

Online Conference on Climate Change, Health and Mountain Ecosystems and their Governance in Support of Sustainable Development in the Tropical Andes – Central America Region (Andes+)

July 7-8, 2020



University of
Zurich UZH



CONDESAN
Consortio para el Desarrollo Sostenible
de la Ecorregión Andina

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1 Conference objective

The online conference on Climate Change, Health and Mountain Ecosystems and their Governance in Support of Sustainable Development in the Tropical Andes – Central America Region (Andes+) of the Conéctate A+ network offers an opportunity for continued connection, exchange and learning, addressing the constraints many face with regards to the Covid-19 pandemic in 2020 for face-to-face interaction.

The conference aims at facilitating an interdisciplinary knowledge exchange among researchers and practitioners on ways to identify opportunities, and overcome barriers, to enable successful implementation of sustainable development and climate change adaptation in the Andes+ region. Through this event, the Conéctate A+ network seeks to promote collaborative arrangements, embed and advance current debates, and articulate the rich collective experience of different communities of practice in the Andes+ region, and invite participants in shaping and developing the network into the future.

The working languages of the conference are English and Spanish. No simultaneous translations will be provided.

2 Conference guidelines

To facilitate the virtual format of this conference, we have assembled some instructions and suggestions for participants to follow to make the experience of this virtual conference as smooth as possible.

- Please [click here](#) to register for the Online Conference.
- Please do not circulate links to the Zoom calls online.
- Please join Zoom calls at least 5 minutes before the start of the session.
- To improve the audibility and sound quality, please wear headphones and use a microphone when you are speaking. Please mute your microphone whenever you are not speaking.
- To reduce the bandwidth and carbon intensity of our Zoom calls, please turn your video off when you are not speaking and only switch it on to speak.
- Feel free to pose questions and comments in the chat function in Zoom during the presentations. Speakers will not be reading them as they present, but moderators will use them to structure a question and answer period at the end of the call.
- Once you log in, please indicate your name, affiliation and country in Zoom - e.g. Gustavo Valdivia (CONDESAN, Peru).
- When speaking, first identify/introduce yourself to the group.

3 Conference schedule at-a-glance

DAY	ACTIVITY	DESCRIPTION				TIME UTC -5 (Lima, Quito, Bogotá)
Tuesday, July 7	Welcome and opening remarks	Welcome notes from organizers				8:00 - 8:15
	Keynote Speeches	Keynote speech 1: Stella Hartinger Title: The 2019 report of the Lancet Countdown on Health and Climate Change and its implications for the Andes+ region				8:15 - 8:35
		Keynote speech 2: Julio Postigo Title: Enmarcando la Investigación en y para la región Andes+				8:35 - 8:55
		Question and answer period				8:55 - 9:15
	Break	Break				9:15 - 9:30
	Concurrent Oral Presentation Sessions	Concurrent Oral Presentation Sessions I	Session 1.1: Andean livelihoods and global environmental change	Session 1.2: Climate change, glacier shrinkage and water resources	Session 1.3: Climate change adaptation and sustainability	9:30 - 10:10
		Question and answer period				10:10 - 10:25
		Concurrent Oral Presentation Sessions II	Session 2.1: Andean livelihoods and global environmental change (cont.)	Session 2.2: Climate change, glacier shrinkage and water resources (cont.)	Special Session: Impacto de la crisis COVID-19 en las actividades de las investigadoras latinoamericanas	10:25 - 11:05
		Question and answer period				11:05 - 11:20
		Break				11:20 - 11:35
	Roundtable	Roundtable 1: Sustainable management of Andean territories: New perspectives in pandemic times				11:35 - 12:20
		Question and answer period				12:20 - 12:50
	First Day Closing Remarks	First day's closing remarks and announcements				12:50 - 13:00

