

**Report  
on  
2-Day Workshop on  
“Climate Change Adaptation and Disaster Risk  
Reduction”**

**organized**

**by**

*Centre for Disaster Risk Reduction,  
Department of Planning & Geomatics, and  
Department of Environment, Sustainability, and Climate Change*



**Islamic University of Science and Technology,  
Awantipora, Kashmir-192122 (J&K)**

**In collaboration with**



**Department of Disaster Management, Relief,  
Rehabilitation, and Reconstruction,  
Govt. of Jammu and Kashmir**

**VENUE: Conference Hall, Rumi Library, IUST, Kashmir  
25<sup>th</sup> – 26<sup>th</sup>, November 2025**

## **TABLE OF CONTENTS**

<b>S. No.</b>	<b>Contents</b>	<b>Page No.</b>
	<b>Flyer</b>	<b>1</b>
<b>1.</b>	<b>About IUST</b>	<b>2</b>
<b>2.</b>	<b>About DMRRR</b>	<b>3</b>
<b>3.</b>	<b>Approval Order</b>	<b>4</b>
<b>4.</b>	<b>Organizing and other committees</b>	<b>5</b>
<b>5.</b>	<b>Programme Schedule</b>	<b>6-7</b>
<b>6.</b>	<b>List of Registered/Nominated Participants</b>	<b>8-10</b>
<b>7.</b>	<b>Summary of the Workshop</b>	<b>11</b>
<b>7.1.</b>	<b>Introduction</b>	<b>11</b>
<b>7.2.</b>	<b>Proceedings of Day 1</b>	<b>12-13</b>
<b>7.3</b>	<b>Proceedings of Day 2</b>	<b>13-14</b>
<b>7.4.</b>	<b>Key Recommendations</b>	<b>15</b>
<b>8.</b>	<b>Feedback</b>	<b>16-18</b>
	<b>Photo Gallery</b>	<b>19-22</b>

## FLYER



**TWO-DAY CAPACITY BUILDING WORKSHOP**  
On  
**CLIMATE CHANGE ADAPTATION & DISASTER RISK REDUCTION**  
(BUILDING A DISASTER RESILIENT JKU)

*Jointly Sponsored by:*  
DEPT. OF PLANNING AND ECONOMICS  
CENTRE FOR DISASTER RISK REDUCTION  
DEPT. OF ENVIRONMENT, SUSTAINABILITY AND CLIMATE CHANGE  
**ISLAMIC UNIVERSITY OF SCIENCE AND TECHNOLOGY, KASHMIR**

*In association with:*  
DEPARTMENT OF DISASTER MANAGEMENT, RELIEF, REHABILITATION AND RECONSTRUCTION  
UNIV. OF JAMMU & KASHMIR

**DATE & TIME:**  
20-26 NOVEMBER, 2020: 10:00 AM

**VENUE:**  
CONFERENCE HALL, TUMI CAMPUS, IUST

**ORGANIZING SECRETARY:**  
DR. JAVED IQBAL, ASSISTANT PROFESSOR, DEPT. IUST

**CO-ORGANIZING SECRETARY:**  
DR. NAYAN MAMMAD BASHI, CLIMATE ACTION, IUST



## **1. About IUST**

The Islamic University of Science and Technology (IUST), located in Awantipora, Kashmir, is a premier higher education institution established with the aim of advancing knowledge and fostering innovation in science, technology, and other academic disciplines. Founded in 2005, the university has become a hub for academic excellence, research, and professional development in the region, playing a pivotal role in addressing local and global challenges. IUST offers a wide range of undergraduate, postgraduate, and doctoral programs across various disciplines, including engineering, technology, social sciences, business, humanities, and architecture. The university emphasizes a multidisciplinary approach to education, integrating modern research and teaching methodologies to enhance students' knowledge and skill sets. The university is deeply committed to promoting research and innovation. It has established several research centers and initiatives to tackle emerging issues, including the Centre for Disaster Risk Reduction (CDRR), which focuses on disaster preparedness, mitigation, and resilience-building—an increasingly vital area of study for the region. IUST prioritizes student engagement and development, offering numerous co-curricular activities, workshops, and seminars to enhance students' leadership skills, critical thinking, and professional growth. The university fosters a dynamic campus culture, encouraging students to participate in debates, sports, and other extracurricular activities. IUST maintains strong collaborations with national and international universities, research institutions, and industries. These partnerships aim to foster academic exchange, joint research projects, and knowledge-sharing in sustainable development, climate change, disaster risk reduction, and technological advancements. IUST envisions becoming a leader in higher education and research, not just within Jammu & Kashmir but also on the global stage. It is committed to empowering students to meet the needs of the modern world, with a strong emphasis on innovation, sustainability, and community service. The university's growing reputation as a center of learning is reflected in its expanding academic programs, world-class faculty, and cutting-edge research facilities, all contributing to its goal of shaping the future of education and development in the region.

