



***STORYING CLIMES OF THE HIMALAYA, ANDES, AND
ARCTIC: Anthropogenic water bodies, multispecies
vulnerability, and sustainable living***

Environmental Humanities online Publishing Workshop

9th October-14th October 2021

Organizers: *Himalayan University Consortium Thematic Working Group on Himalayan Environmental Humanities; in partnership with My Climate Risk, a lighthouse activity of World Climate Research Programme (WCRP), Himalayan Centre for Environmental Humanities (HCEH), Yunnan University, and The Global South Studies Center at University of Cologne. Co-hosted by Royal Thimphu College.*

Context and conceptual arc

Geographically apart from one another, the Himalaya, the Andes, and the Arctic/tundra play a critical role in the hydrological cycle of the earth with their water in both solid and liquid forms as well as in shaping multispecies habitats and cultural heritages within the biospheres fed by their waters. At the same time, they are comparably experiencing risks and degradations from global climate change, such as melting ice, species extinction, and radical transformations of ecosystems and livelihoods. As a global outreach effort of the Himalayan University Consortium (HUC) for comparative studies of climate change in the earth's altitudinal and latitudinal highlands, this workshop invites social and natural scientists, humanities scholars, graduate students, and development specialists to share their interdisciplinarily-intended documentations and discussions of historical and contemporary narratives of climate knowledge in habitat-specific life communities in these three world regions

The conceptual arc of this workshop is “**clime**” or place-specific manifestation of climate patterns and changes, which implies the mutual embodiment of climate and place (Flemming 2010; Carey and Garone 2014). It is intended to minimize the unnecessary separation of the abstractly-constructed climate system from the lived earth as a multispecies planet (Hulme 2015; O’Gorman et al 2019) and to emphasize diverse sensory experiences of climate dynamics and changes over time, contextualized in specific life communities, as weather, seasons, shifting snowlines, the fluctuating height of glaciers, the changing courses of rivers, earthquakes, floods, droughts, and the migrations of humans and nonhumans. The idea of clime resonates with many existing place-based conceptual perspectives on the water-climate nexus emerging from the Himalayan, the Andean, and the Arctic contexts, such as “wet theory” (Lahiri-Dutt 2014), “terrestrial ocean” (Smyer Yü 2021), “fluvial world” (Iqbal 2021), “water as a sentient being” (Brandshaug 2019), “water commons” (Miller 2020; Smyer Yü 2021), “water facilitated commerce” (Cederlöf 2014), “water war” (Chellaney 2013), “pluriverse” (de la Cadena and Blaser 2018), “the New Arctic” (Evengård et al 2015), and “the cryo-historical moment” (Sörlin 2015). While all of these perspectives call for multifaceted meanings of being human as a relational species in concrete historical, ecological, social, and affective terms, they also prompt this workshop to build horizontal connections between them and explore more integral approaches to the understanding of the diverse local manifestations of global climate change. As clime in this workshop particularly refers to places with high water content that are known for their roles in shaping the global hydrological cycle and local ecosystems and livelihoods, its watery character compels our watery inquiries.

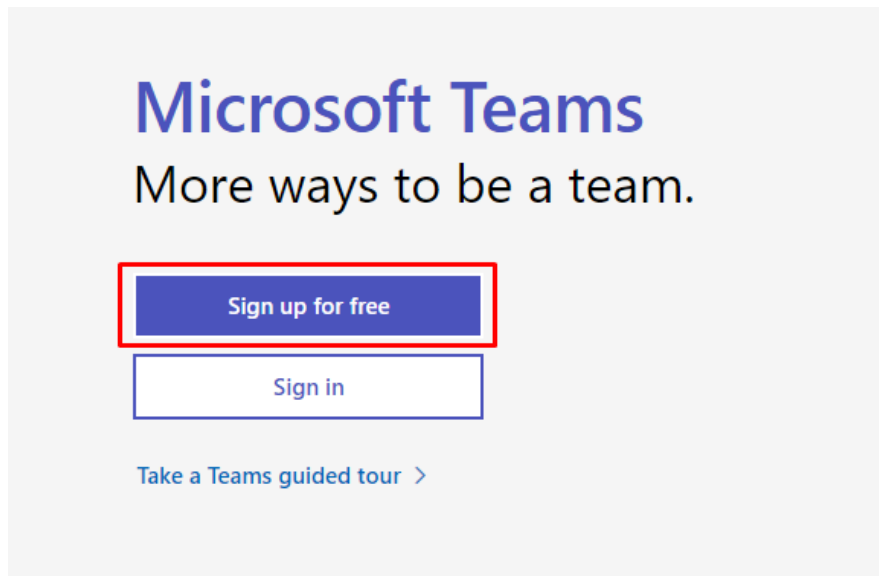
Topical themes

Framed by the interconnected topical themes of water bodies (glaciers, lakes, and rivers), multispecies vulnerability (humans, animals, plants, culturally animated landforms, and traditionally revered deities and supernatural beings), and knowledge of sustainable living (local and global), we welcome papers addressing, but not limited to, the following topics contextualized in watery climes: indigenous histories of water, human affective consciousness of water, climate knowledge in indigenous meteorology, local memories as proxies of climate change, local climate knowledge absent the word “climate,” climate incarnate as seasons and weather, prehuman histories of glaciers and rivers, mountains as water bodies, the Himalayan-Tibetan Plateau as a monsoon maker, geopoetics of glaciers, nonhuman nations/geographies, multispecies relational ontology, the Little Ice Age (1300s-1800s) and human/nonhuman migrations, modern hyperseparation of water and land, anthropogenic effects of modern borders, conservation values of indigenous animistic landforms and water bodies, water as an agent of environmental peacebuilding, and emerging new environmental ethics.

Technical Instruction

Register an email for Teams to join the MS Teams channel

1. Go to: <https://www.microsoft.com/en-us/microsoft-365/microsoft-teams/group-chat-software>



2. Select sign up for free.
3. Type your email. Click next.

Microsoft Teams



Enter an email

We'll use this email to set up Teams. If you already have a Microsoft account, feel free to use that email here.

Email
[redacted]@gmail.com

Next

Microsoft Teams

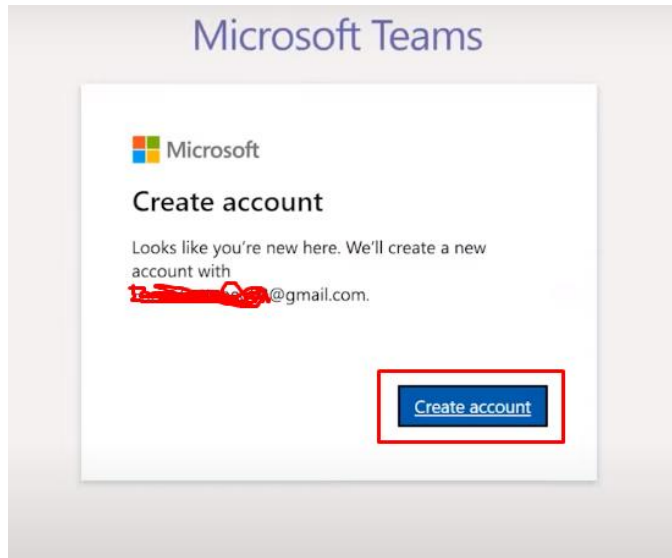


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To connect students and faculty for courses and projects, in a classroom or online
- For friends and family**
For everyday life, to make audio or video calls
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4. Select for work and organizations, next
5. Select create account



6. Type your password, select next.
7. Then type in your code that is sent in your email to verify it, select next.



The last few details

First name Middle name Last name

Company name

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8. Add the final details and select Set-up Teams
9. Either use Windows app (Recommended) or use the web app.
10. You are ready to go!

Instructions to join the meeting in Microsoft Teams

1. Click on the “Click here to join the meeting” hyperlink (shown below), which you received with the email.

Microsoft Teams meeting

Join on your computer or mobile app

[Click here to join the meeting](#)

[Learn More](#) | [Meeting options](#)

Image 1

2. The link will open in your browser as below.

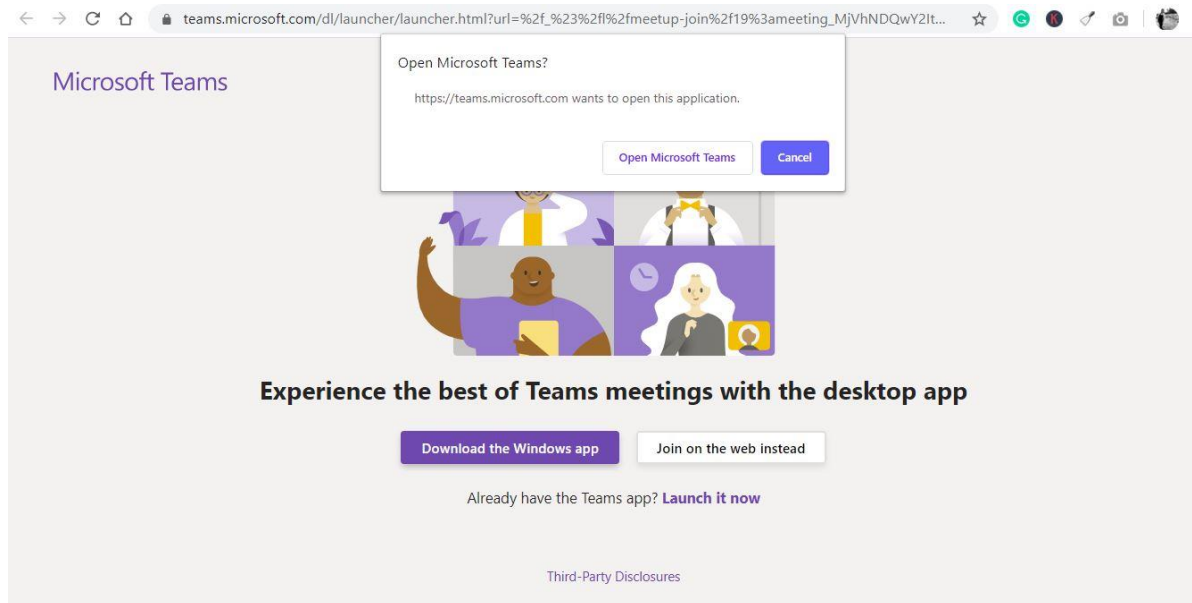


Image 2

3. There are two ways to join the public lecture:
 - a. Via **web browser** which means no prior app installation is required, and
 - b. Via pre-installed **Microsoft Teams application** on your device. (recommended)

a. Join via **web browser**

- Click ‘**Cancel**’ in the pop-up box as seen in Image 2.
- Click ‘**Join on the web instead**’ button on the screen.
- You will then be redirected to the meeting window. Please mention your **full name** in the space provided and click ‘**Join now**’ (Refer to Image 3 below)

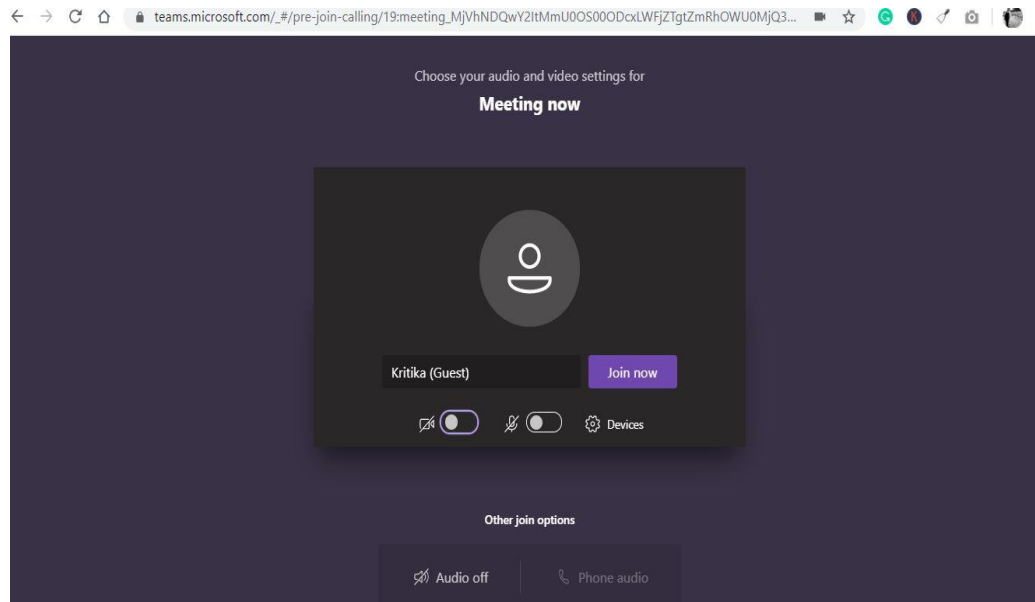


Image 3

- Once the organizer approves your request, you’ll be able to join the session. Please keep your microphone muted to avoid unwanted disturbance unless you are called to speak.

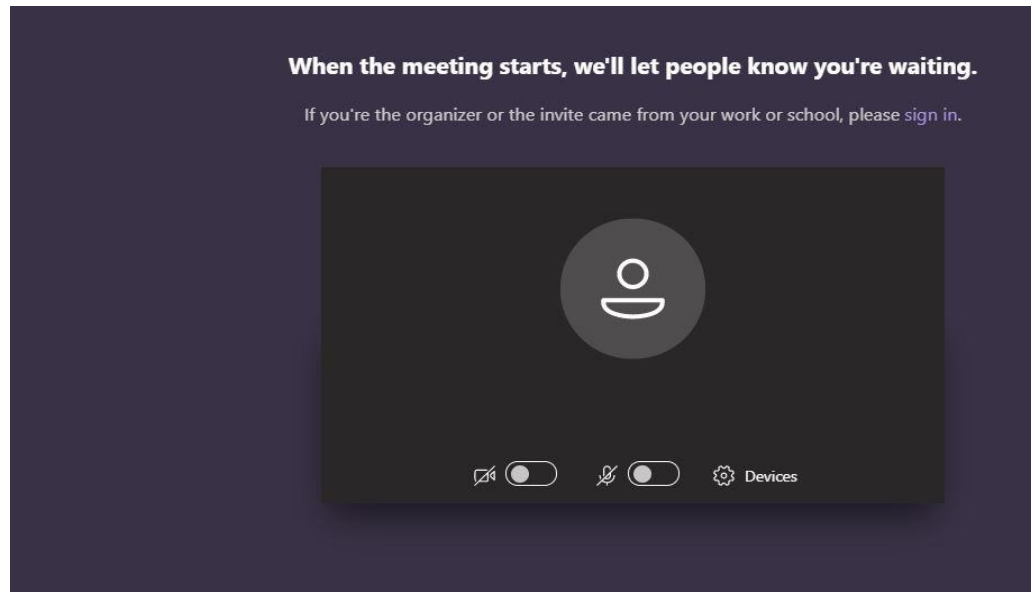


Image 4

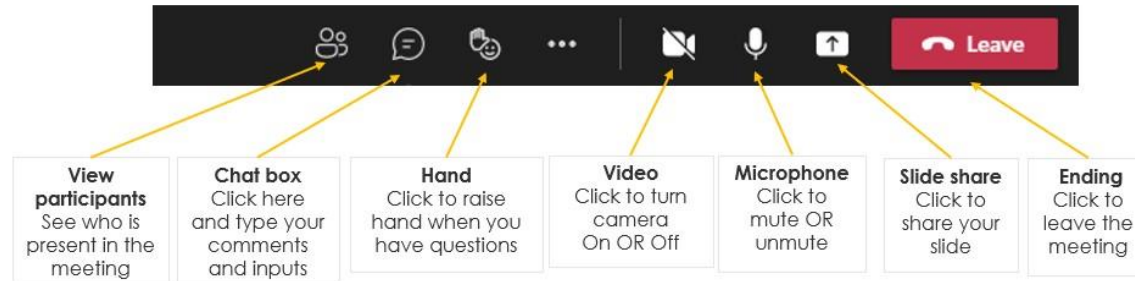
b. Join with **Microsoft Teams Desktop Application**

- If you already have installed MS Teams in your computer, then click on '**Open Microsoft Teams**' from the pop-up box in Image 2 above.
- You will be redirected to your MS Teams application on your computer. Once the organizer approves your request, you'll be able to join the meeting. Please keep your microphone muted to avoid unwanted disturbance unless you are called to speak.

