.	Thematic area	Gap description	Cluster	Knowledge user
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9	Agriculture	Limited understanding of traditional knowledge and indigenous knowledge on agricultural adaptation	Lack of access [2]	Climate negotiators, policymakers
10	Water	Knowledge on how climate change is impacting on water source/usage/availability/quality (including sanitation/water treatment/water inputs for energy/springs and natural wells, groundwater, spring water and glaciers)	Lack of actionable knowledge (e.g., in need of repackaging existing knowledge) [3]	Watershed planners, settlement planners/ energy planners, community leaders and civil society project managers
11	Forestry and biodiversity	Knowledge gap on methodologies and tools to quantify the impact of climate change on ecosystem services	Lack of tools and methods [4]	Researchers, academics
12	Health	Lack of understanding/evidence of potential health co-benefits of climate change adaptation and mitigation measures in various sectors	Lack of actionable knowledge (e.g., in need of repackaging existing knowledge) [3]	Policymakers
13	Forest and biodiversity	Lack of adequate knowledge on the effects of climate change on biodiversity	Lack of actionable knowledge (e.g., in need of repackaging existing knowledge) [3]	Researchers, academics, policymakers, community members
14	Forest and biodiversity	Need for repackaging the baseline data on the effects of climate change for forests and biodiversity for different target groups	Lack of actionable knowledge (e.g., in need of repackaging existing knowledge) [3]	Researchers, academics, practitioners
15	Forest and biodiversity	Insufficient information on local indigenous knowledge on forest management	Lack of actionable knowledge (e.g., in need of repackaging existing knowledge) [3]	Researchers, academics, practitioners, community members
16	Water	Insufficient climate change communication on impacts on water systems/availability to determine climate change impacts and inform decision- making in designing water resource plans and implementation	Lack of actionable knowledge (e.g., in need of repackaging existing knowledge) [3]	Communities, subnational government, non- technical stakeholders

For more information, see the full workshop report available via the Adaptation knowledge portal at http://www4.unfccc.int/sites/nwp/Pages/Home.aspx