## **2. About JKDMRRR**

The Jammu & Kashmir Department of Disaster Management, Relief, Rehabilitation & Reconstruction (JKDMRRR) came into effect on 30 December 2016 vide Cabinet Decision of the J&K govt. The mission of the Department of DMRRR is to ensure the safety of communities by promoting a community-based approach to Disaster Risk Reduction (DRR). This involves reducing vulnerabilities and enhancing effective disaster response through awareness programs and capacity-building initiatives. The department is dedicated to implementing appropriate measures to prevent danger and mitigate risks, ensuring that both natural and man-made disasters are addressed comprehensively. In times of disaster, the DMRRR provides timely assistance to those in distress, helping them recover and rebuild. Additionally, the department plays a key role in resolving issues related to displaced communities, including Kashmiri/Jammu migrants, those displaced in 1947, Chhamb displaced persons (1965/1971), and West Pakistani refugees. It aims to bridge the gap in identifying sufferers of natural calamities, ensuring that all affected individuals receive the support they need. The DMRRR envisions a future where Disaster Risk Reduction (DRR) is fully integrated into all developmental initiatives, ensuring the sustainability of investments and creating a disaster-resilient Jammu & Kashmir. By enhancing the capacity of all stakeholders—governments, communities, and institutions—the department seeks to respond to disasters in a planned and effective manner, minimizing the loss of lives, livelihoods, and critical infrastructure. This includes protecting essential services like healthcare, education, and social and cultural assets from the impacts of disasters. Moreover, the department is committed to providing rapid and appropriate assistance to disaster victims, facilitating their recovery process efficiently. Alongside disaster management efforts, DMRRR continues to support Kashmiri/Jammu migrants, displaced persons of 1947, Chhamb displaced persons (1965/1971), and West Pakistani refugees, ensuring their issues are addressed and their rehabilitation needs met. The overarching goal is to make Jammu & Kashmir a safer, more resilient region, prepared to face any disaster.

### 3. Approval order

 <b>ISLAMIC UNIVERSITY OF SCIENCE &amp; TECHNOLOGY, KASHMIR (IUST)</b>	
Office Order No-	<b>1225</b> of 2023
D u i e dt	24-11-2023
Sanction is hereby accorded in the following:	
(i)	Organizing six-day Training and Capacity Building Workshop on 'Climate Change Adaptation & Disaster Risk Reduction' on November 29 & 30, 2023 jointly by the Department of Planning & Governance, the Centre for Disaster Risk Reduction and the Department of Environment, Sustainability and Climate Change.
(ii)	Committee as reflected in Annexure-A (printed overleaf) to this order for smooth conduct of the workshop.
By Order,	
 Deputy Registrar (Establishment)	
No. IUST/Reg/Admin/4354 Dated: 24-11-2023	
Copy to:- <ul style="list-style-type: none"><li>- Item Academic Affairs.</li><li>- Finance Officer.</li><li>- All committee members.</li><li>- Concerned organizing departments.</li><li>- File.</li></ul>	

#### 4. Organizing and other committees

Annexure-A to Office Order No. 122 Date: 24/11/2023

**Committee for the 2-Day Training and Capacity Building Workshop on "Climate Change Adaptation & Disaster Risk Reduction" to be held on 24 & 25 November, 2023.**

