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# Resilient Mountain Solutions in the Hindu Kush Himalaya

FOR MOUNTAINS AND PEOPLE

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, 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  $(1.8 \pm 0.4$ °C) by the end of the present 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 create additional 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 Hindu Kush Himalaya

The 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 context of the HKH.

RMS will contribute to three strategic impact areas:

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

RMS also contributes to the United Nation's 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**

- Generate and promote the use of new knowledge on resiliencebuilding 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
- Build capacities of national and local government and regional institutions to plan and implement programmes that support resilience to climate change and other changes

## The Resilient Mountain Solutions 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 adopts 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.



#### RESILIENT MOUNTAIN SOLUTIONS INITIATIVE

#### CROSS CUTTING COMPONENTS

Gender, social inclusion, and governance Ensuring technologies and opportunities are accessible to women and marginalized groups and promoting participation in decision making at all levels

#### Communication and outreach

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Targeting knowledge to a wide range of stakeholders for scaling up and scaling out resilient solutions packages

#### Regional scaling and policy update

Supporting an enabling environment for scaling up and scaling out solutions packages in ongoing development projects, programmes, and policies

### CORE COMPONENTS

Knowledge generation and application

Identifying knowledge gaps and validating effectiveness of solutions for resilience building with particular focus on women and marginalized groups Building resilience through innovative solutions packages

Solutions developed and packaged to address challenges, with focus on poverty reduction and enhancing mechanisms for delivering fieldtested solutions

#### Where we work

RMS works in ICIMOD's regional member countries to address their vulnerability to climate change and socio-economic changes. The initiative implements its activities through direct engagement, leveraging of funds, capacity building, and knowledge sharing.







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#### Who we work with

The RMS initiative works with partners in these four categories:

- Implementing partners: Carrying out activities on the ground and promoting 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
- 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

#### For further information contact

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