Important guidelines

1. Please join in 5-10 minutes prior to the indicated time to ensure that everything (audio, video, etc.) goes smooth.
2. Make sure your internet connection is stable during the event.
3. Please remain '**muted**' at all times unless you are requested to speak.
4. If you are disconnected, you can rejoin using the same link.
5. Please use your '**full name**' while joining the session.

Before & during the Teams meeting



Before the meeting:

- Kindly share your PPT presentations (if any) with meeting organizers so that they can run the presentation if there are any technical issues.
- Please join 10-15 minutes before the event to ensure that everything (audio, video, etc.) goes smooth.
- Make sure your internet connection is stable during the event.
- Please open the necessary event-related documents/presentations beforehand to be able to share your screen in a timely fashion. Also, consider closing other applications/documents that could distract you.
- Consider keeping your mobile device silent as you speak.
- Position your laptop/computer at eye level. You can always use a stand (a pile of books or boxes might help).

During the meeting:

- Switch off your microphone and camera during the event.
- Switch on your microphone and camera only when it's your time to speak.
- Once the moderator introduces you, the producer will spotlight your video.

- Click on “Share content” button to share your screen with the participants.
- Make sure that your Content/PowerPoint is opened before you start sharing your screen.
- Make sure to put your PowerPoint in full screen mode after you have shared your screen.
- A red line around your window will indicate that your screen is being shared.
- Make sure to un-share your screen after ending your presentation.

Note: If you don't find any of the abovementioned features on MS Teams, kindly consider leaving the meeting and re-joining or signing out of MS Teams and signing in again.

How to join the Meeting?

Through Teams App:

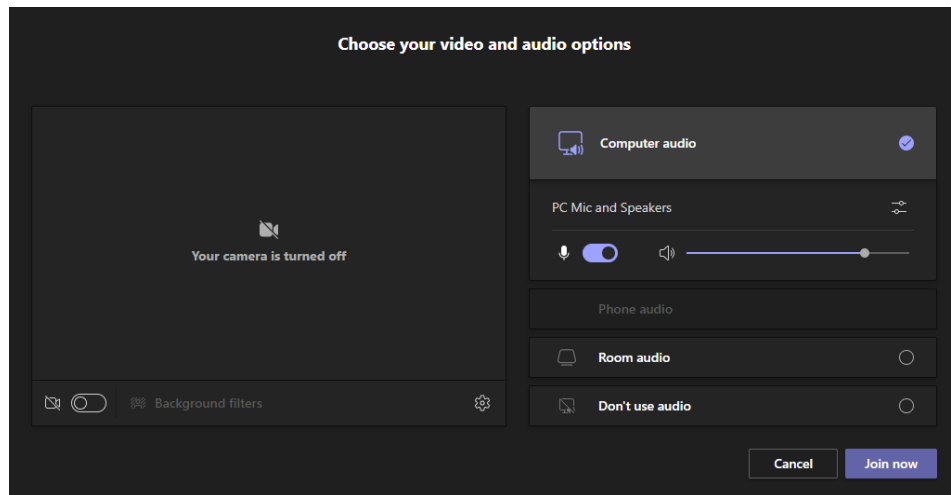
Microsoft Teams meeting

Join on your computer or mobile app

[Click here to join the meeting](#)

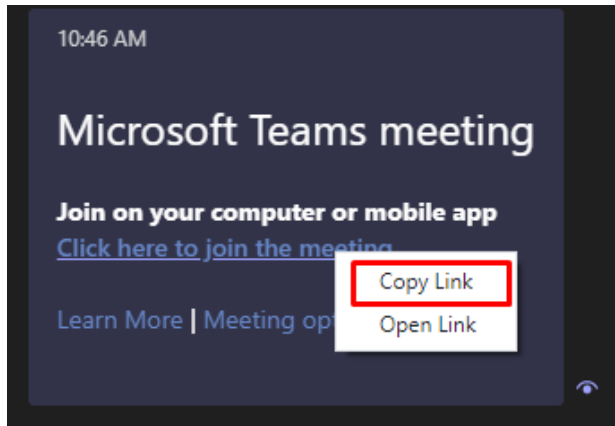
[Learn More](#) | [Meeting options](#)

1. Click on the meeting link “Click here to join the meeting”

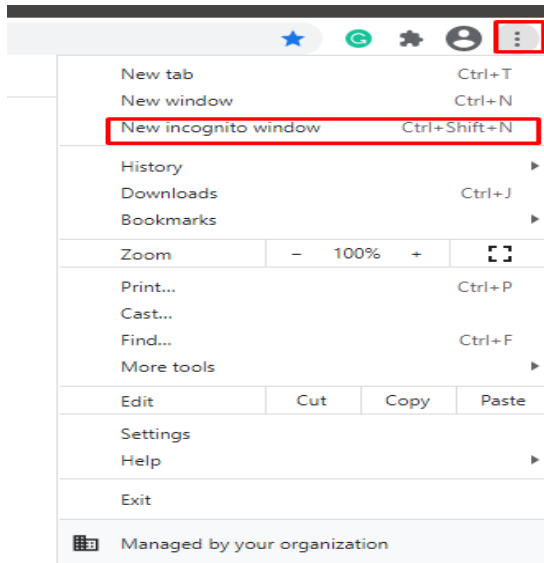


2. You will be directed to the MS Teams app, if you have an email address registered on MS Teams.
3. Click on “Join now” option.

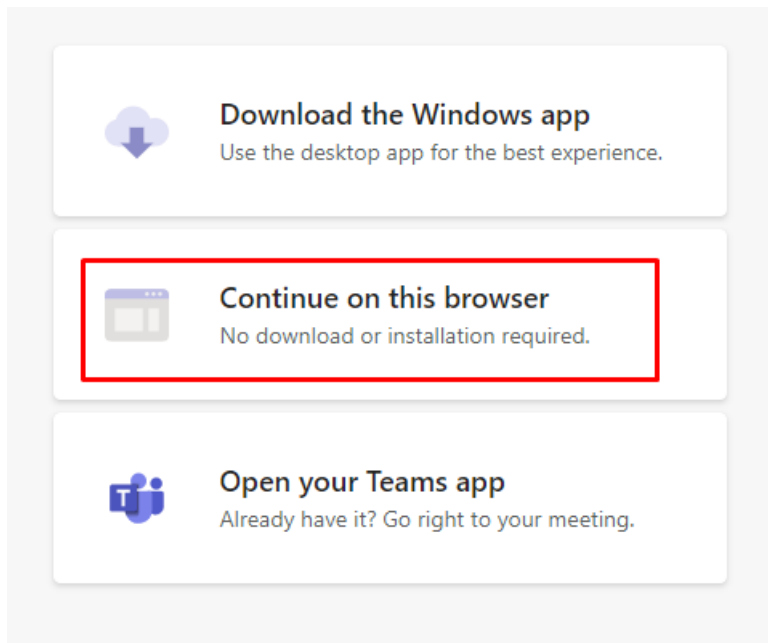
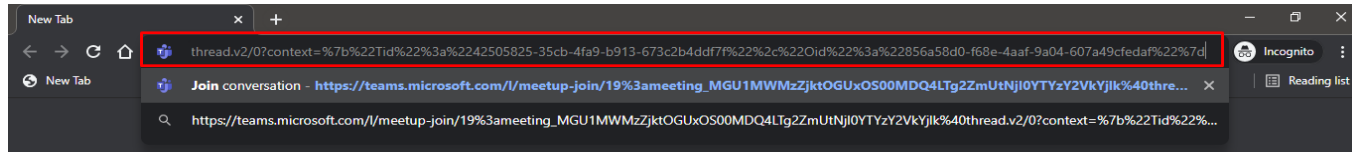
Using the Web Version:



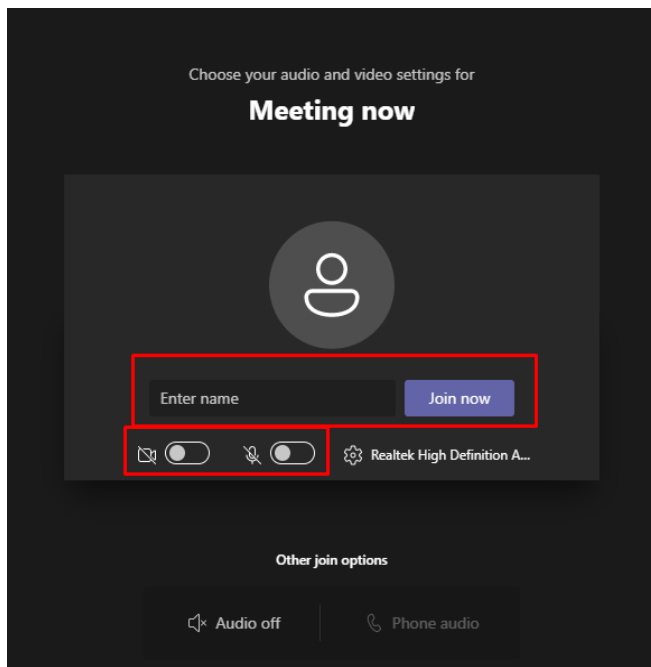
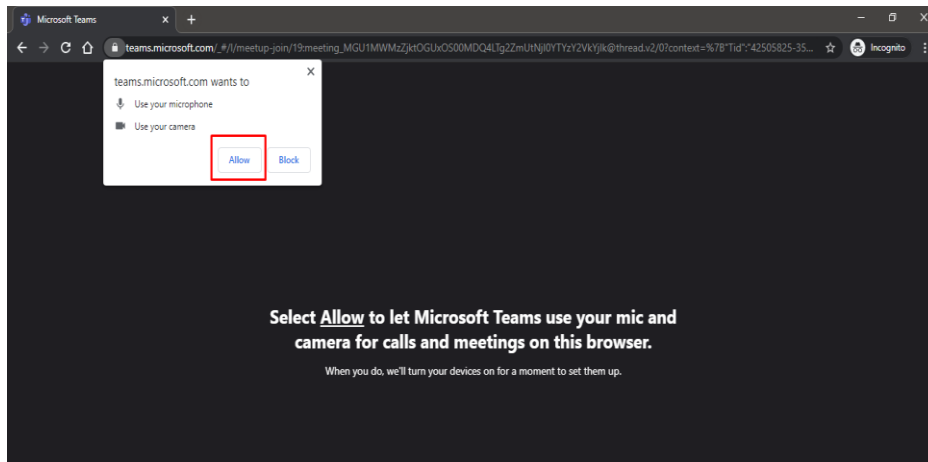
1. Right-click on “Click here to join the meeting”
2. Click on “Copy Link”
3. Open your “Google Chrome” browser, and click on “New incognito window”



4. Paste the meeting link in the URL tab



5. Click on “Continue on this browser”



6. Enter your Full Name and turn off your Camera & Microphone. Then Click on “Join now” to enter the meeting.

Programme Schedule

9 October, Saturday

Inaugural Keynote session (2 hours)

“Climing” Earth Summits of the Himalayas, Andes and Arctic

<i>Time (Bhutan, Thimphu)</i>	<i>Local Time</i>	<i>Welcome Remarks</i>	<i>Keynote Session</i>	<i>Chairperson and Discussant</i>
Thimphu 6:00- 8:00pm	Kathmandu 5:45-7:45pm; US (EDT) 8:00-10:00am; US (PDT) 5:00-7:00am; Oslo/Stockholm/Berlin/Am sterdam 2:00-4:00pm; Bogota/Lima 7:00-9:00am; Sydney/Melbourne 11:00pm – 1:00am; Mumbai 5:30-7:30pm; Bandar Seri Begawan 8:00- 10:00pm	Pema Gyamtsho International Centre for Integrated Mountain Development (ICIMOD), Director General. Tshewang Tandin Royal Thimphu College (RTC), president.	“The ‘Third Pole’ and Monsoon Asia: Histories, Narratives, Futures” Sunil Amrith Yale University, New Haven “ <i>Climing</i> Mountains? Climate, Water and Power in the Peruvian Andes” Karsten Paerregaard University of Gothenburg, Sweden “Pluriversal tundra: Storying more than human ecologies across deep, accelerated, and troubled times” Astrid Oberborbeck Andersen Aalborg University, Denmark	Chairperson Arupjyoti Saikia, Discussant Dan Smyer Yü

****20-25 minutes for each keynote talk; 45 minutes for discussions**

10 October, Sunday

Thematic Session I (2 hours)

Nourishing Earth, Indigenous Cosmovisions, and Climate Education in the Anthropocene

<i>Time (Thimphu)</i>	<i>Local Time</i>	<i>Session Chairman and Discussant</i>	<i>Participant Presentations</i>
Thimphu 7:00-9:00pm	Kathmandu 6:45-8:45pm; US (EDT) 9:00-11:00am; US (PDT) 6:00-8:00am; Oslo/Stockholm/Berlin/Amsterdam 3:00-5:00pm; Bogota/Lima 8:00-10:00am; Sidney/Melbourne 12:00midnight (11 October) – 2:00am; Mumbai 6:30-8:30pm; Bandar Seri Begawan 9:00-11:00pm	Chairperson – Dan Smyer Yü Discussant – Anders Burman , University of Gothenburg, Sweden.	“Telling Stories: Applying a Transdisciplinary Pedagogy to Cryospheric Climes” Vandana Singh Framingham State University, USA
			“Making a world out of climate and a climate out of the world: Encountering the vibrant Andean Anthropocene” Gustavo Valdivia Universidad Nacional Mayor de San Marcos, Lima, Peru
			“Buen vivir, Ontoecologies and Indigenous Economic Practices of Environmental Justice from the Global South” Eduardo Erazo Acosta University Nariño, Columbia
			The Sacredness of Himalayas and the Rights of Nature: Exploring the Conflicts and Complementarities” Bibhu Prasad Nayak Tata Institute of Social Sciences, Hyderabad.

****15-20 minutes for each paper presentation; 30-40 minutes for discussions**

11 October, Monday

HUC-WCRP International and Interdisciplinary Partnership Building for Climate Studies

Chairperson – Chi H Truong (a.k.a Shachi), Himalayan University Consortium.