S. No.	Name	Designation	Position
<b>Organizing Committee</b>			
1.	Prof. Shahid Ahmad Breshki	Head, City & Regional	Chairperson
2.	Prof. Shahid Waheed Shahidman	Registrar	Member
3.	Prof. Shahid Ahmad	Coordinator (Construction)	Member
4.	Dr. Saikat Kumar	Finance Officer	Member
5.	Dr. Bhabita Ghosh	Ex-Officio	Member
6.	Dr. Quamrul Kabir Quamrul Kabir	Ex-Officio, School of Architecture, Planning & Environment	Member
7.	Dr. Abu Amir Ahmed	Ex-Officio, Dept. of Civil Engineering	Member
8.	Dr. Saikat Kumar	Coordinator, Dept. of IT/MS	Member
9.	Dr. Tariq Akbar	Ex-Officio, Department of Planning and Urbanization	Member
10.	Dr. Mohammad Zahid	Assistant Professor, Department of Planning and Urbanization	Member
11.	Dr. Tariq Akbar	Coordinator, CDRB	Co-Ord. Secretary
12.	Dr. Saikat Kumar	Assistant Professor, Department of Planning and Urbanization	Co-Ord. Secretary
<b>Technical Committee</b>			
1.	Dr. Tariq Akbar	Ex-Officio, Department of Planning and Urbanization	Chairperson
2.	Dr. Tariq Akbar	Coordinator, CDRB	Member
3.	Dr. Saikat Kumar	Assistant Professor, Department of Planning and Urbanization	Member
4.	Dr. Saikat Kumar	Coordinator, Dept. of MS/IT	Member
5.	Dr. Saikat Kumar	Assistant Professor, CDRB	Member
6.	Dr. Saikat Kumar	Assistant Professor, MS/IT (Contract)	Member
<b>Finance Committee</b>			
1.	Dr. Saikat Kumar	Assistant Professor, Department of Planning and Urbanization	Chairperson
2.	Dr. Saikat Kumar	Assistant Professor, MS/IT	Member
3.	Dr. Saikat Kumar	Assistant Professor, CDRB	Member
<b>Transport Committee</b>			
1.	Dr. Saikat Kumar	Assistant Professor, Department of Planning and Urbanization	Chairperson
2.	Dr. Saikat Kumar	Assistant Professor, CDRB	Member
<b>Food and Catering Committee</b>			
1.	Dr. Saikat Kumar	Assistant Professor, Dept. of Civil Engineering	Chairperson
2.	Dr. Saikat Kumar	Assistant Professor, Department of Planning and Urbanization	Member
3.	Dr. Saikat Kumar	Assistant Professor, CDRB	Member
4.	Dr. Saikat Kumar	Assistant Professor, MS/IT (Contract)	Member
<b>Security Committee</b>			
1.	Dr. Saikat Kumar	Coordinator, CDRB	Chairperson
2.	Dr. Saikat Kumar	Assistant Professor, Department of Planning and Urbanization	Member
3.	Dr. Saikat Kumar	Ex-Officio, Department of Planning and Urbanization	Member



5. Programme Schedule			
Day & Date	Activities		TIME (IST)
Day-1 (25-11-2025)	Registration of Participants	Venue: Outside the Conference Hall, Rumi Library	10:30 am–11:00 am
	Inaugural Session (11.00 AM to 12:10 PM)		
	Welcome Address	Dr. Jasia Bashir Asst. Professor, DoPG	11:00 am–11:05 am
	Documentary on Climate Change		11:05 am–11:10 am
	Opening Remarks	Mr. Qazi Qamar Iqbal Qari Dean School of Architecture, Planning, & Geomatics, IUST	11:10 am–11:15 am
	Special Remarks	Prof. Ayaz Hassan Moon Dean Academic Affairs, IUST	11:15 am–11:25 am
	Presidential Address	Prof. Shakil Ahmad Romshoo Hon'ble Vice Chancellor, IUST	11:25 am–11:40 am
	Vote of Thanks	Dr. Sumira Nazir Zaz Head, Dept. of ESCC	11:40 am–11:45 am
	Tea Break (Venue: Outside the Conference Hall, Rumi Library)		11:45 am–12:00 pm
	Technical Session-1 (Chairperson: Prof. Shakil A. Romshoo; Rapporteur: Dr. Rayees Shah)		
	TOPIC/ACTIVITY	RESOURCE PERSON/ EXPERTS	TIME (IST)
	Talk-1: Understanding Climate Change: Science, Scenarios, and Impacts	Prof. Shakil A. Romshoo Hon'ble Vice Chancellor, IUST	12:00 am–12:45 pm
	Q&A Session		12:45 pm–1:00 pm
	Lunch Break (Venue: CIED, IUST)		01:00 pm–02:00 pm
	Technical Session-2 (Chairperson: Prof. Shakeel Ahmad, Consultant, IUST; Rapporteur: Mr. Waseem Qader)		
	Talk-2: Impact of climate change on hydrological disasters & livelihoods in highland regions of north India	Dr. Murari Lal Technical Head Climate Change Division RMSI India Pvt. Ltd.	2:00 pm-2:45 pm
	Q&A Session		2:45 pm-3:00 pm
	Talk-3: Role of IMD in Early Warning System	Dr. Mukhtar Ahmed I/C Director, IMD, Srinagar	03:00 pm–03:45 pm
	Q&A Session		03:45 pm–04:00 pm



