

Introduction

The Himalayan University Consortium (HUC) organized a training programme on springshed management for socio-ecological resilience in the Hindu Kush Himalaya (HKH) on 24 March–5 April 2019 to **share knowledge**, **build networks**, and **initiate partnership efforts** across the region. Participants from different organizations have proceeded to apply and expand on their learning from the training to different research, management, and training programmes. These outscaling efforts have reached stakeholders at the policy-making level as well as aided researchers and stakeholders at the grassroots, bolstering springshed management in the HKH.





"This training is the first of its kind in integrating socio-ecological resilience perspectives and inter- and trans-disciplinary approaches. The *Protocol for Reviving Springs in the Hindu Kush Himalaya* already involves elements such as governance and community engagement, but this training introduces the approaches more thoroughly, particularly catering to academics who will apply them in their teaching."

Himanshu Kulkarni

Resource Person

Executive Director and Secretary, ACWADAM



Participants applying learning into action

"The training boosted my confidence to help communities in need of technical inputs and conduct training programmes for government officials, local community members, and students."

Ugyen Dorji

Department of Forestry, College of Natural Resources Royal University of Bhutan



PHOTO: UGYEN DORJI

"The training was an illuminating experience and improved my technical skills. I was able to provide training and technical inputs to foresters, government officials, and community members on springshed management. I am confident that the training will create further knowledge sharing among the wider local community."

Tsheten Dorji,

Chief, Conservation and Sustainable Livelihood Division, Royal Society for Protection of Nature, Bhutan



PHOTO: SARA NOWREEN

"I applied learning from the training into my collaborative research project that focused on water security in hard-to-reach mountainous areas with an environmental security framework. I introduced some steps from the six-step protocol at the field site in Bandarban District, Bangladesh. I was able to influence people directly involved in managing and using the springs at Vangamora and Pladoi villages, in turn making an impact on the community and local-level stakeholders."

Sara Nowreen

Assistant Professor Institute of Water and Flood Management (IWFM), Bangladesh University of Engineering and Technology (BUET), Bangladesh "I conducted a three-day training on springshed management for 17 young soil conservation officers in the Department of Forest and Soil Conservation, Nepal. We were able to incorporate springshed management activities in the regular government budget for four river basin offices and the Kulekhani resource centre."

Prakash Singh Thapa

Watershed and Landslide Management Division, Department of Forests and Soil Conservation, Nepal



PHOTO: PRAKASH SINGH THAPA

"Through this training, I was able to delve deeper into springshed management and deepen my understanding of its importance for socio-ecological resilience. During a graduate course on hydrogeology organized by the Small Earth Nepal our team proposed a project based on the six-step protocol for springshed management. The project was well received by the judges and other team members."

Susmina Gajurel

The Small Earth Nepal, Nepal



The impact at a glance

2019

Academic impact

May, Bangladesh: Conducted a three-day course on weather forecasting, basin hydrological modelling, and river hydrodynamic modelling for flash flood forecasting at the IWFM, BUET

May, Nepal: Two participants acting as academic supervisor and co-supervisor for MSc thesis assessing water resources in Chure region of Nepal at the Central Department of Environmental Science (CDES), Tribhuvan University (TU)

May, Nepal: Supervised a BSc thesis on springs and two ongoing MSc projects on the Jhimruk watershed

June, Bhutan: Water resources management module taught to 32 undergraduate students in the College of Natural Resources

June, Bangladesh: Conducted a three-day course on climate input data processing and analysis at the IWFM, BUET

July, Bangladesh: Organized a workshop at Dhaka University on gender, water, and empowerment among ready-made garment women workers

August, Nepal: Incorporated lessons from the training in the MSc course at the Central Department of Environmental Science CDES, TU

August, Nepal: Research grant on water resources submitted by a participant as the principal investigator passed the second-stage review

September, Bangladesh: PhD student in the University of Chittagong being guided on spring water management in the mountainous areas of Khagrachhari, Chattogram

September, Bangladesh: Completed supervision of Msc thesis on indigenous people's water sources and their water quality

Community impact

April, Nepal: Various field visits organized to the springs in the Kathmandu valley by the CDES, TU

June, Bhutan: Basic training on managing springs conducted for 40 community members in Punakha

August, Bangladesh: Interactions held with people directly involved in managing and using a spring through field work at Vangamora and Pladoi villages

Ministry and policy-level impact

June, Bhutan: Training of trainers on water users' associations conducted for 20 agriculture officers and extension agents from the Ministry of Agriculture and Forests

July, Nepal: Three-day training conducted for 17 soil conservation officers from the Department of Forests and Soil Conservation

August, Bhutan: Six representatives from the Royal Society for the Protection of Nature (RSPN) and 24 forestry officers from the Divisional Forest Offices trained on springshed and watershed planning by the RSPN

August, Nepal: Incorporated springshed management activities in the regular government budget in four river basin offices

September, India: Field visit organized by the Department of Environmental Science, University of Kashmir, to various springs in southern districts of the Kashmir Himalaya to study spring classification flow measurements, analyse drinking water quality, and characterize aquatic biodiversity

Networking

September, Uzbekistan: Training participants from India and Nepal and resource persons from ICIMOD and SDC participated in a training in Tashkent on water resources management and sustainable development strategies in arid regions under a changing climate.



HUC's mandate is to develop an effective, sustainable network of universities and knowledge generating and exchange institutions within and outside the Hindu Kush Himalayan (HKH) region.

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