<i>Time (Thimphu)</i>	<i>Local Time</i>	<i>First Hour</i>	<i>Second Hour</i>
Thimphu 6:00-8:00pm	Kathmandu 5:45-7:45pm; London: 1:00-3:00pm; US (EDT) 08:00-10:00am; US (PDT) 5:00-7:00am; Oslo/Stockholm/Berlin/Amsterdam 2:00-4:00pm; Bogota/Lima 7:00am-9:00am; Sydney/Melbourne 11:00pm-1:00am; Mumbai 5:30-7:30pm; Bandar Seri Begawan 8:00pm-10:00pm	International partnership and leadership building Led by Chi H Truong (a.k.a Shachi) and Ted Shepherd <ul style="list-style-type: none"> Introducing the Global South Studies Center (GSSC) at the University of Cologne by Michael Bollig, GSSC Board Member and Vice Rector. Announcing Himalayan Center for Environmental Humanities at RTC by Jelle Wouters. HUC Environmental Humanities global outreach by Dan Smyer Yü. 	Special lecture – “Meaningful climate science” Ted Shepherd University of Reading, UK Discussions led by Dan Smyer Yü Jelle Wouters Arupjyoti Saikia

12 October, Tuesday

Thematic Session II (2 hours)

Water Commoning, Indigenous Memories of Climate Change, and Multispecies Vulnerability

<i>Time (Thimphu)</i>	<i>Local Time</i>	<i>Session Chairperson and Discussant</i>	<i>Participant presentations</i>
Thimphu 11:00am- 1:00pm	Kathmandu 10:45am-12:45noon; US (EDT) 1:00am-3:00am; US (PDT) 10:00pm-12:00 midnight (<i>11 Oct</i>); Oslo/Stockholm/Berlin/Amsterdam 7:00-9:00am; Bogota/Lima 12:00 midnight-2:00am; Sydney/Melbourne 4:00-6:00pm; Mumbai 10:30am-12:30 noon; Bandar Seri Begawan 1:00-3:00pm	Chairperson Dan Smyer Yü Discussant Willem van Schendel Amsterdam University, The Netherlands	“ <i>Chithu Huluni</i> : Idu Mishmi, river valleys and water bodies of Dibang Valley, Arunachal Pradesh” Ambika Aiyadurai (presenting) Indian Institute of Technology Gandhinagar, India Razzeko Delley Jomin Tayeng Government Model Degree College Roing, India
			“Rise and Fall of Cherrapunji: Re-commoning the Waterspaces of Eastern South Asia” Iftekhhar Iqbal Universiti Brunei Darussalam.
			“Let the Rain Fall on Time: Mist as Life force for Interspecies Flourishing and Communication in the Sikkimese Himalayas” Kalzang Dorjee Bhutia University of California, Los Angeles
			“Ontological Closure, Species Bordering and Multispecies Transformations in the Himalayan Adjacent” Roderick Wijunamai Royal Thimphu College, Bhutan.

****15 minutes for each paper presentation; 30-40 minutes for discussions**

13 October, Wednesday

Thematic session III (2 hours)

Indigenous religious ecology, Natural Disasters, Water Scarcity, and Freedom of Rivers

<i>Thimphu time</i>	<i>Local Time</i>	<i>Session Chairperson and Discussant</i>	<i>Participant presentations</i>
Thimphu 10:00- 12:00am	Kathmandu 9:45-11:45am; US (EDT) 12:00 midnight- 2:00am; US (PDT) 9:00-11:00pm (12 <i>Oct, Tue</i>); Oslo/Stockholm/Berlin/Ams terdam 6:00-8:00am; Bogota/Lima 11:00pm(12 <i>Oct, Tue</i>)-1:00am; Sydney/Melbourne 3:00- 5:00pm; Mumbai 9:30- 11:30am; Bandar Seri Begawan 12:00 noon- 2:00pm	Chairperson Kinley Dorji Royal Thimphu College, Bhutan Discussant Jelle Wouters	“Divine Water and ‘Pristine’ System: Indigenous Responses to Policy Induced Anthropogenic Changes in Manipur” Malem Ningthouja Editorial board member of Journal Revolutionary Democracy, India.
			“Roles That Springs Play: Renewed understanding of spring water, its access, and water conservation” Rinah Shah Ashoka Trust for Research in Ecology and The Environment.
			“Knowing Everest Ice” Jolynna Sinanan Western Sydney University, Australia.
			“Clime, Deities and Development in the Merak highlanders of Bhutan ” Deki Yangzom Tarayana Centre, Bhutan.
			“Sacred Geography of Garhwal Himalayas: Indigenous Narratives of Living Landscape.” Hansa Rawat IGNOU, New Delhi

****15 minutes for each paper presentation; 30-40 minutes for discussion.**

14 October, Thursday

Thematic Session IV (2 hours)

Sentience of Water, Dammed Rivers, Religious Life, and Geopolitics in the Anthropocene

<i>Time (Thimphu)</i>	<i>Local Time</i>	<i>Session Chairperson and Discussant</i>	<i>Participant presentations</i>
Thimphu 12:00noon- 2:00pm	Kathmandu 11:45am- 01:45pm; US (EDT) 2:00-4:00am; US (PDT) 11:00pm (13 Oct, Wed)-1:00am); Oslo/Stockholm/Berlin/Ams terdam 8:00-10:00am; Bogota/Lima 1:00-3:00am; Sydney/Melbourne 5:00- 7:00pm; Mumbai 11:30am-1:30pm; Bandar Seri Begawan 2:00- 4:00pm	Chairperson Dan Smyer Yü Discussant Arupjyoti Saikia	<p>“Facing the Anthropocene together: The robust fragility of more-than-human relations in the Peruvian Andes” Malene K. Brandshaug Innlandet University College, Norway.</p> <p>“Walking with architecture in the Garhwal Himalaya: Informal structures of the Char Dham Yatra” Ainslie Murray University of New South Wales in Sydney, Australia</p> <p>“Surviving Pemakö’s Pluriverse: Kunga Tsomo, the goddess, and the LAC ” Ruth Gamble La Trobe University, Australia</p> <p>“Geopolitical and ecological entanglements on the Brahmaputra River Basin” Alexander E. Davis University of Western Australia.</p> <p>“Himalayan Deities, Disasters and sustainable living across transboundary nations of India and Nepal” Rajkumar Gade (presenting) Tata Institute of Social sciences, India Narayan Gyawali Agriculture and Forestry University (AFU), Nepal. S. Mohammed Irshad Tata Institute of Social sciences, Mumbai, India.</p>

****15 minutes for each paper presentation; 30-40 minutes for discussion**

Organizer Profiles



Dan Smyer Yü

Kuige Professor of Ethnology, Yunnan University

International Faculty Member, University of Cologne

dsmeryu@gmail.com

Biography:

Dan Smyer Yü is Kuige Professor of Ethnology, School of Ethnology and Sociology and the National Centre for Borderlands Ethnic Studies in Southwest China at Yunnan University, and an International Faculty Member of University of Cologne, Germany. He received his Ph.D. in anthropology from the University of California at Davis in 2006. Currently he is the co-lead of HUC's Thematic Working Group on Himalayan Environmental Humanities, an elected board member of International Society for the Study of Religion, Nature and Culture, a member of the Advisory Board of Yale Forum on Religion and Ecology, and the Series Editor of Routledge Environment, Multispecies Indigeneity and Borderland Series. He is the author of *Mindscaping the Landscape of Tibet: Place, Memorability, Eco-aesthetics* (De Gruyter 2015), and the co-editor of *Trans-Himalayan Borderlands: Livelihoods, Territorialities, Modernities* (Amsterdam University Press 2017), *Environmental Humanities in the New Himalayas: Symbiotic Indigeneity, Commoning, Sustainability* (Routledge 2021), and *Yunnan-Burma-Bengal Corridor Geographies: Protean Edging of Habitats and Empires* (Routledge 2021).



Arupjoyoti Saikia

Professor, Department of Humanities & Social Sciences

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arupjyotisaikia@gmail.com

Biography:

Arupjoyoti Saikia is Professor in History in the Department of Humanities and Social Sciences at the Indian Institute of Technology Guwahati. His teaching and research interests are in the field of Assam’s economic and environmental history. A post-doctoral fellow of Yale University, he has held visiting fellow positions at Cambridge University; University of London; Indian Institute of Advanced Studies, Shimla; and University of Calcutta.

His book *The Unquiet River: An Environmental History of the Brahmaputra* (Oxford University Press, 2019) was short-listed for Kamala Devi Chattopadhyay Book Award in 2020 and long listed for Atta Galatta–Bangalore Literature Festival Book Prize. This book got Honorable Mention for Ananda Kentish Coomaraswamy Book Prize in 2021 by the Association of Asian Studies. Saikia’s other published works include *Forests and Ecological History of Assam, 1826-2000* (Oxford University Press, 2011) and *A Century of Protests: Peasant Politics in Assam since 1900* (Routledge, 2014).



Jelle J.P. Wouters

Associate Professor, Department of Social Sciences

Royal Thimphu College

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<https://rub-ovc.academia.edu/JelleWouters>

Biography:

Jelle JP Wouters a social anthropologist and teaches in the Department of Social Sciences at Royal Thimphu College (RTC), Bhutan. He holds an M.Pil. (Distinction) in social anthropology from the University of Oxford and a Ph.D. in anthropology from the North-Eastern Hill University, Shillong, where he was also a Wenner-Gren grantee. Prior to joining RTC in 2015, he taught at Sikkim Central University, India, and was visiting faculty at Eberhard Karls University of Tübingen, Germany, under the “Excellence Initiative” of the German Research Foundation. He is the author of *In the shadows of Naga Insurgency* (OUP 2018) and *Nagas as a society Against voting and other Essay* (Highlander Books 2019) and the co-editor of *Nagas in the 21st Century* (Highlander Books 2017) and *Democracy in Nagaland: Tribes, Traditions, and Tensions* (Highlander Books 2018).



Chi H Truong, Ph.D.

Programme Coordinator, Secretariat Lead

Anthropologist and Mountain Education Specialist

Chi.Truong@icimod.org

Biography:

Chi Huyen Truong joined ICIMOD in March 2016 as Programme Coordinator of Himalayan University Consortium. She is an anthropologist by training and had conducted ethnographic research on de-collectivization, migration, and post-socialist transition in Vietnam. Her recent research interests include social memory, gender, education for indigenous/ethnic minority children, child poverty, and post-disaster livelihood recovery and resilience in Cambodia, the Philippines, and Nepal. She authored articles on *Moussons* (Recherches en Sciences Sociales sur l'Asie du Sud-Est, 2015) and *Children and Society* (2010) and contributed chapters in edited volumes published by University of Hawaii Press (2014), Stanford University Press (2009) and Singapore Institute of Southeast Asia Press (2004 & 2011). She taught in Vietnam National University and Vietnam's Academy of Social Sciences (2001-2004), served as Lead Qualitative Researcher for Young Lives – an International Study of Childhood Poverty in Vietnam (Oxford University, 2008-2010), and held a Senior Research Fellowship at Asia Research Institute (National University of Singapore, 2007) and Australian Government Endeavour Award Fellowship at the Centre for Aboriginal Economic Policy Research (Australian National

University, 2011). Apart from being active in building a regional network of Southeast Asian scholars, she coordinated a number of curriculum building, training and international collaborative research projects funded by The Ford Foundation and The Toyota Foundation. Truong earned a B.A. in History and Ethnology from Vietnam National University (1996), a Ph.D. in Anthropology from University of Toronto (2001), and completed a post-doctoral fellowship at Harvard University (2005-06).

Keynote Profiles

“The ‘Third Pole’ and Monsoon Asia: Histories, Narratives, Futures”



Sunil Amrith

Renu and Anand Dhawan Professor
Yale University.

sunil.amrith@yale.edu

Biography:

Sunil Amrith is the Renu and Anand Dhawan Professor of History, and current chair of the South Asian Studies Council. His research focuses on the movements of people and the ecological processes that have connected South and Southeast Asia. Amrith’s areas of particular interest include environmental history, the history of migration, and the history of public health. He is a 2017 MacArthur Fellow, and recipient of the 2016 Infosys Prize in Humanities. Amrith’s most recent book is *Unruly Waters* (Basic Books and Penguin UK, 2018), a history of the struggle to understand and control the monsoon in modern South Asia. It was shortlisted for the 2019 Cundill Prize, and was reviewed in *Nature*, *The Economist*, *The Wall Street Journal* and *The New York Review of Books*. His previous book, *Crossing the Bay of Bengal: The Furies of Nature and the Fortunes of Migrants* (Harvard University Press, 2013) was awarded the American Historical Association’s John F. Richards Prize in South Asian History in 2014, and was selected as an Editor’s Choice title by the New York Times Book Review. He is also the author of *Migration and Diaspora in Modern Asia* (Cambridge University Press, 2011), and *Decolonizing International Health: South and Southeast Asia, 1930-1965* (Palgrave, 2006), as well as articles in journals including the *American Historical Review*, *Past and Present*, *The Lancet* and *Economic and Political Weekly*. Amrith serves on the editorial boards of the *American Historical Review* and *Modern Asian Studies*, and he is one of the series editors of the Princeton University Press book series, *Histories of Economic Life*.

Abstract:

My talk will examine the history of how the Himalayan region came to feature centrally in understandings of global climate, and particularly of the Asian monsoon. I argue that we can only understand this story by bridging the history of science with histories of empire and geopolitics. My talk will examine the erasure of local concerns and expertise as the Himalayan region became an object of technocratic management on a regional and global scale, bound up with territorial conflicts between nation states. The workshop organizers' rich conceptual notion of "climes" offers us a way to understand global climate change in a different way, anchored in the multiplicity of narratives, imaginaries, and ways of living that have characterized local societies' relationship with water. I conclude with an open question: how can we "jump scales," to use Willem van Schendel's evocative phrase, between "climes" and "climate" in a less reductive way?

"Pluriversal Tundra: Storying more than Human Ecologies across Deep, Accelerated, and Troubled times."**Astrid Oberborbeck Andersen**

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Biography:

Astrid Oberborbeck Andersen holds a PhD in Social Anthropology from the University of Copenhagen (DK) and is associate professor of techno-anthropology at Aalborg University. Her research centers on human-environment relations and on how to make anthropological perspectives matter in interdisciplinary research on ecosystems, environmental relations, and climatic crises, as well as in public life. Her research is based on detailed and critical ethnography, and she has extensive fieldwork experience in Peru and Greenland. Astrid has published on themes such as water politics, wildlife and environmental management, technologies and controversies, and multispecies relations. She is a coeditor of the book *Anthropology Inside Out. Fieldworkers taking note* (Sean Kingston Publishing 2020) and the forthcoming anthology *Rubber Boots Methods for the Anthropocene: Curiosity, Collaboration,*

and Critical Description in the Study of Multispecies Worlds (University of Minnesota Press, 2022). Since 2018, Astrid is chairing the board of *Antropologforeningen i Danmark*, the Danish Anthropology Association.

Abstract:

The polar tundra around Kangerlussuaq in West Greenland stretches 25 km to the East and ends at the Greenland Ice sheet. To the west it stretches almost 200 km before it meets the sea. Resting on continuous permafrost, hosting rivers fed by meltwater from the inland ice and glaciers, and dotted by small freshwater lakes, the tundra can be seen (and storied) as one large and dynamic water body, composed by various interconnected streams, rhythmized by geological epochs and by seasons – freeze, thaw, flow - and feeding into social and natural ecologies.