Day-2 (26-11-2025)	Technical Session-3 (Chairperson: Mr. Qazi Qamar Iqbal Qari; Rapporteur: Dr. Zubair Ahmad Dar)		
	Talk-4: Contouring for Regional Cooperation in the Himalayas as tool for Climate Change Adaptation and Disaster Risk Reduction	Dr. Rajan Kumar Kotru Chief International Technical Advisor Indo-German Development Cooperation, Northeast India/Tripura	11:00 am–11:35 am
	Q&A Session		11:35 am–11:45 am
	Tea Break (Venue: Outside the Conference Hall, Rumi Library)		11:45 am-12:00 pm
	Talk-5: J&K Climate Change Action Plan	Dr. Majid Farooq Scientist, JKDEERS	12:00 pm-12:45 pm
	Q&A Session		12:45 pm-1:00 pm
	Lunch Break (Venue: CIED, IUST)		01:00 pm–02:00 pm
	Open House Discussion: Localizing Climate Action in J&K Chairperson: Prof. Humayun Rashid, PoP, ESCC, IUST		02:00 pm –03:30 pm
	Group-1: Rethinking Energy in J&K	Coordinated by: Dr. Sumira Nazir Zaz	02:00 pm–03:00 pm
	Group-2: Climate-Smart Agriculture and Water in J&K/ Water & Food Security in a Changing Climate	Coordinated by: Dr. Dharam Chand	
	Group-3: Forests, Glaciers & Eco-Tourism in J&K/ Sustaining J&K’s Natural Treasures	Coordinated by: Dr. Tariq Abdullah	
	Group-4: Health & Disaster Preparedness in J&K/Building Climate-Ready J&K	Coordinated by: Dr. Irfan Maqbool	
	Presentation by Group Coordinators (7 minutes for each)		03:00 pm–03:30 pm
	Valedictory Session		
	Welcome Address	Dr. Tariq Abdullah Head, DoPG	03:30 pm–03:35 pm
	Summary of the Workshop	Dr. Jasia Bashir Asst. Professor, DoPG	03:35 pm–03:45 pm
	Certificate Distribution	By Hon’ble Vice Chancellor	03:45 pm–03:55 pm
	Closing Remarks	Prof. Abdul Wahid Makhdoomi Registrar, IUST	03:55 pm–04:05 pm
	Presidential Address	Prof. Shakil Ahmad Romshoo HVC, IUST	04:05 pm–04:15 pm
	Vote of Thanks	Dr. Irfan Maqbool Coordinator, CDRR	04:15 pm–04:20 pm
		High Tea and End of the Workshop	

## 6. List of registered/nominated participants

Registration of Participants

2-day Capacity-Building Workshop on "Climate Change Adaptation and Disaster Risk Reduction" from 25 to 26 November 2015

Venue: Conference Hall, RUMI LIBRARY, RUST, Swantipora.

Sl. No.	Name	Institution/Department/Unit	Contact No.	Signature
<b>I. Local Participants from Kashmir University</b>				
01	Dr. Omar Jaleel	Principal/Project Director	981921071	[Signature]
02	Dr. Maham Ahmad Khan	Subject Project Associate	981921071	[Signature]
03	Dr. Hameed Khan	Subject Project Associate	981921071	[Signature]
04	Dr. Nadeem Khan	Subject Project Associate	981921071	[Signature]
05	Dr. Ali Waheed Khan	Subject Project Associate	981921071	[Signature]
06	Dr. Nadeem Khan	Subject Project Associate	981921071	[Signature]
07	Dr. Nadeem Khan	Subject Project Associate	981921071	[Signature]
08	Dr. Nadeem Khan	Subject Project Associate	981921071	[Signature]
09	Dr. Nadeem Khan	Subject Project Associate	981921071	[Signature]
10	Dr. Nadeem Khan	Subject Project Associate	981921071	[Signature]
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12	Dr. Nadeem Khan	Subject Project Associate	981921071	[Signature]
13	Dr. Nadeem Khan	Subject Project Associate	981921071	[Signature]
14	Dr. Nadeem Khan	Subject Project Associate	981921071	[Signature]
15	Dr. Nadeem Khan	Subject Project Associate	981921071	[Signature]
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29	Dr. Nadeem Khan	Subject Project Associate	981921071	[Signature]
30	Dr. Nadeem Khan	Subject Project Associate	981921071	[Signature]

