

RESEARCH PROFILE SUNRAISE RESEARCH PARTNERS





P11: KUMAUN UNIVERSITY

Nainital, Uttarakhand, India

Departments concerned with SUNRAISE-related topics:

- Department of Geology
- Department of Botany
- Department of Forestry and Environmental Sciences

Contact person: Prof. Dr. Prakash C. Tiwari (pctiwari@yahoo.com)

SUNRAISE-RELEVANT RESEARCH TOPICS

1. Sustainable natural resource management in Himalayan mountains

KEY PERSONALITIES, POTENTIAL MASTER'S AND DOCTORAL SUPERVISORS

- ➤ Prof. Dr. Prakash C. Tiwari Research interests: Natural resource management; High mountain urbanisation; Climate change adaptation
- ➤ Prof. Dr. J. S. Rawat Research interests: Mountain geo-hydrology; Water resource management; Climate change adaptation
- ➤ Prof. Dr. B. S. Kotalia Research interests: Mountain geo-hydrology; Water resource management; Climate change

CURRENT AND PAST PROJECTS

Project 1: "Joint Indo-Norwegian	Funded by: Norwegian	Project type:
research and education on water-	Centre for International	research,
related changes in Himalaya"	Cooperation in Education	education
	(SIU), Norway	
	Keywords: Water management; Students participation; Joint fieldwork	

Project 2: "Urban Growth, Land-Use	Funded by: National	Project type:
Change, and Growing Vulnerability in	Aeronautics and Space	research
the Greater Himalaya Mountain Range	Administration (NASA), USA	
Across India, Nepal, and Bhutan"	Keywords: Land use changes; Urbanisation;	
	Hazards; Remote sensing	



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Project 3: "Pluri-scalar Approaches for Co-production of Pan-Asian Drought Assessment and Adaptive Resource Management in Uttarakhand Himalaya, in Collaboration with Newcastle University, U.K." Funded by: U.K. Royal Society, U.K.

Project type: research

Keywords: Drought; Climate change; Drought assessment; Water resource management

Project 4: "Development of an Evidence-Based Climate Change Adaptation Toolkit to Help Improve Community Resilience to Climate Change Impacts in Uttarakhand, India" Funded by: Asia Pacific Network for Global Change Research (APN), Kobe, Japan Project type: research

Keywords: Climatic extremes; Climate change adaptation; Vulnerability and risk assessment

CURRENT AND RECENT PhD THESES

- Arifa Begum "A Geographical Study of Urban Growth and Quality of Life in the Himalayan Foothills of Kumaun" (2018 ongoing)
- Dheeraj Pant "Climate Change and its Impact on Community Health in Betalghat Development Block, Kumaon Lesser Himalaya" (2017 – ongoing)
- Kevala Nand "Impact of Climate Change on Water Resources in Kujgad Watershed, Kumaun Himalaya" (2017 – ongoing)
- ➤ Manika Kweera "Sustainable Urban Development under Climate Change in the Lake Region of District Nainital, Uttarakhand" (2020 ongoing)
- Manisha Pant "Climate Change and its Impact on Human Health in Mountainous and Foothill Regions of District Nainital, Uttarakhand" (2018 ongoing)
- ➤ Mohan Singh "Impacts of Climate Change on Agriculture, Food Security and Rural Health in Balia Catchment, Kumaon Himalaya" (submitted) (2014 2020)
- ➤ Pooja Nainwal "Women's Perception, Responses and Adaptation to Climate Change in Ramgad Watershed, Kumaun Himalaya, Uttarakhand" (2018 ongoing)
- Rahul Kumar "Impact of Climate Changes on Farming System and Food Security in Kujgad Watershed, Kumaon Himalaya" (2020 – ongoing)
- Ritika Vishnoi "Changes in Rainfall Pattern and its Impact on Food Security status in Ramgad Catchment of Kumaun Himalaya: A Community based Adaptation Strategy" (2013 – 2021)
- Vaseem Ahmad "Impact of Climate Change on Water Resources: A Case Study of Balia Catchment, District Nainital, Uttarakhand" (2017 – ongoing)

RESEARCH AMBITIONS IN RELATION TO SUNRAISE

- 1. Development of further research activities in globally and locally high priority areas
- 2. Moving ahead in education in globally and locally high priority areas



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ENABLERS AND BARRIERS ENCOUNTERED FOR RESEARCH DEVELOPMENT

Enablers	Barriers
 Internationally reputed, highly experienced, hardworking faculty Location of the University in the heart of Himalaya 	 Shortage of financial resources Shortage of infrastructure Shortage of equipment

NATIONAL RESEARCH/ POLICY SUPPORTING RESEARCH DEVELOPMENT

1.	National Jal Jeevan Mission (National Water Mission)	
2.	National Climate Change Action Plan	
3.	National Mission on Sustaining Himalayan Ecosystem	
4.	National Mission for the Himalayan Studies	

CAPABILITY IMPROVEMENT TARGETED TO FULFIL THE ASPIRED RESEARCH GOALS

Improvements are desired in:

- > Equipment
- > Training for academic staff
- > Access to international databases
- External experts support or PhD supervision
- Access to modern information technology and library resources

ENABLERS AND BARRIERS ENCOUNTERED FOR RESEARCH TRAINING

Enablers	Barriers
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