This keynote attends to the tundra and its bodies of water by walking and ethnographically storying tundra climes with different actors and their perspectives: Hunters and hunting officers who show us the landscape as one of more than human sociality. Geologists who reveal deep time of the tundra and show us ruptures in water-ice dynamics. Entrepreneurs and policy makers who dream of converting climate change into a source of innovation and profit, as they work to turn the accelerated melting of ice into new water products.

Resulting from these perspectives is a pluriversal tundra, where ways of making sense of the changing water bodies are conflicting, embedded in contrasting ways of knowing and living climes. This storying of the pluriversal tundra leads to methodological questions of how to compose an anthropology that attunes beyond the human and analyses across deep and accelerated, long and short temporal scales. It also leads to questions of the ethics and politics of storying climes: whose perspectives get heard and whose voices are silenced? And in what ways are stories to be responded?

“Climing Mountains? Climate, Water and Power in the Peruvian Andes.”



Karsten Paerregaard

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Biography:

Karsten Paerregaard is professor emeritus of Anthropology at School of Global Studies, University of Gothenburg, where he took up the position as chair professor of Social Anthropology in 2012. He has previously worked at University of Copenhagen and DIIS (Danish Institute of International Studies) in Denmark. Paerregaard has been the principal investigator of several research projects and been granted research funding numerous times in Sweden and Denmark. He has also been research fellow at the Woodrow Wilson Center, Washington DC and at Swedish Collegium for Advanced Study, Uppsala and has twice been visiting professor at University of Florida. Paerregaard's ethnographic field research has been centered in Peru where he has worked for almost 40 years. It also includes multi-sited fieldwork among Peruvian migrants in North America, Southern Europe, Japan, and Argentina and Chile. Paerregaard's research interests and publications cover such topics as ecology, water and irrigation, livelihoods, social organization, power and inequality, religious denominations, ritual activities, ethnicity and indigeneity, and cosmology and offering practices.

Currently, his research is focused on the intersection between migration, environment, climate and culture in the Peruvian Andes. His books include *Linking Separate Worlds. Urban Migrants and Rural Lives in Peru*, Berg (1997); *Peruvians Dispersed. A Global Ethnography of Migration*, Lexington (2008); and *Return to Sender. The Moral Economy of Peru's Migrant Remittances*, UC Press(2015). He has recently completed a book manuscript titled *Andean Meltdown. A Climate Ethnography of Water, Power and Culture in Peru*, which examines the impact of climate change on water management and mountain worship in the Peruvian Andes and which currently is reviewed by an American university press. Paerregaard has also published extensively in international journals, recently in *HAU. Journal of Ethnographic Research* (2020), *Environmental Communication* (2020), *Water International* (2020), *Water Alternatives* (2019), *Climate and Development* (2018) and *WIRE's Water* (2018).

Abstract:

The paper's aim is to unpack the relation between climate, water and power in the Andes. The region suffers from chronic water scarcity and Andean people have always depended on melt water from glaciers and ice mountains. The Inca cosmology crafted the circulation of water as a relation of reciprocity between humans and a non-human realm inhabited by mountain deities, ancestors and other spiritual beings. To legitimize their own sovereignty the Incas represented themselves as human proxies of the divine force that created the world and therefore as masters of the hydrological circle. After the Spanish conquest the indigenous population adapted to colonial rule by identifying the new conquerors with their own ancestors and when Peru gained its independence, Andean people reset their cosmological compass once again by substituting their pre-Hispanic ancestors with mountain deities and the Spanish conquerors with the mestizo class that became Peru's new rulers. The anthropomorphic configuration of mountain deities as images of the

region's political power holders still prevails in the Andes but climate change and the water crisis it generates is compelling Andean people to reinvent their cosmology once again. The paper examines how this happens by asking: What are the relations of power that tie humans to mountains, ice and water in the Andes? How do Andean people engage with and configure the divine forces they believe inhabit mountains, the landscape, and the water? And lastly, how do climate change, glacier melt and water shortage challenge the Andean cosmology?

“Meaningful Climate Science.”



Ted Shepherd

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Biography:

Ted Shepherd is a dynamical meteorologist whose interests range from theoretical geophysical fluid dynamics to climate modelling and data analysis, with a focus on atmospheric circulation. This span from fundamentals to applications has been a hallmark of his research. Ted worked at the University of Toronto from 1988-2012, where he made pioneering contributions to the Hamiltonian description of atmospheric dynamics while initiating and leading the Canadian national climate modelling effort focused on ozone-climate coupling. He made several pivotal contributions to the understanding of the role of climate variability and change in interpreting the observed ozone record and in predicting future ozone recovery. Since moving to the University of Reading in 2012, Ted has highlighted the important role of atmospheric circulation in climate change, which has implications for regional adaptation and societal risk. Ted has held leadership roles in scientific assessments of both climate (IPCC) and stratospheric ozone (WMO/UNEP), and in the World Climate Research Programme, and is a Fellow of the Royal Society of Canada and the American Geophysical Union.

Discussant and Guest Speaker Profiles



Anders Burman

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Biography:

Anders Burman holds a PhD in Social Anthropology from the University of Gothenburg (2009) and is currently Associate Professor in Human Ecology and Head of Research at the School of Global Studies, University of Gothenburg where he teaches Political Ecology. He has published on issues concerning indigenous peoples and movements, activism and activist research, ritual practice, gender politics, climate justice, political ontology, decolonization and knowledge production with a geographical focus on the Bolivian Andes. He is the author of *Indigeneity and Decolonization in the Bolivian Andes: Ritual Practice and Activism*, published 2016 by Lexington Books/Rowman & Littlefield.



Willem van Schendel

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Biography:

Willem van Schendel (University of Amsterdam & International Institute of Social History) works in the fields of history, anthropology, and sociology of Asia. Recent books include: *The Camera as Witness: A Social History of Mizoram, Northeast India* (2015; with Joy L.K. Pachuau) and *A History of Bangladesh* (new edition, 2020). Forthcoming is *Human-Animal-Plant Histories of the Eastern Himalayan Triangle* (2022, with Joy Pachuau).



Michael Bollig

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Biography:

Prof. Dr. Michael Bollig is Professor for Anthropology, Board Member of the Global South Studies Center (GSCC) in Cologne and Associate Vice Rector for International Relations with the Global South at the University of Cologne. His research focuses on human-environmental relations, political ecology, and environmental history, transition of local knowledge, globalization and conflict research. He is the author of *Shaping the African Savannah: From Capitalist Frontier to Arid Eden in Namibia* (Cambridge University Press 2020), *Pastoralism in African: Past, Present and Future* (with M. Schnegg and H. Wotzka, Berghan 2013), and *African Landscape: Interdisciplinary Approaches* (with B. Olaf. Springer 2009). He is a guest editor of *Environmental History* 2019, 24(4): Forum: Commodifying the “Wild”: Anxiety, Ecology and Authenticity in the Late Modern Era, *International Journal of the Commons*, Special Issue 2016, 10,2: Pastoralism and the New Commons. Co-Management, Conflict and Cooperation, and *Journal of Eastern African Studies*, Special Issue 2016, 10,1: Resilience and Collapse in African Savannahs. Causes and Consequences of Environmental Change in East Africa.

Participant Profiles

“Buen vivir, Ontoecologies and Indigenous Economic Practices of Environmental Justice from the Global South”



Eduardo Erazo Acosta

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Biography:

Eduardo Erazo Acosta is a Professor, Sociologist in a Research Group "Curriculum and University" University Nariño. Currently he is a Sustainable and indigenous Knowledge researcher accompanying social movements in the Andean region, Colombia. He has distinction as a young essayist within the framework of the Nobel Peace Prize was awarded jointly by the Ministry of Science and Higher Education, the Institute of Applied Social Sciences of the University of Warsaw.

Abstract:

This document reflects on the alternatives to economic development, and presents the many possibilities that, from the ancestral vision, various ancestral communities on the planet have, and which are based on respect for Mother Nature in times of climate change, as a context of urgent need to rethink and question the system of trade relations and exchange with the serious repercussions on nature, based in the presentation of new concept of Ontoecologies. Secondly, it is the result of learning in indigenous communities in Ecuador and Colombia, are presented here part of the scenario of the Buen vivir, as a philosophy of life, but also as a practice of cultural and economic wealth of indigenous communities in South America, which are articulated to nature as a center of relations,

and system of integrality in their imaginary, systems very similar to the practice of cultural wealth and respect for nature present in indigenous peoples living in various latitudes of the planet.

“Chithu Huluni: Idu Mishmi and their river valleys in Dibang Valley, Arunachal Pradesh”



Ambika Aiyadurai

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Biography:

Ambika Aiyadurai is an Assistant Professor at the Indian Institute of Technology – Gandhinagar. Her research examines the social dimensions of wildlife conservation with a special interest in human-animal relations and community-based conservation projects. Her ongoing and long-term research aims are to understand how local and global forces shape human-animal relations. She has a PhD in Anthropology at the National University of Singapore. She is trained in both natural and social sciences with masters’ degrees in Wildlife Sciences from the Wildlife Institute of India (Dehradun) and Anthropology, Environment and Development from University College London (UK). She has published articles in *Conservation & Society* and co-edited a special issue in *Interdisciplinary Studies*



Razzeko Delley

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in *Literature and Environment*. Her monograph *Tigers are our Brothers: Anthropology of Wildlife Conservation* was published by OUP (2021).

Razzeko Delley belongs from Idu Mishmi tribe and resides at Roing Arunachal Pradesh, India. Presently he is working as Assistant Professor of English Literature at Jomin Tayeng Government Model Degree College Roing. He is the author of the book *“Idu Mishmi Shamanic Funeral Ritual Ya,”* published by Bookwell Publications, New Delhi in the year 2018. Razzeko was an editor for the paper, *“Change and Continuity among Tribes: The Idu Mishmis of Arunachal Pradesh,”* published by Ministry of Culture, Government of India in the year 2019 and *“Marriage in Tribal Culture,”* published by Bookwell Publications (2006). *“Krishna-Rukmini, Idu Mishmi-Bishmaknagar Phenomenon: History or Cultural Assimilation? A Study,”* is a journal published by Razzeko Delley in year 2018 which is published by the Social Science Researcher 2018, Vol. 4 Paper I.D. 4.2.4.

Abstract:

This paper is a case study of anthropogenically-impacted water bodies and their cultural meanings rooted in the indigenous history of the Idu Mishmi people of Arunachal Pradesh, India. The identity of the Idu Mishmi is founded upon the concept of *Chithu Huluni*: the twelve water river valleys (*chithu*: water source, *Huluni*: twelve). They identify themselves based upon the twelve river valleys where they reside. From birth to death, water and water bodies shape and drive diverse social and cultural setup. An Idu Mishmi, when born, is incorporated through birth ritual when the *Machinu*, the cleansing ritual is performed. Water (*Machi*) and different water bodies are invoked by the shaman *Igu* and the newborn is cleansed with spiritual water. During the funerary practice, the first ritual is washing the corpse and spiritually cleansing through lament. The soul guided by the shaman makes an arduous journey covering two hundred and sixty-seven spiritual places and stoppages consisting of natural landforms and water bodies. The worlds of the living and dead are believed to be divided by a river called *Kandi*. The crossing of this river changes the status of living to dead. Despite their rich culture rooted in ecology, the Idu Mishmi’s indigenous history and knowledge are yet to be documented as very few studies are being carried out so far. The modern developments like hydropower and highway projects in the region are the anthropogenic forces of change immensely impacting the cultural and historical landscape.

We will critically examine how these water bodies are impacted by climate change by focusing on Idu Mishmi people’s experiences, memories and understandings of climate change in relation to the river valleys and water bodies. There is no specific Idu term for climate change; however, it is recognized as daily weather conditions, seasonal rainfall and snow-fall with reference to agriculture, hunting, fishing and other subsistence activities. For example, there are several words to revolve around just rains: *ayo/ara* (rain), *indu* (incessant rains), *arachi* (drizzling in fine weather), *ara-mbu* (cloudy with slight drizzle), *tsi* (incessant rain because of breach of

taboo). This is just one example. Using oral narratives and interviews from the senior members, we will study the changes in high-altitude lakes and shifting courses of rivers and how they are collectively remembered, by examining the folklore of the Idu Mishmi, which carry insightful references to great famine, heavy landslides, and severe forest fires.

“Let the Rain Fall on Time: Mist as Life force for Interspecies Flourishing and Communication in the Sikkimese Himalayas.”



Kalzang Dorjee Bhutia

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Biography:

Kalzang Dorjee Bhutia is a Visiting Scholar in the Asian Studies Program at the University of California Riverside. He is originally from west Sikkim, India, and completed his PhD in Buddhist Studies at the University of Delhi. He is currently completing a monograph on the environmental history of Sikkimese Buddhism. Publications related to this project include “Trees as Village Protectors, Guru Rinpoche’s Wayfinders, and Adopted Family Members: Arboreal Imagination, Agency, and Relationality in Sikkim,” in *Worldviews* 25.2 (2021); “Purifying Multispecies Relations in the Valley of Abundance: The Riwo Sangchö Ritual as Environmental History and Ethics in Sikkim,” in *MAVCOR* 2 (2021), and “Foxes, Yetis, and Bulls as Lamas: Human-Animal Interactions as Resource for Exploring Buddhist Ethics in Sikkim,” in *Journal of Buddhist Ethics* (2018).

Abstract:

Let the rain fall on time; let there be a good harvest; may all the bad diseases of humans and animals be warded off; then may there be long life and peace and prosperity all over the world! – my translation, from the *Propitiation Rite for the Sacred Habitat of the Valley of Rice* (*’Bras ljongs gnas gsol*)

The rivers that originate in the glaciers of the mighty Mt. Kanchendzonga, the world's third highest mountain located on the border of the eastern Himalayan Indian state of Sikkim, connect the Tibetan plateau with the plains of India and Bangladesh, and ultimately, the Indian Ocean. In recent years, local battles over rapacious hydroelectric development have demonstrated the centrality of waterways to the flourishing of local communities. These communities are not just human; within the diverse cosmologies that overlap in the state, Sikkim's roaring rivers, lush forests, and fertile soil are all understood as parts of a sacred habitat (Classical Tibetan: *gnas*) that is home to many interdimensional beings. These include humans, nonhuman animals, and spirits of different categories, including Buddhist-inspired protector deities (Classical Tibetan: *chos skyong yul lha gzhi bdag*) who function as part of the retinue of Kanchendzonga, the guardian deity who presides over the region. The many forms of water that flow from Kanchendzonga, including rivers, lakes, ponds, and hot springs, are seen as sacred. *The Propitiation Rite for the Sacred Habitat of the Valley of Rice* (Classical Tibetan: *gnas gsol*) is a ritual designed to propitiate all the beings of the landscape, and to invoke the circumstances necessary for interspecies flourishing in the sacred habitat. One of the many passages evokes the importance of rain on time and healthy, clean waterways for the wellbeing of all beings in, and beyond, the state.