Wednesday, July 8

DAY	ACTIVITY	DESCRIPTION				TIME UTC -5 (Lima, Quito, Bogotá)
Wednesday, July 8	Opening remarks and announcements	Second day's opening remarks and announcements				8:00 - 8:15
	Keynotes	Keynote speech 3: Veerle Vanacker Title: The relation between land use, topography and erosion rates in Tropical Andean highlands.				8:15 - 8:35
		Keynote speech 4: Wouter Buytaert Title: Towards water security in the Tropical Andes				8:35 - 8:55
		Question and answer period				8:55 - 9:15
	Break	Break				9:15 - 9:30
	Concurrent Oral Presentation Sessions	Concurrent Oral Presentation Sessions III	Session 3.1: Hazards, risks, and their management	Session 3.2: Hydroclimatic and socio-economic change in glaciated basins	Session 3.3: Sustainable land management and ecosystem services	9:30 - 10:10
		Question and answer period				10:10 - 10:25
		Concurrent Oral Presentation Sessions IV	Session 4.1: Hazards, risks, and their management (cont.)	Session 4.2: Hydroclimatic and socio-economic change in glaciated basins (cont.)	Session 4.3: Sustainable land management and ecosystem services (cont.)	10:25 - 11:05
		Question and answer period				11:05 - 11:20
		Break				11:20 - 11:35
	Roundtable	Roundtable 2: Conéctate A+: Moving forward				11:35 - 12:20
		Question and answer period				12:20 - 12:50
	Closing Remarks	Next steps and closing remarks				12:50 - 13:00

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Detailed conference schedule

Tuesday, July 7, 2020 Times in UTC -5 (Lima, Quito, Bogotá)	
7:30	Registration opens
8:00 – 8:15	Welcome and call to order.
8:15 – 8:35	Keynote speech 1.1: The 2019 report of the Lancet Countdown on Health and Climate Change and its implications for the Andes+ region Stella Hartinger, Universidad Peruana Cayetano Heredia, Lima
8:35 – 8:55	Keynote speech 1.2: Enmarcando la Investigación en y para la región Andes+ Julio Postigo, Indiana University Bloomington
8:55 – 9:15	Question and answer period
9:15 – 9:30	Break
9:30 – 10:25	Concurrent Oral Presentation Session 1.1: Andean livelihoods and global environmental change Chair: Geovanna Lasso
	9:30 Sustainability and vulnerability to climate change of smallholder agroecosystems in highlands: A comparison between agroforestry and conventional systems in the Indigenous Territory of Kayambi People - Northern Andes of Ecuador Raúl Córdova, Nicholas J. Hogarth and Markku Kanninen
	9:40 Water Management in an Andean Peasant Community: Adaptation to Climate Change and Accommodation to the Bureaucratic State Ben Orlove
	9:50 The power of Sumak kawsay's ancestral philosophy (Buen vivir) in the indigenous movements of Colombia - Ecuador in High mountain at 2,600 meters above sea level vs. exclusion by mega mining development, Rights of Mother Nature from the global south" Eduardo Erazo Acosta
	10:00 An Anthropological Perspective into Mining Disputes in Intag, Ecuador Jenni Viitala
	10:10 Question and answer period

9:30 – 10:25	Concurrent Oral Presentation Session 1.2: Climate change, glacier shrinkage and water resources Chair: Fabian Drenkhan	
	9:30	Análisis de la variación temporal del albedo en nieve y glaciares en la Sierra Nevada de Santa Marta (Colombia) Viverlys L. Diaz-Gutiérrez, Tomás R. Bolaño-Ortiz, Yiniva Camargo-Caicedo
	9:40	Water security and climate change adaptation strategies in the glaciated Vilcanota-Urubamba river basin Andrés Goyburo, Pedro Rau, Fabian Drenkhan, Wouter Buytaert
	9:50	Climate change scenarios for northern Andes José D. Pabón-Caicedo, Guillermo E. Armenta-Porras
	10:00	Complex vs simple hydrological simulation in glacierized regions and scarce data: a case study in the upper Vilcanota catchment, Perú Randy Muñoz, Daniel Viviroli, Christian Huggel
	10:10	Question and answer period
9:30 – 10:25	Concurrent Oral Presentation Session 1.3: Climate change adaptation and sustainability Chair: Carolina Adler	
	9:30	PISCIS: One Health, Integration Of Biodiversity Data Into Health Surveillance The Decision-Making Process Hugo Mantilla-Meluk
	9:40	Adaptation strategies to increase resilience against climate change and promote food security in small-scale livestock farmers of the Andes Eduardo Fuentes, Mario Viera, Jorge Gamarra y Carlos Gómez
	9:50	Is "Water sowing and harvesting" ("siembra & cosecha de agua") an efficient strategy to adapt to the negative (local) impacts of climate change? – A preliminary analysis of an ecohydrological field experiment in Rontoccocha (Apurimac, Peru) Jan R. Baiker
	10:00	Challenges in ecosystem-based adaptation to climate change in the Colombian Andes Laura Niggli
	10:10	Question and answer period