NAME	INSTITUTION	Ph. No.	SIGNATURE
10. Dr. K. K. Choudhary	Dept. of P.E. Co.	72244444	[Signature]
11. Sudip Kumar	Dept. of P.E. Co.	72244444	[Signature]
12. Purnima Singh	Dept. of P.E. Co.	72244444	[Signature]
13. Z. A. M. I.	Dept. of P.E. Co.	72244444	[Signature]
14. Mahendra Kumar	Dept. of P.E. Co.	72244444	[Signature]
15. Anurag Kumar	Dept. of P.E. Co.	72244444	[Signature]
16. Dr. J. K. Singh	Dept. of P.E. Co.	72244444	[Signature]
17. Anurag Kumar	Dept. of P.E. Co.	72244444	[Signature]
18. Dr. J. K. Singh	Dept. of P.E. Co.	72244444	[Signature]
19. Dr. J. K. Singh	Dept. of P.E. Co.	72244444	[Signature]
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## **7. Summary of the workshop**

### **7.1 Introduction**

In the context of accelerating climate change, increasing climate variability, and the rising frequency and intensity of extreme weather events, mountainous and ecologically fragile regions such as Jammu & Kashmir are emerging as critical hotspots of climate-induced disaster risk. Glacial retreat, erratic precipitation, cloudbursts, floods, landslides, heat stress, and ecosystem degradation are no longer isolated phenomena but interconnected manifestations of systemic environmental change and development pressures. These risks are further amplified by fragile terrain, sensitive ecosystems, and socio-economic vulnerabilities, making climate adaptation and disaster risk reduction urgent development imperatives for the region.

Recognising these emerging challenges, the Department of Planning & Geomatics, Centre for Disaster Risk Reduction, and the Department of Environment, Sustainability and Climate Change, Islamic University of Science and Technology (IUST), Kashmir, jointly organised a two-day Capacity Building Workshop on “Climate Change Adaptation & Disaster Risk Reduction” on 25th–26th November 2025, in collaboration with the Department of Disaster Management, Relief, Rehabilitation and Reconstruction (DMRRR), Government of Jammu & Kashmir. The workshop was conceived as a platform to sensitise academicians, planners, engineers, administrators, researchers, and students to the imperative of integrating climate adaptation and disaster risk reduction into policy, planning, and development processes.

The overarching objective of the workshop was to strengthen institutional and professional capacities for climate-resilient, risk-informed, and sustainable development in Jammu & Kashmir, with specific reference to the unique geographical, environmental, and socio-economic context of the Himalayan region. The programme aimed to bridge the gap between climate science, policy frameworks, and on-ground implementation by promoting evidence-based, participatory, and integrated approaches to climate risk management and disaster resilience.

The workshop brought together senior government officials, scientists, domain experts, academicians, researchers, and students, reflecting a strong institutional commitment towards mainstreaming climate adaptation and disaster risk reduction into development and governance frameworks. The presence of national and international experts ensured that deliberations remained grounded in both scientific rigour and practical applicability.

## 7.2 Proceedings of Day 1

The workshop commenced on 25th November 2025 with an inaugural session that set the thematic context and outlined the urgency of addressing climate risks and disaster vulnerabilities in Jammu & Kashmir. The opening remarks emphasised that the region is increasingly exposed to multi-hazard risks due to climate change, unplanned development, environmental degradation, and growing pressure on fragile ecosystems. The speakers underscored that traditional development approaches are no longer adequate and must be replaced with integrated, climate-sensitive, and risk-informed strategies.

The inaugural addresses highlighted habitat loss, unsustainable land use, and rapid urbanisation as key drivers of vulnerability. It was stressed that thoughtful planning, ecosystem protection, and community engagement are essential for building safer and more resilient settlements. The dignitaries also reflected on the significant economic and humanitarian losses caused by past floods, earthquakes, and landslides in the region, reiterating the need for proactive mitigation, preparedness, and institutional strengthening. The Presidential Address delivered by the Hon'ble Vice Chancellor, IUST, provided a comprehensive overview of Jammu & Kashmir's disaster vulnerability profile, with particular emphasis on climate change, glacier dynamics, hydrological risks, and ecosystem sensitivity. He stressed the urgent need for science-based planning, inter-agency coordination, and capacity building at both institutional and community levels.

The first technical session of the workshop was delivered by Prof. Shakil Ahmad Romshoo, Hon'ble Vice Chancellor, IUST, on "Understanding Climate Change: Science, Scenarios, and Impacts." He provided a comprehensive overview of climate science, greenhouse gas emissions, and observed warming trends, and explained the role of climate models and emission scenarios in projecting future risks. He elaborated on the functioning of the Intergovernmental Panel on Climate Change (IPCC) and the relevance of global climate assessments for regional planning.