One manifestation of water health that is not often invoked in discussions of Sikkim's sacred waters is the mist that is a ubiquitous element of everyday life in the state. In both the monsoon and the winter months, mist rises from the rivers of the sacred habitat, clothing Kanchendzonga and traveling into the forests and kitchen gardens of Sikkim, where it creates moisture in which cardamom, tea, and other vegetation can grow; and it rises up to form clouds that become the rains that keep the rivers flowing. Mist is therefore a crucial element in the flourishing of Sikkim's ecosystems, and in Buddhist cosmology, mists are seen as manifestations of *lu* (Classical Tibetan: *klu*), aquatic spirits that are associated with health and prosperity. In this paper, I will discuss how human Buddhist communities in west Sikkim interpret and interact with mist as a form of interspecies, inter-dimensional communication in ritual traditions and daily life. In acknowledging mist as a part of the life force of *lu* and, by extension, the sacred habitat, Sikkimese Buddhists maintain the balance that is essential to survival in the fragile mountain ecosystem.

“Facing the Anthropocene together: The Robust Fragility of More-than-human Relations in the Peruvian Andes.”



Malene K. Brandshaug

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Biography:

Malene K. Brandshaug is a social anthropologist currently working as an associate professor in social sciences at Inland University of Applied Sciences, Norway. She is interested in human-environment relationships, indigeneity, infrastructure, water and climate change. Her doctoral work is based on in-depth ethnographic fieldwork in the Peruvian Andes and concerns more-than-human relations, water practices and questions of (de)coloniality among indigenous farmers. In 2020 she completed her doctoral dissertation entitled *Liquid landscapes: Human-water interactions and water scarcity in Yanuqe, Peru* at University of Gothenburg. Additionally, she has published the following three articles: “Water, Life and Loss: Aquasociality and Environmental Change in the Peruvian Andes” (Kristisk etnografi – Swedish journal of anthropology, forthcoming), “Smooth Flows? Hydrosocial Communities, Water Governance and Infrastructural Discord in Peru’s Southern Highlands” (*Water International* 2020, co-authored with K. Paerragaard, and S. Ullberg), and “Water as More than Commons or Commodity: Understanding Water Management Practices in Yanque, Peru” (*Water Alternatives* 2019).

Abstract:

In the farming district Yanque in the Southern Peruvian Andes, the landscape is made up of places and landscape formations that are also sentient beings engaged in relations of care and respect with humans. Water is one such sentient being who takes the form of springs, lakes and streams that are named persons with feelings, thoughts and will. Additionally, water is a substance of importance for animals, crops and life-sustenance for small-scale farmers. In Yanque, Mismi is one of these named beings – referring to both a

glaciated mountain and a stream of water – and provides the largest water flow for irrigation in the area. When the effects of climate change transform the landscape and warmer temperatures causes the ice on the mountaintops to melt, it is not only a glacier that is shrinking and an important water reserve that is diminishing, it is the person Mismi who is losing its snow cape and who is suffering together with Yanque farmers.

The intrinsic sociomaterial interrelatedness of water bodies, earth-beings, humans and other species, and the vernacular practices of more-than-human commoning in Yanque, are fragile and make them vulnerable to transformations. However, these same practices and relations also make Yanqueños more robust when confronted with a changing environment. Based on empirical material from long-term ethnographic fieldwork in the Southern Peruvian Andes, this paper discusses this apparent paradox, where the transformations wrought by a changing environment in Yanque bring to light relationships between humans and sentient water beings that are both fragile and robust. Further, I discuss how these intimate relations between humans and water beings as well as the more-than-human life projects played out in everyday-life in Yanque in general, offer lessons on how to live well together in the Anthropocene.

“Other-than-Human Subjectivities in a Melting World: Ontological Disobedience in the Andes”



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Biography:

Anders Burman holds a PhD in Social Anthropology from the University of Gothenburg (2009) and is currently Associate Professor in Human Ecology and Head of Research at the School of Global Studies, University of Gothenburg where he teaches Political Ecology. He has published on issues concerning indigenous peoples and movements, activism and activist research, ritual practice, gender politics, climate justice, political ontology, decolonization and knowledge production with a geographical focus on the Bolivian

Andes. He is the author of *Indigeneity and Decolonization in the Bolivian Andes: Ritual Practice and Activism*, published 2016 by Lexington Books/Rowman & Littlefield.

Abstract

A barren landscape of gravel and stone unfolds as high-altitude bodies of ice and snow melt away in the Andes. This partly new landscape is not, however, divest of life, morality, agency, and subjectivity; the landscape is rather carved out from within the relation between human social practices on the one hand, and other-than-human agencies and subjectivities on the other. This paper delves into relational lifeworlds and subjectivities that have little or no place in debates focused on greenhouse gas emissions, global average surface temperature and climate change mitigation. It probes into the incessant acts of ontological disobedience, carried out not least by Andean Indigenous shamans, through which other worlds are enacted, allowing for other-than-human subjectivities to emerge from within the cracks and fissures of dominant reality. Asking whose reality is allowed to be real, the paper suggests a conceptual framework for grasping the subjugation of Indigenous lifeworlds, the denial of their ontological weight, and the imposition of dominant ontological schemes: ‘the coloniality of reality’.

Key words: Ontological disobedience; the coloniality of reality; the Andes; other-than-human subjectivity; climate change.

“Making a World out of Climate and a Climate out of the World: Encountering the Vibrant Andean Anthropocene.”



Gustavo Valdivia

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Biography:

Gustavo Valdivia has been ethnographically exploring the worlds that are emerging in the high Andes of Peru as the Anthropocene unfolds. His work is principally based in the Quelccaya, the largest tropical glacier on the planet, and articulates an eclectic body of theory, methods, and practices to provide an ethnographically grounded account of those significant moments in which Nature challenges human comprehension and control. This project, which he started as a Ph.D. student at the Anthropology Department at The Johns Hopkins University, has led him to carry out long-term fieldwork among indigenous alpaca herders, collaborate as a field assistant in 5 scientific expeditions to obtain ice cores from the Quelccaya's summit, work as a field producer for the documentary BBC series *Frozen Planet II*, and participate as a chapter scientist in the IPCC Sixth Assessment Report. In 2014, founded the *Sonic Melting* collective to start producing a set of field recordings of the ice of the Quelccaya as it melts.

Abstract:

During most of the year, the grasslands that feed the herds of alpacas, llamas and sheep of nearly 100 families in Phinaya, a semi-nomadic pastoralist community in the Southern Andes of Perú, can only be irrigated by several rivers that originate in the Quelccaya ice cap, the largest tropical glacier in the world. Due to its size and location in the Southern Peruvian Andes, the Quelccaya has also become a privileged site for climate science research. In fact, a set of ice cores obtained from this glacier are considered to be today “the longest and highest-resolution tropical ice core record to date” and, therefore, one of the most important pieces of evidence for the scientific understanding of the last 2000 years of global climate history (Thompson et al. 2013). However, as we know from paleo-glaciological studies completed in this area, the Quelccaya glacier is being deeply affected by climate change, which is forcing it to retreat at a rate that has no historical precedent in the last 6000 years (Thompson et al. 2021).

Since the 1980s, several lakes have been formed around the Quelccaya as a result of glacial retreat. In 2006, a piece of the glacier crashed into one of those lakes and generated an outburst flood that affected pastoral families, land and animals. Locals in Phinaya have also been building irrigation systems to capture the runoff water from the Quelccaya to expand their grasslands, adapting their herds' composition and their herding practices, and confronting mining and energy companies that are interested in their land and water to expand their operations. People in Phinaya too have noticed that the Quelccaya is retreating, and they know that in retreating it is transforming their lives. As the scientists, they are advancing and unsettling common assumptions about the environment by endlessly experimenting through a creative, generative, and multi-layered relation with the natural world.

As various ethnographic studies suggest, in many parts of the Andean world people still communicate with certain topographic features of the landscape (Ricard 2007, Gose 1994). Human worlds are, as Jane Bennett would say, "inextricably enmeshed" with the

vibrant, non-human agencies of the Andean geological forces (Bennett 2010). Furthermore, in the Andes, glacier mountains, springs, streams and lakes are considered living beings as well as people and animals (Cummins and Mannheim 2011). In this sense, more than a simple inert topographic accident, these landscape discontinuities are usually *apus*, the only beings that can provide seeds and strength to plants and animals. *Apus* are, in a good account, the ultimate caretakers of herds, plants, and humans. They are in constant material communication with life (Yusoff 2018).

Drawing on in depth ethnographic work with both Andean herders and with one of the most influential paleo-glaciology research teams in the world, this paper explores this central concept of indigenous thought of the Andes to produce a more sophisticated account of the interconnectedness that characterizes the geohistorical present of the Andes. In this sense, it highlights the figure of the Quelccaya *apu* as territorial articulator and as a distributor of living beings (broadly conceived) in this environment, and develops the idea of Quelccaya as a field of forces connected to a number of processes and dynamics, both of natural and anthropogenic origin, which, finally, are also linked to the lifeworlds of the people who interact with it today. Furthermore, by bringing sensory attentiveness to nonhuman forces "that we cannot yet hear" (Voegelin 2021), it challenges dominant understandings of the Andean world, especially those that are situated and shaped by the ideological constructions of colonial and Peruvian state forces, which continue transforming the Andean ecologies in the context of the Anthropocene.

“Geopolitical and Ecological Entanglements on the Brahmaputra River Basin.”



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Biography:

Alexander E Davis is a lecturer in international relations at The University of Western Australia. My research looks at international relations from historical, critical, and postcolonial perspectives, particularly in South Asia. I am currently writing a book on geopolitics and ecology in the Himalaya, titled *The Geopolitics of Melting Mountains: An International Political Ecology of the Himalaya* (Palgrave, 2022). I am head of the Australian Himalaya Research Network, and a foundation member of the network New International Histories of South Asia. I am the author of *India and the Anglosphere: Race, Identity and Hierarchy in International Relations*. I am also lead author of *The Imperial Discipline: Race and the founding of International Relations*, with Vineet Thakur and Peter Vale (Pluto Press, 2020). I have recently been published in *The Australian Journal of International Affairs*, *Pacific Historical Review*, *Review of International Studies* and *India Review*.

Abstract:

This paper examines transboundary river management on the Yarlung Tsampo-Brahmaputra River basin through an international political ecology approach. This region has recently been the site of military India-China conflict over Arunachal Pradesh, and has seen substantial infrastructure builds, including the construction of dams on the river and its tributaries. This Situation Also has a major impact on downstream Bangladesh, which is facing an enormous threat from climate change. In particular, China has been planning to build the world's largest dam on the Yarlung Tsampo River in the Tibetan Autonomous Region. The project will likely have disastrous impacts on the river ecosystem as a whole, on local ecologies, and on downstream communities in India and Bangladesh. This paper will first retheorise the international politics of the Brahmaputra River basin, drawing on insights from earth systems science, river basin ecology and political ecology. I argue that the region's waterbodies and the ecologies which underpin them, must be thought of as an agent in international politics. Drawing on this theorisation, I then examine the region's hydropower contest, the forms of international cooperation that currently exist over water, how people who live alongside the river relate to them, and how the situation is entangled with geopolitical competition.

“Water and Clime in the Bhutan Highlands”



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Biography:

Thinley Dema graduated from Royal Thimphu College with a bachelor’s degree in English and Environmental Studies in the year 2018. She received an “Indian Ambassadors’ scholarship award” in the year 2019 to pursue Masters in Ecology and Environmental studies in Nalanda University. She has been part of three research projects till date. She is the co-author of “Ecotourism and Social Cohesion: Contrasting Phobjikha and Laya Experiences” (Rig Tshoel, 2019), “Territory, Relationality and the Labour of Deities: Importing Raffestin on the Bhutanese spiritual landscape” (Rig Tshoel, 2020), “Eco-theological and Economic Perceptions of the Three Brother Mountains (Jampelyang, Chenrizi, and Chana-Dorji) in Bhutan’s Haa district” (Routledge 2021), and “Cities by Women: urban space, livelihoods and challenges of women street vendors in Thimphu city” (Elsevier Journal, 2021, forthcoming).

Jelle JP Wouteris a social anthropologist and teaches in the Department of Social Sciences at Royal Thimphu College (RTC), Bhutan. He holds an M.Pil. (Distinction) in social anthropology from the University of Oxford and a Ph.D. in anthropology from the

North-Eastern Hill University, Shillong, where he was also a Wenner-Gren grantee. Prior to joining RTC in 2015, he taught at Sikkim Central University, India, and was visiting faculty at Eberhard Karls University of Tubingen, Germany, under the “Excellence Initiative” of the German Research Foundation. He is the author of *In the shadows of Naga Insurgency* (OUP 2018) and *Nagas as a society Against voting and other Essay* (Highlander Books 2019) and the co-editor of *Nagas in the 21st Century* (Highlander Books 2017) and *Democracy in Nagaland: Tribes, Traditions, and Tensions* (Highlander Books 2018).

Abstract:

Earlier this year, a glacial lake outburst flood in Bhutan killed several highlanders. They were asleep in a tent after a day of searching *yartsagunbub*, a medically, highly prized caterpillar fungus, alike biotic and abiotic in its composition, when the flashflood washed upon them, burying them with mud and debris in an instant. Explanations for the flashflood, which plunged the Bhutanese nation into mourning, spanned the entire spectrum between detached climate science research and the affective and agential will of territorial deities, between altered precipitation patterns, glacial melt, and irregular stream discharges caused by anthropogenic climate change and a cosmological imbalance in cultural and spiritual terms. Proponents of the latter highlighted the flourishing fungus economy, which accelerated both wealth and karmic debts in the highlands, spurring material and cultural transformations that upset deities whose rage offsets natural calamities (Choki 2021). Blames were similarly dispersed, although they seemingly centered around greed, whether the greed of the Global North and the contagion of capitalism, or the cordyceps-rush on part of highlanders.

This paper draws on these multiple explanations, and on the condition – ecological, conservational, ontological – of water bodies in highland Bhutan more generally, as an entry to engage the concept of ‘clime’, or the mutual inhabitations of climate and place (Flemming 2010). Our paper emerges from two broad premises. First, a clime is not one thing, but many things at once, and ethnography and ‘lively ethography’ (Van Dooren and Bird-Rose 2016) are central for understanding the cultural and more-than-human contexts of climes. This approach is not in defiance of climate science research. Per contra, our paper invites scientific research on climate change in Bhutan to accompany us in a deeper, more affective, and more-than-human exploration of the ‘situated knowledges’ (Haraway 1988), enplaced manifestations, embodied experiences, and relational worlding practices that co-constitute and relate the highland Bhutanese clime.

Second, the success of clime, as a meaningful and comparative tool to apprehend climate change, critically relies on its capability to disrupt ‘conceptual comfort zones’ (De la Cadena 2010: 335). Concepts do important onto-epistemological work, whether by contextualizing climate change, identifying actors and agency, elucidating causes, consequences, and corollaries, framing networks of vulnerability and solidarity, or enabling (or foreclosing) ethical responses. To establish a vernacular lexicography of clime is complex

and many will be difficult concepts that will defy easy translation. We nevertheless argue that such a conceptual exercise is crucial in understanding and operationalizing the notion of climate. To develop climate conceptually from Bhutan we will draw on a wide range of perspectives and voices – indigenous actors and scientific researchers, spiritual practitioners and lay, folklorists and policy-makers, conservationists and politicians, and so on – and make them converse and coalesce in multi-layered narratives that are distinctly Bhutanese yet also – and crucially – capable of relaying knowledge and experiences to the wider Himalaya, the Arctic, and the Andes.

“[un]Truths and Re-emergence in Storied Biomes: Reimagining Bhutanese folktales in the context of environmental conservation.”



