

**‘Water Resources  
in the Himalaya -  
Disaster Resilience and Reduction’**

**Meet of the Mountain States 2024**



## Meet of the Mountain States

Meet of the Mountain States (MoMS), an annual event of [Integrated Mountain Initiative](#) (IMI) is held in Delhi to share the outcomes of the immediately preceding Sustainable Mountain Development Summit (SMDS) with a key stakeholder group which includes policy makers, elected representatives, partners of IMI and other relevant agencies to evolve joint commitment for priority actions on key mountain issues.

### The Context: The IHR - water tower and disasters

The Himalayan River Systems play a vital role in sustaining life, livelihoods and landscapes. It is home to diverse 200 million mountain peoples who live on its slopes and equally important to nearly 1.2 billion people (One-fifth of world's population) depend on it downstream. The Himalaya are the water towers of Asia that have nurtured civilisations as well as provided sacred meanings to people. The Himalaya besides providing water security, is intricately linked to food, biodiversity and energy security. However, this important geological trait simultaneously also threatens it.

The Himalayan landscape is geologically young (Xu 1993) and active tectonically which manifests in earthquakes and frequent landslides. As the tallest mountain range of the world, it bears the brunt of the monsoon winds bringing a deluge of rains across its ranges and especially in the eastern extent, making it one of the wettest as well as biodiverse places on Earth. A combination of steep slopes, high intensity rain and tectonically active region still rising mountain result in regular landslides.

The frequency and intensity of landslides and flash floods has been further increased by anthropogenic actions and development paradigms chosen in the IHR. Climate change also contributes to localised extreme weather phenomena and the resulting increased intensity and magnitude of precipitation, contributes to cloudbursts, landslides, flash floods, snow storms and Glacial Lake Outburst Flowss.(GLOF)

The region has a history of catastrophic disasters as recent as the devastating earthquake in Nepal (April 2015), landslides in Darjeeling Hills (June 2015), the earthquake in Sikkim (September 2011), the destructive floods in Uttarakhand (June 2013) and disasters in Himachal, Uttarakhand, Sikkim and West Bengal in 2023 to name a few.

Provision of "loss and damage" funding for vulnerable countries hit hard by climate disasters was the major breakthrough agreement in the conclusion of United Nations Climate Change Conference COP27. "It has determined a way forward on funding for loss and damage - deliberating on how we address the impacts on communities whose lives and livelihoods have been ruined by the very worst impacts of climate change." The Himalaya is one of the most climate change impacted landscapes on the planet after the poles thus needs concrete action on 'loss and damage'<sup>[RK1]</sup>.

2023 has provenly been a stark reminder that climate change triggered disasters are going to be a “business as usual phenomena”. India has also felt the brunt of disasters and it must be noted that several assessments have shown that Indian Himalayan Region is more vulnerable due to its inherent fragility, higher warming, melting glaciers and increased frequency of cloud bursts etc. (see IPCC AR 6, HIMAP Report of ICIMOD 2018, NMSHE of NAPCC, Down To Earth). The above-mentioned cases of Himachal, Sikkim and West Bengal disasters in 2023 highlight the challenges of disasters in the Himalaya and the need for going beyond business as usual in responding to disasters that impact life, livelihood and ecology of the Himalaya. The body count narrative of response to disasters vilifies the magnitude and impact of disasters in the Himalaya that is sparsely populated. This is one of the main reasons why mountain disasters do not get the necessary attention they deserve. Hence indirect and long term socio-economic and ecological losses of disaster in the mountains go unaccounted and unaddressed.

The Himalaya is a multi hazard landscape with a complex interplay of events across timelines and ecosystems that need to be understood beyond single disaster events and relief and rehabilitation only. There is an urgent need to look at disasters in the Himalaya through the lens of water and sustainable development in an interdisciplinary manner at interstate/and also transboundary landscape levels. The acknowledgement of the gravity of disasters in the Himalaya has to have sensitive policies, practices, appropriate resource allocation and rigorous monitoring.

### **IMI’s work on Disasters in the Himalaya**

The Integrated Mountain Initiative (IMI) is a collective initiative for recognizing the value of mountain regions and enabling people to realise its potential by integrating the knowledge and experiences of multiple stakeholders. IMI has been working continuously on addressing cross- cutting issues related to climate change, mountain agriculture and livelihoods, disaster risk reduction and resilience, plastic waste management and sustainable mountain cities, which are relevant for mountain development. IMI acknowledges the collective effort required for mountain agendas to be made more center stage and to ensure support from governments – both at the centre and in the states. Its annual Sustainable Development Summits (SMDS), since 2011, followed by Meet of Mountain States (MoMS) therefore engages various stakeholders to come together and take part in an informed dialogue on themes of specific relevance to the mountain communities and regions of India.

These events bring together distinguished legislators, central and state government representatives, civil society, practitioners, academicians, industry leaders, media and communities together to deep delve on issues and to sensitize and advocate with national policymakers and practitioners. Events such as these increase the visibility and recognition of path breaking work by local people in the mountains, and reinforce the commitment of

partnerships and collaborations between all stakeholders to take forward the cause of sustainability in the development of mountain regions, especially the IHR.

At IMI we have been highlighting the issue of disasters in the IHR that led us to participate at the 6<sup>th</sup> World Conference on Disasters, Dehradun too. The Nagaland and Uttarakhand Sustainable Mountain Development Summits in 2013 and 2020 respectively delved deeply on DRR as well as having a pre-Nagaland Summit on Disasters. These events have been taken forward by IMI to foreground the increasing frequency and magnitude of disasters in the IHR as well as the need for mountain sensitive policies, practices and appropriate resource allocation.

