

Resilient Mountain Solutions in the Hindu Kush Himalaya



Background

Climate change and other environmental and socioeconomic drivers of change are testing the resilience of ecosystems and communities in the Hindu Kush Himalaya (HKH). These changes affect biodiversity, ecosystem services, and the livelihoods of people in the mountains, and have consequences for downstream communities who depend on these services.

Temperatures in the mountains are rising faster than the global average. It is predicted that mountain areas will be up to two degrees hotter by the end of the century, even if global temperature change remains under 1.5°C, as outlined in the United Nations Framework Convention on Climate Change (UNFCCC) Paris Agreement.

Social and economic changes in mountain communities – high outmigration of men, labour shortages, and decreasing cultivation on arable land – pose challenges for agricultural productivity and natural resource management and add responsibilities for women.

The International Centre for Integrated Mountain Development (ICIMOD) and its partners have made significant progress in testing solutions and filling critical knowledge gaps on climate change, adaptation, and resilience in the HKH. Building the capacity of local institutions and forming dynamic, multi-stakeholder partnerships with governments, communities, and the private sector can help communities use this knowledge and enhance their long-term resilience and capacity to adapt to change.

Creating mountain-specific solutions for a resilient HKH

ICIMOD's Resilient Mountain Solutions (RMS) Initiative tests simple and affordable resilience-building tools and approaches that community members in rural parts of the HKH can replicate.

It trains and networks with governments, local institutions, and other stakeholders to ensure that these solutions are scaled up and scaled out to reach as many communities as possible.





The initiative builds on research and solutions developed and tested by ICIMOD and its partners to identify a range of options that have proven effective and applicable in the diverse mountain contexts of the HKH.

RMS contributes to three strategic impact areas:

- Poverty reduction
- Reduced physical and social vulnerability
- Improved ecosystem services

RMS also contributes to the United Nations Sustainable Development Goals by providing relevant knowledge for their successful implementation in the mountain context.

Goal

Enhance the resilience of women and men in the HKH to socioeconomic and environmental changes, by scaling up and scaling out existing resilient solutions and developing new knowledge and solutions through pilot studies, collaborative research, field demonstrations, and strategic outreach and engagement.

Objectives

1. Generate and promote the use of new knowledge on resilience-building solutions in the HKH and globally through action research and pilot studies
2. Develop, test, and promote “resilient solution packages” that are gender and socially inclusive and tailored to the HKH context
3. Build the capacities of national and local government and regional institutions to plan and implement programmes that support resilience to climate change and other changes



The RMS framework

RMS combines the social, economic, and environmental dimensions of sustainable development with climate change adaptation, resilience, and preparedness for future risks to form an integrated approach to resilient mountain development. The Initiative has adopted the working definition of resilience as “the ability of an individual, community, or a socio-ecological system to not only overcome stress, shock, or setback (recover or bounce back), but develop capabilities to move forward to a condition or state that can help transcend to a better state”.

The RMS framework works within three major dimensions of resilience – climate resilience, socioeconomic resilience, and future resilience – categorized into nine sub-dimensions.

Where we work

RMS works in ICIMOD's regional member countries to address their vulnerability to climate change and socioeconomic changes. The Initiative implements its activities through direct engagement, leveraging of funds, capacity building, and knowledge sharing. Through 2019, RMS has been working in Bangladesh, Bhutan, Myanmar, Nepal, and Pakistan.

Our partners

The RMS Initiative works with partners in these four categories:

1. Implementing partners: Carrying out activities on the ground and promoting the uptake of solutions at the national level and beyond
2. Strategic/policy partners: Engaging with government-supported national programmes, working with the media and knowledge centres to support regional engagement, and enhancing global outreach through engagement with multilateral processes and global think tanks
3. Private sector: Diversifying livelihood opportunities through business modalities and value chain development and promoting financial sustainability of project activities
4. Knowledge partners: Scientific and technical backstopping through action research, knowledge sharing, and policy engagement