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Biography:

Kinley Dorji has been teaching in the Environmental Management Programme at Royal Thimphu College for last three years. He has a Master's of Science in Environmental Management with specialization in Natural Resources Management and Climate Change. He has also conducted a few small researches in the field of climate change and resources management focusing on the water and forest resources. However, of late, his interest has inclined towards the study of environmental humanities and he has been investing his time and effort to understand the world we live in, the world that we share with a countless living beings like himself.

Abstracts:

Bhutan's environmental conservation is of prime importance to Bhutan's heritage, and the connection between conservation and heritage has been supplemented incidentally by much research on folk myths, deity citadels, and sacred landscapes exploring Bhutan's culture and cosmos. However, the storied biome (a landscape with a living association with stories and myths) has not been considered

as an entity in itself regarding the dynamic relationship between conservation and evolving story-telling. Environmental conservation research has been overlooked in favor of work on biodiversity (water, climate change, etc.). Folk myths and sacred customs have long been studied, with comparisons drawn between sacred landscapes and local beliefs (Francoise Pommaret, Karma Ura, Elizabeth Allison, etc.). However, the latter studies have been independent of scientific research on the environment/ecology. No studies have sought to combine scientific conservation research and local folktales in a cross-disciplinary analysis to explore the interplay between knowledge practices and conservation. This research seeks to combine the two by providing an in-depth analysis of Lhuntse and Samdrup Jongkhar in the east of Bhutan to ascertain how folktales inform conservation strategies and how conservation strategies inform folktales at different levels of management. Folktales are not simply abstract renderings of historical ideas but, in rural environments, represent constant adaptations and reinventions in a living, contemporary context.

This project would use ethnographic and oral history research, tied with hagiographic enquiry, which will be augmented by spatial analysis of land use changes over the last three decades, considering impacts of the former in the management of the natural resources by analyzing the existing legal management frameworks. It would also entail assessing the forest types of the two localities regarding their regeneration cycles to understand the influence of changes on the ecological integrity. It would enhance our understanding of ecological resilience of these places towards climate change to recommend holistic adaptation measures. This project seeks to bridge disciplinary gaps to produce a multi-stage analysis on storied biomes, the first of its kind in Eastern Bhutan that does not rely on axiomatic assumptions of either one discipline to support the other, but instead incorporates diverse methods and perspectives to understand the interrelationship of environmental and spiritual belief and practice.

“Surviving Pemakö’s Pluriverse: Kunga Tsomo, the goddess, and the LAC”



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Biography:

Ruth Gamble is Lecturer in History at La Trobe University in Melbourne, Australia. She is a historian of Tibet and the Himalaya, with a particular interest in this region's rapidly changing environment. Her publications include *Reincarnation in Tibetan Buddhism: the Third Karmapa and the Invention of a Tradition* (OUP, 2018) and she is currently writing a history of the Yarlung Tsangpo (Brahmaputra) River. She has also published articles on the region's ecological politics, literature, and histories. Dr Gamble was a post-doctorate fellow at Ludwig Maximilians University in Munich, and a fellow at Yale University's School of Forestry & Environmental Studies. Before coming to La Trobe University, she taught Tibetan language studies and Asian Religions at the Australian National University. She was recently awarded an Australian Research Council DECRA Fellowship.

Abstract:

Pemakö is a transboundary Vajrayana Buddhist sacred site in which the goddess Dorje Pakmo's body is said to form the Great Bend and Great Canyon of the Yarlung Tsangpo River. Henry McMahon's line—drawn to accommodate China and Britain's imperial posturing—cut across the goddess's waste, disconnecting the region's social, ecological, and hydrological systems. Post-colonial India and China both embraced this imperial heritage and claimed parts of the goddess's body as their body politic. These competing claims have extended to the region's people, biodiversity, and water. This article tells the story of Pemakö from the perspective of Kunga Tsomo's family, who first migrated into the region in the early 1900s as pilgrims. It outlines their historical relationship with Pemakö's multiple (sacred, political, economic, ecological) geographies and shows how they have influenced their socio-ecologies. This combination of geography and history illuminates the “pluriverse” with which the family has negotiated the past century. The pluriverse resembles that proposed by Arturo Escobar but diverges from it in two ways. First, the family's Vajrayana Buddhist worldview encourages multiple ontologies. And second, rather than the “one-world world” ontology that Escobar describes in contradistinction to the pluriverse, the family has been pressured to accept the Chinese and Indian states' variant, non-one-world hegemonic ontologies.

“Himalayan Deities, Disasters and Sustainable living across Transboundary Nations of India and Nepal”



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Biography:

Rajkumar Gade is a Ph.D. scholar with Tata institute of social sciences, Mumbai, India and by profession he is a free-lance consultant working in the areas of Disaster risk reduction and Climate change, and social development sectors for more than 15 years. He has been very active in supporting various organizations on building the profile of emergency and disaster management. He has been working around Himalayan nations such as India, Afghanistan, Nepal, Bhutan, Bangladesh on various subject interests, such as Disaster risk reduction, Water resources and social development sectors like Education and Livelihoods. His Ph.D on Transboundary disaster governance in India and Nepal has led to research interest in Himalayan region. Apart from his professional work, he is also a watercolor artist, and strongly believe in art as a medium of vehicle to handle social issues, especially for awareness building

Narayan Gyawali, is a Ph.D. scholar from Agricultural and Forestry University, Nepal and has experience working in Development sector for more than a decade. Presently working as a programme manager, with Lutheran world relief, Nepal on Transboundary resilience program across India and Nepal. His interests' areas are Agriculture, livelihoods, climate change, biodiversity, flood and urban resilience, disaster risk reduction and humanitarian support. He has vast experience working as Monitoring and evaluation for Lutheran World Relief (LWR) for Asia and Middle East for the six countries – Nepal, India, Sri-Lanka, Indonesia, Philippines and Jordan. His research areas, are around the community based early warning systems, usage of technology in disaster risk reduction and flood resilience programs. Otherwise, he is a very humble person and always ready to help needy.

S. Mohammed Irshad is an Assistant Professor of Disaster Studies at Tata Institute of Social Sciences. He is interested in disaster economics, risk economics, development planning, political economy of development, water governance and history of disasters. His research examines the relationship between state and society, welfare models and its contemporary challenges, disaster loss and its impacts on the economy more specifically the local economy and social and political movements around development and risk. He holds a PhD in Economics from University of Kerala, on the topic 'Foreign Aid and Institutional Changes: An enquiry into the changing mode of water sector Governance in Kerala. He is supervising six PhD Students on the topics, a) Transboundary disaster risk reduction between India and Nepal, b) Social Security and Disaster Risk Management, c) Disaster and Fatality: An Economic analysis, d) Urban Environmental Risk Governance, e) Disaster and Exclusion, and f) Flood risk management and institutional changes.

Abstract:

India and Nepal, both being part of the same Himalayan ecosystem, both have evolved together with similar religious practices and identities for ages and till date they are bound by the religion. Two main religions evolved over the time, Hinduism and Buddhism in the Himalayan plateau, the rivers flowing through Himalayas were named after goddesses and the mountain peaks on gods. The Himalayas have been the home for deities and most of the religious literature is being around Himalayas, and was treated sacredly over the centuries. Most of the Nepalese and Indian cities have formed on the banks of rivers, but due to extreme climatic conditions and shift in dis balance of fragile Himalayan ecosystem, disasters have become common in the terrain. Floods, earthquakes, landslides, twisters, droughts, heat waves are making life vulnerable to those living in the ecosystem apart from new age water and transport infrastructure development such as dams, irrigation canals and roads. Over the years, the religious tourism also has increased multifold from various quarters of the world to the Himalayan region. Nepal being called city of temples, have dedicated deities and temples for earthquake. Similarly local deities for floods and droughts. Dedicated temples and places for understanding the value of life and deaths constructed and inhabited from centuries in India at Kashi and Varanasi.

The religious values had deep impact of co-living with other species and sustainable living concepts were imbibed and similarly the organic way of living using local material and knowledge was in practice, if we examine Buddhist viharas, they were constructed on mountain tops and a place for monks to stay insides during monsoons, to ensure they don't hurt other smallest species during their treks. The Buddhist engineering was disaster resilient to earthquake prone zones evolved centuries ago. In fact, Buddhism flourished across the earthquake zones from Afghanistan to Japan rapidly covering south Asia.

Due to industrial revolution, access to markets and growth in population, the Himalayan ecosystem has come under tremendous pressure for exploitation of natural resources, the new age development indicators, especially infrastructure has led to human migration into fertile lands, degraded forests, industrialization, construction, in search of energy options in Himalayas have made the indigenous system and knowledge un sustainable, rivers have contaminated, debris and siltation in river beds, landslides. Many of the temples are hit by the floods every year, earthquakes have damaged temples and settlements due to unsustainable living practices.

The paper will explore the relationship between the religion, the deities, disasters and sustainable living by collecting case studies from India and Nepal and analyze through a framework, which incorporates religion, sustainable living and policy making to reduce the adverse impact through a transboundary mechanism on Himalayan ecosystem.

“Drumming up Climate Agencies in Arctic Norway”

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Biography:

Michael T. Heneise is Associate Professor in Religious Studies at UiT The Arctic University of Norway, and Director of the Highland Institute. He has conducted anthropological research in the Andes of South America, and in Eastern Himalaya. His doctoral research at

Edinburgh University explored the relationship between dreams, sacred landscapes, and personhood among the Nagas in India. His current research interests include traditional pathways to care and healing, medical hybridities, epic poems and bards, and the environmental humanities more broadly. Prior to Edinburgh he studied anthropology in Ecuador at the Latin American School of Social Sciences (FLACSO). He is the author of *Agency and Knowledge in Northeast India: The Life and Landscapes of Dreams* (Routledge, 2018), Co-Editor of *Nagas in the 21st Century* (Highlander, 2017), Co-editor of *The Routledge Handbook of Highland Asia* (Routledge 2021), and is Co-Editor of the journals *Himalaya* and *Highlander*.

Abstract:

The reindeer hide drum constructed by the Northern Sámi noaidi is painted with horizontal lines representing low, middle and high realms in Sámi cosmology. When played, the thin, vibrating membrane oscillates between human and other-than-human worlds as the noaidi enters and clears passageways for human and reindeer communities moving through Arctic landscapes and climes. But the drummed membrane is also manipulated from the other side. Indeed, drumming subjectivities managing climes include other-than-humans and meta-humans. While the noaidi's hand is restrained, and climate uncertainties engaged largely within scientific epistemological frameworks, this paper explores the various ways Sámi cosmology continues to exert itself in the everyday lives and decisions of the Sámi and their neighbours as they navigate increasing climate uncertainty and unpredictability in Arctic Norway.

“From Pahar to Haor: Re-commoning the Waterspaces of Eastern South Asia”



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Biography:

Iftekhar Iqbal is at the Universiti Brunei Darussalam and works in environmental and intellectual history of Asia and Bangladesh, in particular. Prior to joining UBD, he held teaching or research appointments at the University of Dhaka, King's College London and Humboldt University Berlin, among others. He is recipient of several fellowships including with the British Academy and Humboldt Foundation. Iqbal's publications include *The Bengal Delta. Ecology, State and Social Change 1840-1945* (Palgrave 2010). He is currently exploring the connected history of the Tibetan-Himalayan rivers. His recent publications include: "Rivers of Mobility: Multi-ethnic Societies and Ecological Commons in a Fluvial Asia", in Dan Smyer Yü and Karin Dean ed., *Yunnan–Burma–Bengal Corridor Geographies: Protean Edging of Habitats and Empires* (Routledge, 2021).

Abstract:

With 26,461 millimeters of rainfall between the summers of 1860 and 1861, a northeastern Indian village called Cherrapunji earned the fame of being the world's wettest place. In the course of the past one and a half centuries, the rainfall there has been reduced to less than half that amount, representing an iconic shift in climate. Yet Cherrapunji highlights more than a maverick monsoon spanning the Bay of Bengal, the Bengal Delta and northeastern India. The rainfall in the Meghalaya mountain ranges (*pahar*), where Cherrapunji is located, is intimately tied with the issues of local and transregional drainage, biodiversity, livelihood and patterns of mobility that these waters contributed to in the surrounding terrestrial climate. Taking the examples of *haors* (wetland ecosystems) in northeastern Bangladesh, this paper shows how rain-induced Meghalaya waters in India find a resting place in Bangladesh, inviting fishes, wildlife and humans alike in a bonding that defies the logic of political borders.

“Walking with Architecture in the Garhwal Himalaya: Informal structures of the Char Dham Yatra”



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Biography:

Ainslie Murray is an interdisciplinary artist and academic based in the Faculty Arts, Design and Architecture at the University of New South Wales in Sydney, Australia. Her work explores the augmentation of architectural space through subtle realisations of forgotten and intangible spatial forces. Ainslie's principal interest is in forms of space-making that often escape attention, including ephemeral, minimal and mobile forms of architecture. Her practice-based research investigates these forms of architecture in relation to climate (atmosphere, air, water), performance (walking, climbing, pilgrimage), material (portable and spontaneous structures), motion (movement as design methodology), and notation (motion-capture, gestural art-making, choreographic notation). Ainslie was awarded her PhD in Visual Arts from Sydney College of the Arts, University of Sydney, in 2011. Her work has been exhibited throughout Australia and internationally in Canada, China, Denmark, Italy, Japan, New Zealand and the UK.

Abstract:

This paper addresses sustainability in architectural practice through consideration of informal architectural structures on the Char Dham Yatra (Four Pillars Pilgrimage) in the Garhwal Himalaya. The seasonal passage of pilgrims tracing their way through the mountains is an established flow that is intimately intertwined with the parallel flows of the Yamuna, Bhagirathi, Mandakini and Alaknanda rivers. The landscape is characterized by a complex environmental fluidity as both pilgrims and rivers navigate the volatile climate and topography. In response, a rich and varied array of temporary and spontaneous structures that support this movement combine to create an unusually flexible and innovative spatial environment. These structures are significant in directing attention towards ways in which architecture can compel more sustainable and placespecific relationships between people and landscape.

The paper grafts multiple perspectives of the Char Dham Yatra to consider various structures encountered on the route. Drawing on works of art, anthropology and geography as well as locally published guidebooks and maps, a variety of seasonal shelters and carrying structures are examined to determine minimum thresholds of 'architecture' in this environment — a basket to carry an infirm pilgrim, a textile to form a roof, a stone wall to rest upon, a pack to carry a cooking pot and a blanket.

The paper commences with the author's observations of walking the Char Dham route. A survey of items pilgrims may carry and a range of architectural structures they may encounter is presented. The paper then progresses through an inquiry into what might constitute architectural space in the fluid context of the pilgrim route. Three types of space proposed by David Morris are followed to distinguish 'crossings' between body, movement and landscape: 'lived space', in which space is created through the act of a body moving through it; 'dwelling space', in which space is created through the act of a body dwelling in it for a length of time; and 'habitual space', in which space is created through the act of a body dwelling habitually in it and returning to the same movements and

postures again and again over a longer period of time. These crossings are then considered against other notions of ‘crossing’ arising from walking with rivers.