### **Meet of the Mountain States, 22 March 2024 (MoMS) ‘Water Resources in the Himalaya: Disaster Resilience and Reduction’.**

The upcoming Meet of the Mountain States 22 March 2024 (MoMS) will have elected representatives of the IHR, Key Policymakers and Government Department Representatives, Academia who will dialogue over critical issues of “Water Resources in the Himalaya: Disaster Resilience and Reduction’. The MoMS is set within a larger goal of IMI to inform policymakers for a greater mountain sensitivity of policies on disaster as well as allocation of appropriate financial resources to mitigate the collateral as well as multi sectoral long-term damage.

#### **The objectives of MoMS 2024 are:**

1. Highlight the interplay of water, development choices and increasing disasters in the Indian Himalaya by bringing together in dialogue: policy makers, key planning and implementing stakeholders and researchers on a single MOMS platform.
2. Inform and advocate for the urgency of mountain sensitive policies and practices with appropriate financial resource allocation at the intersection of water and disasters.
3. Propose new approaches to resilience -landscape based development, and a concrete plan for next 3 years engaging all stakeholders and enablers.

#### **Session outlay of MoMS 2024**

The MoMS 2024 will be held over a period of one day that is proposed to be divided into these sessions.

- **Geo-Hydrology of the Himalaya and Disasters**
- **Linkage between Himalayan Geology, River Systems Disasters and Disaster Response**
- **Management of Water in IHR, Evidence based DRR and way forward**

**MoMS 2024 - Some key outcomes**

- A Himalayan Declaration to be finalised at MoMS 2024 in Delhi based on recommendations that evolve.
- Mountain DRR policy and key action points to pilot action projects of community based DRR mountains
- Pilot actions projects that link science and practise

## Meet of Mountain States ( MoMs)

### Draft Programme Schedule

22nd March, 2024 Delhi

**'Water Resources in the Himalaya: Disaster Resilience and Reduction'**

Day – 1

1000 - 1100 hrs : Inaugural Session -

### Geo-Hydrology of the Himalaya and Disasters

#### Session Objectives:

**Linking water and disaster in the IHR and placing the IMI perspective**

Time	Programme	Speaker	Remarks
1000 hrs	Welcome & Context setting  Waterborne disasters in the recent past	President IMI	6 – 7 persons on dais
	Preside by	Smt Ritu Khanduri, Hon'ble Speaker, Uttarakhand	
1015 hrs	Keynote Speaker	Dr Eklabya Sharma	
1035 hrs	IMI and DCCC	Prof Satheesh, Chair, DCCC & IISc	
1045	Address from special guest	Shri Chowna Mein, Hon'ble Dy. CM Aruncachal Pradesh	
1055 hrs	Address from Guest of Honour	Shri Aswini Chaubey, Hon'ble Minister of State, MoEFCC	
1105 hrs	Address from Chief Guest	Shri Kiren Rijju, Hon'ble Minister, Ministry of Earth Sciences, Government of India	
	Vote of thanks	IMI	

1110 hrs	Tea Break		
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**1130 hrs – 1300 hrs: Thematic session I: Linkage between Himalayan Geology, River Systems Disasters and Disaster Response**

**Session Objectives:**

**Bring to a single platform various expert opinions on the intersect of Himalayan Geology, River Systems Disasters and Disaster Response**

**Link expert opinion to the need for mountain sensitive policies and appropriate resource allocation**

**Chair:** Dr. V.K. Saraswat, member, NITI Ayog

1130 hrs	Welcome and background (context setting)	IMI, Dr G.S. Rawat, IMI	
	Keynote DehraDun Declaration from 6 WCD	Dr. Durgesh Pant, Director General, UCOST	
11:45 hrs	Panel Discussion	Dr. V.K. Saraswat, member, NITI Ayog - CHAIR - context setting	
		Mr Vohra, Chairman Dam Safety Authority,CWC Dr. Ashim Sattar, IIT Bhubaneswar Dr. Smriti Basnett, DCCC Elected Representatives	

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12:45	Open house		

**1300 - 1400: Lunch Break**

**1400 hrs – 1600 hrs: Thematic session II : Panel Discussion  
Management of Water in IHR, Evidence based DRR and way forward**

**Session Objectives**

**Bring forth solutions that respond to the water resources and disaster in the IHR**

**Create a road map of action on water and DRR in the IHR**

**Chair:** Mr Arvind Mehata Ex Member Sec 15 Finance commission



1400 hrs	Welcome and Context Setting	Dr. Rajan Kotru(IMI)	
1410 hrs	Panel Discussion	Chair: Mr Arvind Mehata Ex Member Sec 15 Finance Commission	
		<p>Mr. Kamal Kishore of NDMA,</p> <p>Mr. Arindam Chaudhry, Dy. Commissioner, SDMA, Himachal Pradesh</p> <p>Sikkim SDMA</p> <p>Dr. P.K. Joshi, JNU</p> <p>Prof Atul kansal, VC, TERI</p> <p>SaveTheHills, DHI</p> <p>SaveTheHills (recommendation will be emailed)</p> <p>WRI</p>	
15:30	Response from Elected Representative moderated by Dr Kotru	Elected Representatives of IHR.	
1600	Summing up	Mr Sushil Ramola	
	Vote of Thanks	IMI, Ms <a href="#">Binita Shah</a>	

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