Using examples from the Himalayan region, Prof. Romshoo highlighted the impacts of climate change on glaciers, snow cover, water resources, ecosystems, and disaster patterns in Jammu & Kashmir. He emphasised that glacial retreat, altered hydrological regimes, and increasing frequency of extreme events pose serious threats to water security, agriculture, infrastructure, and livelihoods. The session stressed that climate science must inform sector-specific action plans at village, block, and panchayat levels, and that adaptation strategies must be grounded in local realities.

The second technical session of the day was conducted by Dr. Murari Lal, Technical Head,



Climate Change Division, RMSI India Pvt. Ltd., on “Impact of Climate Change on Hydrological Disasters & Livelihoods in Highland Regions of North India.” He presented detailed insights into the increasing frequency of extreme rainfall events, floods, landslides, and droughts in mountainous regions and their cascading impacts on agriculture, infrastructure, tourism, and rural livelihoods. He critically examined the vulnerability of highland communities and stressed the need for integrating climate risk assessments into development planning and infrastructure design.

This session was followed by a presentation by Dr. Mukhtar Ahmed, I/C Director, IMD Srinagar, on “Role of IMD in Early Warning Systems.” He explained the operational mechanisms of weather forecasting, technological advancements in meteorological monitoring, and the critical importance of timely and accurate dissemination of weather alerts. He highlighted challenges related to last-mile connectivity, public awareness, and institutional coordination, and emphasised the role of early warning systems in reducing disaster losses and enhancing community preparedness.

The sessions generated active interaction and discussion, with participants seeking clarifications on regional climate projections, forecasting accuracy, and the role of local institutions in disaster preparedness.

### **7.3 Proceedings of Day 2**

The second day of the workshop, 26th November 2025, focused on regional cooperation, policy frameworks, implementation challenges, and localisation of climate action. The sessions highlighted that while scientific knowledge and policy instruments exist, their translation into on-ground action remains constrained by capacity gaps, data limitations, and institutional silos.

The first session of the day featured Dr. Rajan Kumar Kotru, Chief International Technical Advisor, Indo-German Development Cooperation, who delivered a talk on “Regional Cooperation in the Himalayas as a Tool for Climate Change Adaptation and Disaster Risk Reduction.” He highlighted the transboundary nature of climate risks in the Himalayan region and stressed the importance of regional cooperation, knowledge sharing, and ecosystem-based adaptation. He emphasised that glaciers, river systems, and ecosystems transcend political boundaries, and therefore require collaborative, multi-country approaches for effective risk reduction.

This was followed by a presentation by Dr. Majid Farooq, Scientist, Department of Ecology, Environment & Remote Sensing (JKDEERS), on the “J&K Climate Change Action Plan.” He outlined the policy framework, sector-specific strategies, and ongoing initiatives aimed at strengthening climate resilience in Jammu & Kashmir. The presentation covered priority sectors such as water resources, agriculture, forests, health, urban development, and disaster management,



and highlighted the need for inter-departmental coordination and stakeholder engagement.

An open house discussion chaired by Prof. Humayun Rashid provided a platform for participants to critically examine the Action Plan, share field experiences, and offer suggestions for strengthening local implementation. The dialogue underscored that effective climate action requires not only policies but also institutional capacity, community participation, and sustained political commitment.

A major component of the second day was the open house group discussion session on “Localising Climate Action in J&K.” Participants were divided into four thematic groups focusing on energy, agriculture and water, forests and eco-tourism, and health and disaster preparedness. Each group deliberated on sector-specific challenges, vulnerabilities, and opportunities for adaptation and resilience.

The discussions examined issues such as renewable energy transitions, climate-smart agriculture, water security, glacier protection, sustainable tourism, ecosystem conservation, health system preparedness, and community-based disaster risk reduction. Participants highlighted the need for context-specific strategies that reflect local ecological conditions, livelihood patterns, and socio-cultural realities.

The group presentations reinforced that climate resilience is not only about infrastructure but also about institutions, governance quality, social capital, and community engagement. The exercise promoted interdisciplinary thinking and demonstrated the value of participatory approaches in climate adaptation planning.

The workshop concluded with a valedictory session in which the proceedings and key learnings were summarised, and participants reflected on the knowledge gained. Certificates were distributed to all participants in recognition of their active engagement and learning.

The closing remarks emphasised that climate change and disaster risk reduction must be mainstreamed into all sectors of development planning in Jammu & Kashmir. It was reiterated that universities, research institutions, and government departments must work collaboratively to generate knowledge, build capacity, and support evidence-based decision-making. The proceedings formally concluded with IUST reiterating its commitment to capacity building, research, and sustained engagement with government departments and stakeholders for building a climate-resilient Jammu & Kashmir.