This sense of ‘habitual space’ is then considered within the collective agency of pilgrimage and examined in architectural terms, and contrasted with other types of walking and climbing in the region. The ‘conquest’ of Meru Peak beyond Gamukh, for example, widely applauded in the Western world and the subject of a major feature film, reflects a profoundly different attitude to landscape and subsequently to the structures required to support movement within it. These differing attitudes generate contrasting stories of place as the experience of landscape is radically re-orientated according to alternative motives and means. The paper points to the necessity of re-imagining what architecture is and might be in relation to how we form structures within the landscape as pilgrims, tourists and adventurers. This perspective is of direct relevance to the Garhwal Himalaya and also more broadly as we struggle with global issues of sustainable living in an increasingly unstable environment.

“The Sacredness of Himalayas and the Rights of Nature: Exploring the Conflicts and Complementarities.”



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Biography:

Bibhu P. Nayak is an Associate Professor at School of Livelihoods and Development, Tata Institute of Social Science (TISS), Hyderabad Campus. He is an economist by training and has been working on environmental and resource governance issues. He teaches courses like Ecological Economics, Theories of Economic Development and other courses linking institutions, environment and development. Prior to TISS, he worked for The Energy and Resources Institute (TERI), New Delhi and Institute for Social and Economic Change (ISEC), Bengaluru in India.

He has worked on several research and consultancy projects funded by various national and international agencies. His research interest includes economics of conservation, community-based institutions, social capital and collective action, participatory natural resource management and rural livelihood systems. He has worked on research projects with inter-disciplinary focus and travelled extensively across different states in India for field research. He published some of his research on different national and international journals and participated in several international summer schools, national and international conferences and workshops. He is the recipient for Global Development Network (GDN) Medal for Research on Development in 2013.

Abstract:

Recognition of nature as legal personality have emerged as a radical legal progression for environmental protection with some or other forms of nature rights being conferred to rivers, mountains, forests etc.. in different countries. The two judgements of Uttarakhand High Court passed in March 2017 advocated similar rights to the two Himalayan rivers and glaciers and all other elements of nature in Uttarakhand Himalayas. While one judgement declared Ganges and Yamun rivers as well as all their tributaries *'juristic/legal persons/living entities having the status of a legal person'*, the other judgement found *'the Glaciers, including Gangotri & Yamunotri, rivers, streams, rivulets, lakes, air, meadows, dales, jungles, forests wetlands, grasslands, springs and waterfalls, legal entity/legal person/juristic person/juridical person/moral person/artificial person having the status of a legal person, with all corresponding rights, duties and liabilities of a living person, in order to protect and conserve them'*. Though both the judgements are criticised for its inherent limitations and subsequently stayed by Supreme Court, it brought the discourse on rights of nature to the fore in India.

The rights of nature discourse are arguably based on the traditional/indigenous philosophies and values that emphasizes on the close interconnectedness of humans and nature and averse to the notion of nature as a 'property' and 'resource' to be exploited/harvested for material progress. The deification of Himalaya and its different elements and worshipping them as divine personalities by the local communities and the Hindus at large philosophically aligns to recognising the nature as living person in legal pronouncements. However, the deification of nature and worshipping of nature has not deterred the exploitation of nature in Himalayas. This paper aims at discussing the conflicts between the belief (of sacredness of River Ganga) and the practice among some Himalayan communities in the state of Uttarakhand and also the complementarities between the discourse on rights of nature and the belief (of sacredness of River Ganga).

“Divine Water and ‘Pristine’ System: Indigenous Responses to Policy Induced Anthropogenic Changes in Manipur.”



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Biography:

Malem Ningthouja (N.M. Meetei) received his B.A. (Hons.) in History from Hindu College, Delhi, and M.A., M.Phil., and Ph.D. in History from the University of Delhi. He is currently a member of the Editorial Board of the journal Revolutionary Democracy and an alternate member of the International Coordination Committee of the International League of People's Struggle. He is the author of the books *Freedom from India: A history of Manipur Nationalism*, Spectrum, Guwahati, 2011, *India's War on Democracy: The Debate on AFSPA 1958*, Waba Publications, Imphal, 2014, and *Diametrical Nationalisms: Rulers, Rebels, and Masses in Manipur*, Aakar, New Delhi, 2015. His latest publication is “Ethnonationalism in Northeast India: A Case Study of the Ban on Hindi Movies and Songs in Manipur” in *Yunnan–Burma–Bengal Corridor Geographies: Protean Edging of Habitats and Empires* edited by in Dan Smyer Yü and Karin Dean (Routledge, 2021). He was a fellow at the Indian Institute of Advanced Study, Shimla working on the topic “The Armed Forces Special Powers Act 1958 and Protest in Manipur.” He is interested in historical studies of the India-Myanmar borderlands. He attended India-China Corridor Writing Workshop, at Myitkyina, Myanmar, November 2018.

Abstract:

Manipur in Northeast India is a 90% mountainous borderland province that falls in the Assam-Burma tertiary ranges of the Himalayas. According to legends and studies, human settlements began in the hills before dispersion in batches to the catchment areas of the rivers and lakes in the oval-shaped central valley to evolve into a 'mighty' kingdom. The fertile valley, hitherto underwater many 'thousand' years ago, is blessed with life-nourishing annual *Nongju-tha* (rainy season from July to September). Rain watered among

others the biodiversity-rich Loktak (the largest 'fresh' water lake in Northeast India), where the 'floating island' known as Keibul Lamjao is the home of the endangered Shangai (brow-antlered deer) and others. Besides it, there are rains, streams, rivers, and natural reservoirs that contributed to the evolution of an indigenous 'pristine' ecosystem.

The paper studies spiritual aspects of water embedded in Meetei belief and memory. Water is divine! It is an essential element of life besides fire, air, sky, and earth. Water and everything on the earth, symbiotically related, are the gifts of nature-goddess. The sky that bestows rain is the father. The earth that receives and nourishes water is mother. Mount Koubru that raises above the rain bearing cloud is the crown. Lake Loktak where rivers meet is the navel. Water Goddess Ireima is responsible for aquatic lives. The supreme god is the source of rain. Predict the nature of rainfall by knowing the direction of the divine abode where the first winter thunderstorm occurs. To call rain, invoke the god with *Nonglao Eshai* and ritual. To block rain, perform rain-stopping rituals.

The paper also studies the indigenous water system and aquatic farming. The first focuses on predominant reliance on rain, water harvesting, and management. The second focuses on the dependence on aquatic farming for food and other utilities. The paper argues, except in the highly concentrated urban areas where landholding is small and 'free spaces' are rare, the traditional system is widely practiced in varying degrees. Ponds, drains, lakes, and aquatic ecosystem are flourishing on private and common lands. Likewise, natural streams, artificial canals, and rivers are also expected to flow freely. But the pristine system has been gradually losing ground due to anthropogenic changes that came along with policies in times. The changes have negative repercussions on water, supply, and people. Water became a commodity and took various forms of causes, utilities, and effects. To elaborate it, the paper studies the issues surrounding Loktak, Thoubal River, Mount Koubru, etc., and indigenous responses. Overall, the study is based on interviews, visual and audio oral accounts, lyrics, reports, official documents, memorandums, news, and secondary works.

“Sacred Geography of Garhwal Himalayas: Indigenous Narratives of Living Landscape.”



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Biography:

Hansa Rawat is a doctoral student of history in Indira Gandhi National Open University in New Delhi, India. In her doctoral research, she is studying the Himalayan regions of India under British colonialism. She holds a Master’s degree in Modern History from Jawaharlal Nehru University, and a Bachelor’s in Journalism from University of Delhi. Her research focuses on Himalayan Studies, Asian History, Mapping and Imperialism. She is particularly interested in colonial experiences in Asian region, and role of cartography in the making of Imperial Empire. Currently she is writing chapters in edited volumes for international publications.

Abstract:

Himalaya is the home of many holy mountains and rivers according to the popular understanding of Indian masses. The river Ganga along with Saraswati, Parushini, Shatudri, and Yamuna have been mentioned in many ancient texts which are dated thousands years old. The rivers of Himalaya are treated as goddesses among the Hindus. Every year many pilgrims visit Gangotri, the temple town at the source of the Ganga in Garhwal region of the Himalayas. In Haridwar region, where Ganga enters the plains is considered as a sacred site for worshippers. The landscape of rivers in the Himalayan space gives birth to the idea of holiness of the region. Numerous stories related to Ganga and other rivers in ancient texts depict them as divine and gateway to immortality. The festivals like Kumbha Mela emphasize on the significance of river Ganga. In the month of Shravana (summer), and winter month of Phalguna, the town of Haridwar is flooded with pilgrims carrying kavad--poles slung over the shoulder with water pots on each end. They arrive in Haridwar to fill their pots with Ganga water, and return to their places to pour it upon the images of Lord Shiva. The role of rivers in the

Garhwal region of Himalaya is prominent in narrating indigenous history of the region and cultures around festivals, seasons, mountains, and religion. The collective memory of the region ideates to create a living landscape in which mountains, rivers, forests, and villages are elaborately linked to the stories of the gods and heroes.

Recent trends of renaming of Indian places such as from Allahabad to Prayagraj, Faizabad to Ayodhya, and Gurgaon to Gurugram based on ancient texts, reasserts the idea of living landscape in the plains. Through this paper, I would like to study how the modern geographies overlap and at times question the ancient and sacred geographies in the region of Garhwal Himalayas of India. The underlying objective to conduct this research is to navigate the mental geographies which counter the modern geographies that demarcate the land and river, mountain and river, political and religious, indigenous/local and foreign/global. Keeping that in mind, this paper expects to open the discussion on ways in which the sacred and divine nature of rivers and mountains of the Himalayas can promote the role of global awareness and conservation of the environment

“Roles That Springs Play: Renewed understanding of Spring Water, its Access, and Water Conservation”



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Biography:

Rinan Shah is a PhD candidate at the Ashoka Trust for Research in Ecology and the Environment. Her areas of interest encompass environment and development in the political-economic context. She is currently studying the manifestation of domestic water scarcity in urban mountain towns of the Eastern Himalayan Region. She was a Research Fellow under the National Mission on Himalayan Studies from 2016-2019. She was also a member of the HI-AWARE Academy for Doctoral Students. Rinan is a part of the systematic metareview for studying the effectiveness of adaptation strategies for Chapter 4 on Water of the IPCC WGII Sixth Assessment Report. One of her articles has been published in the Water Policy Journal entitled “Conundrum or paradox:

deconstructing the spurious case of water scarcity in the Himalayan Region through an institutional economics narrative”. She have started studying Transboundary Water Governance. She also have popular articles in the City Observer, Susterana and ATREE Young Researchers Network.

Abstract:

Through this paper we explore the multifaceted nature of the spring water among its people, place and nature. Experiences of water scarcity vary across physical and socio-economic location. This study looks at households in water-rich regions which have been experiencing water scarcity for decades and their relationship with water sources, springs in particular. Springs are the primary sources of water for the mountain communities. The affective consciousness of the communities is reflected in their perspectives of the purity of spring water. Households mention that since it is “*umreko paani*” – water which has emerged out of its own, a property of springs – it is clean and can be used for drinking. Purity in a way that it is the best and safest water to drink hence acting as a yardstick for comparing any other water sources like the municipality or private supplies. Purity also in a way that spring water is considered sacred for religious purposes leading to them to protect it as a sacred spot. Stored water is considered stale hence water gotten from the springs at the time of need is considered fresh. Knowledge, awareness and visibility of the water source are ascribed to a good water source.

Springs is considered as a boon for the communities living around it and seen as the beacon of common property resource. This is not essentially the case since communities living around the springs create rules of access based on the location of the households, the seasons and the like. Access to the springs is defined through institutions and rules which are often exclusionary. There have also been instances of discrimination based on people’s origins. Spring as a common property resource has to be reconsidered as a contested common.

The Eastern Himalayan Region, where I carried out this work, is one of the highest rainfall receiving regions of India. Communities living in the mountains face water scarcity throughout the year. Due to low volumes of water, conservation becomes writ in their nature. Conservation here is borne much more from the lack of sufficient volume of water than a concern for water saving. This speaks to the larger ideas around water saving and conservation since the amount of water the communities are surviving on is rarely looked at to define wastage and to push for water saving mechanisms. For Darjeeling, my study site, women have become used to the cycle of low water availability, buying water, seeking out private suppliers, waiting for them at the turns of the roads so that their tanker is not stolen, and redoing it. They can judge how soon they are going to run out of water by just looking at the markers on the

storage tanks. This highlights that the low water availability, which could be linked to inefficient harnessing of local resources as springs, have led to behavioural changes creating a restricted water consumption pattern in water scarce regions.

“Knowing Everest Ice”



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Biography:

Jolynna Sinanan is a Lecturer in Social Anthropology at the University of Manchester. She has an interdisciplinary background in anthropology and development studies and her research focuses on digital media practices in relation to regionally comparative mobilities, family relationships, work and gender. Jolynna has developed an international research profile around comparative ethnographic studies of digital practices and infrastructures in relation to intergenerational mobilities across cultural and social contexts in the Asia-Pacific, the Caribbean and South Asia. Her current areas of research are mobile media and mobile livelihoods in the Everest tourism industry in Nepal and automated decision-making in countries in the Global South. She is the author of *Social Media in Trinidad* (2017, UCL Press) and the co-author of *Digital Media Practices in Households* (2020, Amsterdam University Press), *Visualising Facebook* (2017, UCL Press) and *How the World Changed Social Media* (2016, UCL Press).

Abstract:

Early visitors were drawn to Nepal for the images it evoked of solitude, spiritualism and heroic mountain exploration. More recently, the global mediatisation of Mount Everest (Chomolungma, Sagarmatha) has played a key role in attracting visitors to the region (Mazzolini, 2015; Mu and Nepal, 2016, Ortner, 1999). Arguably, Everest has always been mediatised: historically, its appeal as an idea has existed in part through technologies of visual cultures. Everest may be especially mediatised now; recently improved mobile

infrastructure in the northern Himalayas has coincided with an increase in the number of tourists arriving between 2016 and 2018 (Ministry of Culture, Tourism and Civil Aviation, 2017). Due to Everest's ecological significance and location, the retreat of its glaciers has become an important indicator of the rate of climate change, a visual theme that appears consistently in before-and-after photographs (Garrard and Carey, 2017). As such, Everest in visual cultures captures a double bind: on the one hand images, particularly from scientific study express the narrative of environmentalism and the consequences of the Anthropocene. On the other, images of Everest in global media and produced within the tourist encounter reinforce the narratives of solitude, spiritualism and mountain exploration. Such enduring themes contribute to the appeal of Everest that results in more tourists embarking on visiting the region, which is already fraught with increasing environmental challenges.

However, these dominant narratives fall short of capturing the totality of the complex relationship between climate change and development. This paper examines the intersection of Everest (ice) in visual cultures and the 'work' of Mount Everest tourism. I focus on how the production and circulation of images through digital technologies shape how tourists imagine and experience Everest in Nepal. Drawing on fieldwork conducted in the Solukhumbu region with guides, porters and tourists, I argue that digital work: mobile and visual communication are part of tourist experiences, but they are also part of the strategies for meeting aspirations of life projects for workers whose livelihoods depend on the tourist industry. Through focusing on the tourist encounter, this paper considers the material as well as immaterial infrastructures that shape the value of Everest. The paper explores negotiations of responsibility within unequal social relations of precarious labour, tourism as privileged mobilities and the commodification of fragile alpine ecosystems. The paper contributes to a deeper understanding of the relationship between technologies and the human affective consciousness of water by considering the aesthetic value of Everest's ice scapes within locally-bound and across global networks and its repercussions.