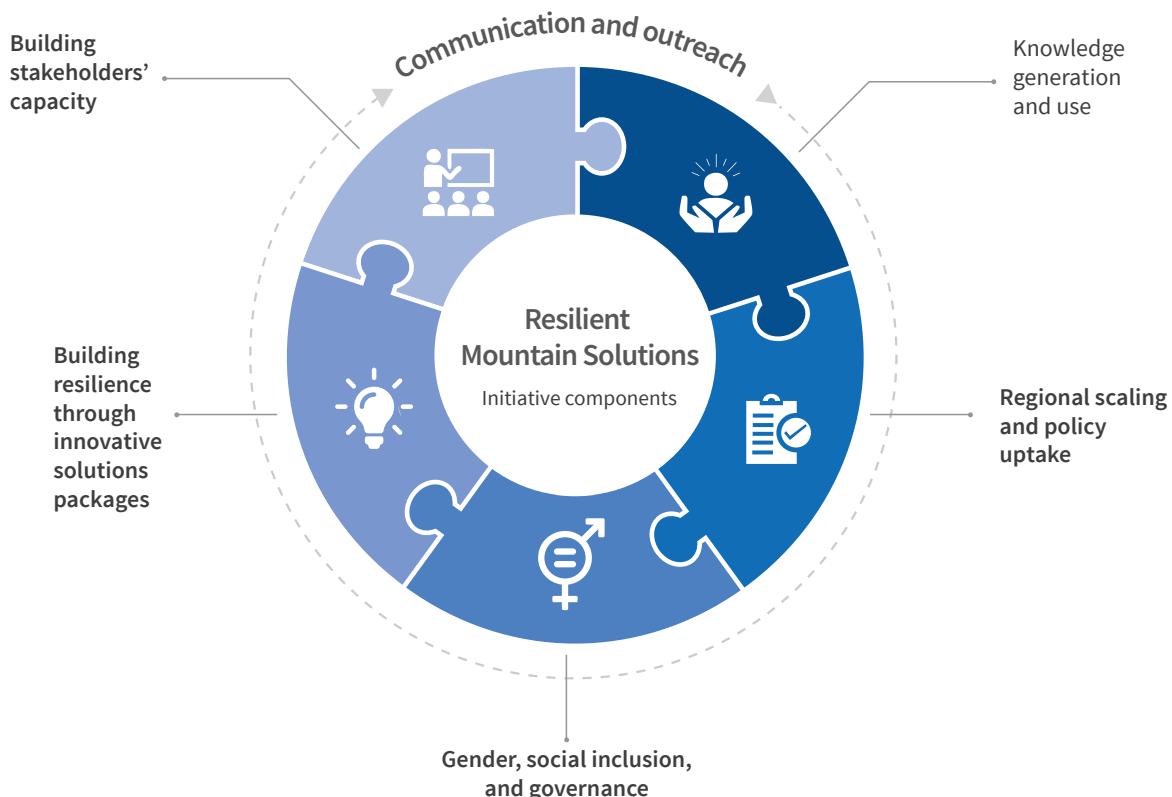
Key areas of work

Resilience markers: RMS has been developing resilience markers for pilot sites in its four partnering countries. These markers will be used to gauge the resilience of societies across the HKH and employ the framework in designing interventions.

Resilient Mountain Village: In Nepal, RMS is working with the Government of Nepal and the Center for Environmental and Agricultural Policy Research, Extension and Development (CEAPRED) to implement the Resilient Mountain Village approach in Kavre and Dadeldhura. In these districts, the initiative has adopted an integrated approach to building community resilience – by involving and training farmers, farmer groups, government officials, and other stakeholders.

Springshed revival and management: RMS is working in Kavre with CEAPRED, in collaboration with local users, the municipality, and other relevant stakeholders, to implement interventions around springshed revival and management, which were developed earlier by ICIMOD. RMS will be working together with the Krishi Gobeshona Foundation to implement similar interventions in Bangladesh too.

Green enterprises: The Initiative is working with the Government of Bhutan to frame the growth strategy of the country's Startup Center and build the capacity of the entrepreneurial ecosystem's stakeholders regarding best practices related to green, resilient enterprises.



Organic agriculture: RMS seeks to promote the adoption of “safe food” farming practices in the HKH. This will help farmers meet the growing market demand for safe food while also ensuring better nutrition for their families. In particular, RMS is working with the Government of Bhutan to enable the growth of organic agriculture in Bhutan.

Gender inclusion: Every RMS intervention and project design is informed by a gender-inclusion outlook, with women playing significant roles in planning.

Digital services and value-chain enhancement for farmers: RMS is working with SABAH Nepal to develop and strengthen farm-to-market value chains (where women are the chief nodal actors) and promote SABAH’s Sinduka brand in Kavre and other areas. RMS is also piloting in Kavre the uptake of GeoKRISHI’s digital platform, which will enhance the livelihoods of the district’s farmers.

RMS partners

- Antarprerana Pvt Ltd, Nepal
- Department of Agriculture, Ministry of Agriculture and Forests, Bhutan
- Department of Cottage and Small Industry, Ministry of Economic Affairs, Bhutan
- Department of Environment, Ministry of Forests and Environment, Nepal
- GeoKRISHI, Pathway Technologies and Services Pvt Ltd, Nepal
- GRID Arendal, Norway
- Krishi Gobeshona Foundation, Bangladesh
- Myanmar Institute for Integrated Development, Myamnar
- SAARC Business Association of Home Based Workers (SABAH Nepal)
- The Center for Environmental and Agricultural Policy Research, Extension and Development, Nepal

SUPPORTED BY



For further information

Nand Kishor Agrawal

nandkishor.agrawal@icimod.org

| Pratigya Silwal

pratigya.silwal@icimod.org

ICIMOD gratefully acknowledges the support of its core donors: the Governments of Afghanistan, Australia, Austria, Bangladesh, Bhutan, China, India, Myanmar, Nepal, Norway, Pakistan, Sweden, and Switzerland.