## 7.4 Key Recommendations

Based on the deliberations, technical sessions, group discussions, and participant interactions, the following key recommendations emerged:

1. **Climate adaptation and disaster risk reduction must be institutionalised:** Climate and disaster considerations should be mainstreamed into all development policies, sectoral plans, and governance frameworks.
2. **Science-based planning should be promoted:** Climate projections, hazard assessments, and vulnerability analyses must inform all major development decisions.
3. **Ecosystem-based adaptation should be prioritised:** Protection of forests, wetlands, glaciers, and water bodies is essential for reducing climate risks and enhancing resilience.
4. **Early warning systems must be strengthened:** Investments in forecasting, monitoring, and last-mile dissemination are critical for reducing disaster losses.
5. **Sector-specific adaptation strategies should be developed:** Water, agriculture, health, energy, and tourism sectors require tailored adaptation plans.
6. **Institutional capacity needs strengthening:** Government departments and local bodies require technical training, professional manpower, and modern tools for effective implementation.
7. **Inter-departmental coordination must be improved:** Effective climate action requires strong collaboration between environment, planning, disaster management, agriculture, health, and infrastructure departments.
8. **Community participation should be enhanced:** Local knowledge, community networks, and traditional practices must be integrated into resilience strategies.
9. **Data-driven decision-making should be encouraged:** Use of geospatial technologies, climate databases, and risk maps is essential for informed planning.
10. **Regular training and capacity building programmes should be institutionalised:** Continuous learning is necessary to keep pace with evolving climate risks and adaptation approaches.

## 8. Feedback

Feedback was collected from participants using structured evaluation forms on both Day-1 and Day-2 of the workshop. The responses provide valuable insights into the effectiveness of content delivery, relevance, interaction quality, and overall learning outcomes. The assessment reflects both quantitative ratings and qualitative inputs gathered during discussions and open-ended feedback.

### SECTION A – SESSION-WISE FEEDBACK

#### Day-1: 25th November, 2025

##### Talk-1:

*Understanding Climate Change: Science, Scenarios, and Impacts*  
by **Prof. Shakil A. Romshoo**

- Relevance of topic to professional needs: ☐1 ☐2 ☐3 ☐4 ☒5 (Avg. ~4.7)
- Quality of expert talk & presentation: ☐1 ☐2 ☐3 ☐4 ☒5 (Avg. ~4.6)
- Opportunity for Q&A and interaction: ☐1 ☐2 ☐3 ☐4 ☒5 (Avg. ~4.5)
- Overall satisfaction with the Talk: ☐1 ☐2 ☐3 ☐4 ☒5 (Avg. ~4.7)

##### Talk-2:

*Impact of climate change on hydrological disasters & livelihoods in highland regions of North India* by **Dr. Murari Lal**

- Relevance of topic to professional needs: ☐1 ☐2 ☐3 ☐4 ☒5 (Avg. ~4.6)
- Quality of expert talk & presentation: ☐1 ☐2 ☐3 ☐4 ☒5 (Avg. ~4.5)
- Opportunity for Q&A and interaction: ☐1 ☐2 ☐3 ☐4 ☒5 (Avg. ~4.4)
- Overall satisfaction with the Demonstration: ☐1 ☐2 ☐3 ☐4 ☒5 (Avg. ~4.6)

##### Talk-3:

*Role of IMD in Early Warning System* by **Dr. Mukhtar Ahmed**

- Relevance of topic to professional needs: ☐1 ☐2 ☐3 ☐4 ☒5 (Avg. ~4.5)
- Quality of expert talk & presentation: ☐1 ☐2 ☐3 ☐4 ☒5 (Avg. ~4.4)
- Opportunity for Q&A and interaction: ☐1 ☐2 ☐3 ☐4 ☒5 (Avg. ~4.3)
- Overall satisfaction with the Demonstration: ☐1 ☐2 ☐3 ☐4 ☒5 (Avg. ~4.5)

#### Day-2: 26th November, 2025

##### Talk-4:

*Regional Cooperation in the Himalayas as tool for Climate Change Adaptation and Disaster Risk Reduction* by **Dr. Rajan Kumar Kotru**

- Relevance of topic to professional needs: ☐1 ☐2 ☐3 ☐4 ☒5 (Avg. ~4.6)
- Quality of expert talk & presentation: ☐1 ☐2 ☐3 ☐4 ☒5 (Avg. ~4.5)

- Opportunity for Q&A and interaction: ☐1 ☐2 ☐3 ☐4 ☒5 (Avg. ~4.4)
- Overall satisfaction with the Demonstration: ☐1 ☐2 ☐3 ☐4 ☒5 (Avg. ~4.6)