“Telling Stories: Applying a Transdisciplinary Pedagogy to Cryospheric Climes”



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Biography:

Vandana Singh is a professor of physics at Framingham State University in Massachusetts. For over a decade she has been working on a trans-disciplinary, justice-centered pedagogy of climate change, at the intersection of science, social sciences and the humanities. She has authored an educational case study on Arctic climate change and its impact on the Inupiaq communities of the Alaskan North shore, has co-conceptualized and helped run an interdisciplinary summer workshop for school teachers on climate pedagogy, and has contributed to the US National Academies deliberations on interdisciplinarity in the sciences. Vandana was born and raised in India, and is also a writer of speculative fiction, with two short story collections to her credit. She is a Climate Imagination Fellow (2021). Recent academic publications include two book chapters (one co-authored) in *Curriculum and Learning for Climate Action: Toward an SDG 4.7 Roadmap for Systems Change* (UNESCO Brill Publications Fall 2021).

Abstract:

This paper begins with two stories from the Arctic, and a brief account of the author's experience of the Alaskan North Shore in 2014, that led to an always-evolving trans-disciplinary, justice-centered pedagogy of climate change. I present a brief elucidation of this pedagogy, arguing that it must be holistic and trans-disciplinary, combining histories human and non-human over multiple timescales, transcending apparent dichotomies of local and planetary, and centered on the issue of multi-species justice. Such a pedagogy must also transcend divides between the natural and social sciences and the humanities; in addition, it demands a reconceptualization of the classroom and the teacher-student relationship. This paper then focuses on the application of this pedagogy to an understanding of cryospheric climes and their relationship to global climate, local cultures, onto-epistemologies and ecosystems through an exploration of the Alaskan North Shore. Despite the cryosphere's crucial importance to climate change, water security, human well-being and biodiversity, it has not received sufficient attention in education across geographies, nor are most pedagogical approaches informed by a trans-disciplinary and transformational learning ethos. Case-based and story-based pedagogical experiments in a general physics undergraduate classroom and a first year seminar allow us to consider the climate – or ice itself - as teacher. When the subject of study becomes teacher through story, what are the possibilities that arise? Such an approach allows engagement of the whole student, individually and through community building, to respond to the key features of the problem rather than applying pre-existing frameworks, thus allowing us to question the latter. Therefore, an onto-epistemological lens is an integral part of this pedagogy; insights from the history of physics illuminate key features of the Newtonian or Mechanistic paradigm and its wide influence on areas well outside the domain of Newtonian physics, permeating every aspect of modern industrial civilization. By making this invisible paradigm visible and contestable, we are able to see how inadequate it is for engaging with the climate crisis. This opens a space for considering alternative onto-epistemologies, specifically those of the Inupiaq peoples of the North Shore of Alaska through a case

study developed by the author (Singh, V., 2015) for undergraduate education as part of an initiative of the Association of American Colleges and Universities, following a visit to the region in 2014. This paper reflects on the potential of grounded stories to bridge the local/global divide, and explores possibilities informed by a current, ongoing exploration of the Himalayan context, where storied ground-level community perspectives may potentially enrich our understanding and inform our actions across scales of space and time, geography and species. The paper considers potential connections and diversities among cryospheric climes, and also beyond them, and speculates on how these might animate and inspire new approaches to learning and action for students and communities within and outside these climes. The role of speculative fiction in expanding the imagination beyond the currently dominant Newtonian/ Mechanistic paradigm and beyond dystopias (Singh, 2016) is briefly alluded to in the context of a speculative futurism exercise.

“The Shattered Clime of Elephant Nation in Yunnan: Multispecies Indigeneity on the Anthropogenic Earth”



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Dan Smyer Yü is Kuige Professor of Ethnology, School of Ethnology and Sociology and the National Centre for Borderlands Ethnic Studies in Southwest China at Yunnan University, and an International Faculty Member of University of Cologne, Germany. He received his Ph.D. in anthropology from the University of California at Davis in 2006. Currently he is the co-lead of HUC's Thematic Working Group on Himalayan Environmental Humanities, an elected board member of International Society for the Study of Religion, Nature and Culture, a member of the Advisory Board of Yale Forum on Religion and Ecology, and the Series Editor of Routledge Environment, Multispecies Indigeneity and Borderland Series. He is the author of *Mindscaping the Landscape of Tibet: Place, Memorability, Eco-aesthetics* (De Gruyter 2015), and the co-editor of *Trans-Himalayan Borderlands: Livelihoods, Territorialities, Modernities* (Amsterdam University Press 2017), *Environmental Humanities in the New Himalayas: Symbiotic Indigeneity, Commoning, Sustainability* (Routledge 2021), and *Yunnan-Burma-Bengal Corridor Geographies: Protean Edging of Habitats and Empires* (Routledge 2021).

Zhen Ma received her doctoral degree in ethnology from Minzu University of China in 2016 and has been a postdoctoral researcher at the Max Planck Institute for the Study of Religious and Ethnic Diversity since 2017. Her research focuses on the social and environmental changes among ethnic groups in contemporary southwestern China. Her recent publications include “Sensorial Place-Making in Ethnic Minority Areas: The Consumption of Forest Pu'er Tea in Contemporary China” (*The Asian Pacific Journal of Anthropology* 2018), “Encounters in Zomia: Dynamics of Ethnic Relations in the Pu'er tea Trade in Southern Yunnan, China” (*China – An International Journal* 2021), and “Uncertainty, Risk, and Merit-Making: Pu'er Tea Economy and Religious Practices in a Southern Yunnan Bulang Community” (*Social Analysis*, 2021). She is currently working on a monograph manuscript concerning transnational religious interactions between Southwest China and the Upper-Mekong region.

Abstract:

In March 2020, a herd of fifteen elephants left their habitat in Xishuangbanna National Nature Reserve. After walking northward for five hundred kilometers, they reached the outskirts of Kunming, the capital of Yunnan Province, in June 2021. Their entry into densely populated towns and agricultural fields soon made national headlines. The sensation it has stirred up is now reverberating across the world, as more and more drone images captured by the state-designated monitoring teams and elephant paparazzi flood social media. Wildlife specialists, government officials, and the general public in China are all echoing the same questions – What prompted the elephants to leave their habitat? Were the elephants disoriented and did that cause them to wander out of the nature reserve? Will they return to the nature reserve? Is their extinction inevitable? How soon will they become permanently settled in

human designated habitats? Both popular and specialized opinions of human-elephant conflicts continue to swing between elephants as a flagship species with a high value for wildlife tourism because of their ability to *maimeng* or play cute to their human counterparts, elephants as a threat to human property and lives, and as an endangered species that is better protected if individuals live within the nature reserve designated as their home with human conservation assistance.

We co-author this paper as a terrestrial understanding of the climatic transformation of Asian elephant habitat in Yunnan, and in which we see climate synonymously as *clime*, referring to terrestrial places embodied with climatic patterns and related environmental changes. We trace the historical roots of this climatic transformation to a series of climate-induced, inter-Asian imperial conquests and migrations on a massive scale starting eight centuries ago, as well as to the human-induced climate change radically altering elephant habitats since the mid-twentieth century. We take more-than-human historical and geographical approaches to addressing the question of how climate change in the last eight hundred years has been concurrently a work of the earth and a work of humans. The former mostly refers to the Little Ice Age (1300s-1900s) while the latter points to the climate-induced imperial conquests of the Mongols and Chinese dynasties, the subsequent north-to-south migrations of agriculture-based human populations, and the impacts of recent industrialization and globalization projects that have drastically transformed indigenous lifeways in Yunnan. While we argue that these earth- and human-initiated events have both contributed to the fragmented and diminishing home range of the elephants, we intend to narrate the climatic history of Asian elephants in Yunnan as a story of what we call the vanishing “multispecies indigeneity.” Our coinage of this phrase is meant to emphasize a historical inter-Asian landscape in which elephant nations and human nations were once intertwined with each other concurrently as shared and negotiated ecological niches as well as to signify its currently shattered shapes emblematic of the modern humanization of the earth with the single utilitarian purpose of extracting its resources.

“Ontological Closure, Species Bordering and Multispecies Transformations in the Himalayan Adjacent”



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Biography:

Roderick Wijunamai is a lecturer of sociology and anthropology at Royal Thimphu College, Bhutan. He holds an MA in Development Studies from Tata Institute of Social Sciences (Mumbai), and has been teaching at Royal Thimphu College since 2018.

Roderick has researched and written on development mechanisms in East Africa, Indian migrant construction workers' experiences in Bhutan, and more recently on the social history of the Nagas, and the politics of food and eating in Northeast India. He is scheduled to commence his Ph.D. in the Department of Anthropology, at Cornell University, in the spring of 2022, with a thematic focus on Indigenous crops and plantations in the Indo-Burma borderland.

Abstract:

In the contemporary historical moment, profound environmental changes impact lives – human and nonhuman, biotic and abiotic – across communities in the Himalaya and the adjacent region. For many upland communities, both extreme weather and other anthropogenic forces (such as state, neoliberal capitalism, and other new elements) have put indigenous ecological knowledge, traditions, and practices under strain. Together, these processes transform lives and livelihoods in the region, and so in substantial ways. Invoking the conceptual notion of ‘climes’ (Flemming 2010; Carey and Garone 2014), my paper engages two core questions, namely: (a) What are the idioms and affective relations through which the indigenous Tenyimi Naga people, in the Himalayan adjacent, relate to their crops? (b) How has the environmental change affected the relations of the Tenyimi Naga people and the indigenous crops they co-evolved and co-exist with? Using relational ontology frameworks and a multispecies approach, I argue that emergent transformations are interrelated. On one hand, their mutuality—their co-dependence and co-existence—is disrupted. And on the other, these processes are threatening indigenous food sovereignty. My key argument, however, is that the transformations have upset their ‘symbiotic indigeneity’ (Smyer Yü 2021). It is driving species (humans and other-than-humans) apart in ways that are putting a closure on their relational ontology, and what I call *species bordering*.

“Climate, Deities and Development in the Merak highlanders of Bhutan”



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Biography:

Deki Yangzom holds a bachelor degree in Anthropology from Royal Thimphu College, Bhutan. She carried out fieldwork in the highlands of Eastern Bhutan, where she is interested in the intersubjectivities between humans, yaks, deities, and so in the context of changing climate. She presented a paper during the International Society of Bhutan Studies hosted at Oxford University in 2019. She is presently with the Tarayana Centre for Social Research and Development, researching on climate change and adaptation, gender equality and gender transformative change, sustainable agriculture and indigenous knowledge.

Abstract:

The changing relationship between Ama Jomo and the highlanders of Merak in Bhutan. This paper relates religion to ecology through the study of the affective attachments and relations between the deity Ama Jomo and highlanders of Merak in eastern Bhutan. This ongoing research informed through narratives, discuss how the spiritual landscape of Merak is co-inhabited by many Jig ten ki lha (unenlightened gods) who make their presence known throughout the landscape, often in the elements of nature, such as rocks, trees, and water. The Merakpas acknowledge the presence of those deities in the landscape through ritual and offerings. The highlanders revere Ama Jomo for her indispensable role in securing their livelihood in the highlands where they became herders, and formed society and culture. The relationship between the Ama Jomo and the yak herders is a result of an active negotiation process where the mutuality and relatedness is constructed, expressed and maintained. It is this ‘mutuality of being’ (Sahlins 2013) between humans and nonhumans, between the biotic and the abiotic, that this paper will display ethnography, and engage with the wider lens of multispecies relations and vulnerabilities.

Indeed, in the recent years, the community of Merak experienced rapid changes, especially in terms of socio-economic development, life-style, and aspirations. Ever since, Merak became connected by road in 2014, there appears to be a rising tension between Merakpas traditional engagement with the environment and current development aspirations. The herders have started excavating the sacred sites in order to build new and bigger houses. In doing so, the many religious treasures of Ama Jomo, which are imprinted on rocks and trees are now seen to be losing its value. The Merakpas engagement in development discourse invoke Ama Jomo's vengeance as they increasingly engage in construction works on the sacred sites. Merakpas draw the connotation between deities' anger and the sudden natural catastrophe, changing climate, and personal adversity they experience in the highlands. In retrospection, they realize that it is their everyday activities which cause cosmic imbalance. Some of the highlanders fear losing their deity if they continue to provoke and anger Ama Jomo by executing undesirable construction in her landscape. Merakpas link their everyday misfortunes in the village to their decreasing concerns for their deities. This is articulated in terms of the changing behavior of the people in maintaining and expressing their relationship to both the deities and the landscape. Hence, this paper discuss how the rigorous development discourse in the highlands disintegrate the ontological relationship between the herders and the deities, whose presence concurrently shape the landscape of Merak.

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Biography:

Achala Sharma joined ICIMOD in March 2014, and currently working as Programme Associate for Regional Programme 6, Himalayan University Consortium (HUC). She has her master's degree from Indira Gandhi National Open University (IGNOU) – International Center for Academics (ICA) in Kathmandu, Nepal and an undergraduate degree from University of Nebraska (USA) in Economics and Management Information System.

Achala facilitates the smooth running of the Consortium in administrative and day to day operations. In addition to many other responsibilities, some of my major responsibilities are: looking after HUC membership, and institutional grants and contracts, as well as supporting HUC Fellows and trainings, Thematic working group, meetings and workshops.

Prior to joining ICIMOD, she was associated with Mega Bank Nepal Limited as an Operation In-Charge for three years and Wells Fargo Bank in United States for a year. She loves to travel and enjoys cooking and reading.



Bhawana Syangden

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Bhawana Syangden joined ICIMOD in June 2011. Currently, she is working as a Programme Officer for Mountain Knowledge and Action Networks (MKAN). Prior to joining ICIMOD, Ms Syangden worked with the British Council Nepal as Projects Officer. She brings with her relevant experience in working with various INGOs mainly in the conservation field. Ms Syangden has worked for various projects with WWF Nepal, IUCN and SANDEE. She holds a Master's degree in Business Administration with a specialization in General Management from ACE Institute of Management. With more than nine years' of progressive work experience in different international organizations and being involved with several projects, she is adept in program development, oversight and evaluation.



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Kritika Sharma has completed her Computer Engineering and has professional ambition to stay versatile, confident to learn and implement in the best way possible. She joined ICIMOD on August 2019 as Web Content Management Assistant and is working exclusively for HUC Portal. She was appointed as Firefox Student Ambassador and participated in various trainings and workshops

including Office Apps Development Camp, Basic Photoshop training, Women & Mozilla (WoMoz), etc. Before joining ICIMOD, she has worked in CloudFactory for about 2 years as a Data Specialist and later as a freelancer. She is comfortable to actively participate in teaching and instructing engineering subjects and technologies.



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Sanhita Sahasrabudhe joined ICIMOD as Knowledge Management and Communication Officer in 2018. She has eight years of experience working across media, advertising, IT, and the non-profit sector. At ICIMOD, Sahasrabudhe contributes to strengthening the communication impact and outreach of for HUC, SANDEE and HIMAP initiatives under Regional Programme 6 – Mountain Knowledge and Action Networks. She also helps synthesize strategic documents for initiatives under the programme, devising communication strategies and developing knowledge products for internal and external dissemination. Sahasrabudhe has her master's in software engineering and is a gold medalist of the Crafting Creative Communications course at the Mudra Institute of Technology, Ahmedabad, India in 2017.