#### **Talk-5:**

##### *J&K Climate Change Action Plan* by **Dr. Majid Farooq**

- Relevance of topic to professional needs: ☐1 ☐2 ☐3 ☐4 ☒5 (Avg. ~4.7)
- Quality of expert talk & presentation: ☐1 ☐2 ☐3 ☐4 ☒5 (Avg. ~4.6)
- Opportunity for Q&A and interaction: ☐1 ☐2 ☐3 ☐4 ☒5 (Avg. ~4.5)
- Overall satisfaction with the Talk: ☐1 ☐2 ☐3 ☐4 ☒5 (Avg. ~4.7)

#### **Open House Discussion:**

##### *Localising Climate Action in J&K* coordinated by **Prof. Humayun Rashid**

- Clarity of instructions for OHD activity: ☐1 ☐2 ☐3 ☐4 ☒5 (Avg. ~4.5)
- Effectiveness of resource persons and moderators: ☐1 ☐2 ☐3 ☐4 ☒5 (Avg. ~4.7)
- Relevance of discussion to professional practice: ☐1 ☐2 ☐3 ☐4 ☒5 (Avg. ~4.6)
- Overall satisfaction with conduct of OHD: ☐1 ☐2 ☐3 ☐4 ☒5 (Avg. ~4.7)

#### **SECTION B – WORKSHOP LOGISTICS & ARRANGEMENTS**

- Venue & Seating Arrangements: ☐1 ☐2 ☐3 ☐4 ☒5 (Avg. ~4.5)
- Audio-visual & Technical Support: ☐1 ☐2 ☐3 ☐4 ☒5 (Avg. ~4.4)
- Registration & Coordination: ☐1 ☐2 ☐3 ☐4 ☒5 (Avg. ~4.6)
- Hospitality & Support Staff: ☐1 ☐2 ☐3 ☐4 ☒5 (Avg. ~4.6)
- Food & Refreshments: ☐1 ☐2 ☐3 ☐4 ☒5 (Avg. ~4.5)

#### **SECTION C – OVERALL WORKSHOP ASSESSMENT**

- Adequacy of time for sessions/activities: ☐1 ☐2 ☐3 ☐4 ☒5 (Avg. ~4.3)
- Usefulness of open interactive session: ☐1 ☐2 ☐3 ☐4 ☒5 (Avg. ~4.7)
- Opportunities for networking: ☐1 ☐2 ☐3 ☐4 ☒5 (Avg. ~4.5)
- Overall satisfaction with the workshop: ☐1 ☐2 ☐3 ☐4 ☒5 (Avg. ~4.7)
- Extent to which workshop met expectations: ☐1 ☐2 ☐3 ☐4 ☒5 (Avg. ~4.7)
- Would you recommend such workshops to others? ☒ Yes ☐ No

#### **SECTION D – OPEN-ENDED FEEDBACK (CONSOLIDATED)**

##### **1. Most useful session/talk and why:**

Participants most frequently cited:

- Climate Science & Impacts (Prof. Romshoo) – for scientific clarity
- J&K Climate Change Action Plan (Dr. Majid Farooq) – for policy relevance
- Open House Discussion – for interaction and local applicability

##### **2. Any session/topic that needed more depth or time:**

- Local implementation mechanisms

- Sector-specific adaptation strategies
- Community-based approaches
- Glacier and flood risk management

### **3. Suggestions for improving future workshops:**

- Include field visits to climate-vulnerable areas
- Add hands-on training sessions on climate data and risk mapping
- Provide training manuals/handouts
- Increase duration of group activities and discussions
- Organise advanced thematic workshops

### **4. Any other comments/feedback (food, logistics, etc.):**

Participants expressed satisfaction with arrangements, hospitality, and coordination. Many appreciated the professional conduct of the organising team and supportive staff.

The consolidated feedback indicates very high participant satisfaction with the content quality, relevance, interaction, and organisation of the workshop. The programme was widely acknowledged as timely, relevant, and impactful in enhancing understanding of climate change adaptation and disaster risk reduction in the context of Jammu & Kashmir. Participants strongly recommended replication of such capacity-building initiatives at district and departmental levels.

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## PHOTO GALLERY



*Inaugural Session presided by Prof. Shakil A. Romshoo, Hon'ble VC, IUST*



*Presidential address by Prof. Shakil A. Romshoo, Hon'ble VC, IUST*



*Technical sessions, Day 1*





*Technical sessions, Day 2*



*Valedictory and Group Photograph*