10:25 – 11:20	Concurrent Oral Presentation Session 2.1: Andean livelihoods and global environmental change (cont.) Chair: Manuel Peralvo	
	10:25	Increased resilience through different livelihood and production strategies of smallholder farmers in the Peruvian Andes Maria Wurzinger, Marlene Radolf, Gustavo Gutiérrez
	10:35	The potential for restorative justice to address climate change adaptation needs in deglaciating environments Tanya Jones
	10:45	Narratives of Ice Loss in the Peruvian Cordillera Blanca Holly Moulton, Mark Carey, Christian Huggel, Alina Motschmann
	10:55	Social versus environmental sustainability: household income diversification strategies among Quinoa producers in the Southern Bolivian Highlands Elizabeth Jimenez, Corinne Valdivia, Sabin Bieri, Grover Céspedes and Alejandro Romero
	11:05	Question and answer period
10:25 – 11:20	Concurrent Oral Presentation Session 2.2: Climate change, glacier shrinkage and water resources (cont.) Chair: Fabian Drenkhan	
	10:25	Análisis del retroceso glaciar: Formación de lagunas de origen glaciar y su relación con parámetros morfológicos Katy Medina, Edwin Loarte, Alberto Castañeda, Eduardo Villavicencio, Yadira Curo y Francisco Castillo
	10:35	Temperature and precipitation trends in the Cordillera Blanca, and Cordilleras Urubamba, Vilcabamba and Vilcanota. Emily Potter, Duncan Quincey, Andrew Orr, Francesca Pellicciotti, Andrew Ross, Rob Hellström, Catriona Fyffe, Alan Llacza, Gerardo Jacome, Edwin Loarte, Katy Medina, Scott Hosking
	10:45	Cambio en la dirección de la escorrentía del glaciar Sullcón Edwin Loarte, Katy Medina, Francisco Castillo
	10:55	Question and answer period
10:25 – 11:20	Special Session: Impacto de la crisis COVID-19 en las actividades de las investigadoras latinoamericanas Chairs: Nadia Castro and Ana E. Ochoa	
	10:25	Silvana Tapia, Universidad del Azuay, Ecuador

	10:45	Claudia Segovia, REMCI.
	11:05	Question and answer period
11:20 – 11:35	Break	
11:35 – 12:50	Roundtable 1: Sustainable management of Andean territories: New perspectives in pandemic times Chair: TBD	
	11:35 - 12:05	Julio Postigo, Indiana University Bloomington; Xavier Ricard Lanatta, Agence Française de Développement; and María Fernanda López, Facultad Latinoamericana de Ciencias Sociales, Quito
	12:20	Question and answer period
12:50 – 13:00	General announcements	

Wednesday, July 8, 2020 Times in UTC -5 (Lima, Quito, Bogotá)		
8:00 – 8:15	General announcements	
8:15 – 8:35	Keynote speech 2.1: The relation between land use, topography and erosion rates in Tropical Andean highlands Veerle Vanacker, Université Catholique de Louvain	
8:35 – 8:55	Keynote speech 2.2: Towards water security in the tropical Andes Wouter Buytaert, Imperial College London	
8:55 – 9:15	Question and answer period	
9:15 – 9:30	Break	
9:30 – 10:25	Concurrent Oral Presentation Session 3.1: Hazards, risks, and their management Chair: Christian Huggel	
	9:30	Human-induced glacial retreat has significantly increased glacial lake outburst flood hazard from Lake Palcacocha (Cordillera Blanca, Peru) Rupert F. Stuart-Smith, Gerard H. Roe, Sihan Li, Myles R. Allen

	9:40	Developing a low-cost sensor network for predicting glacial lake flood events Liam S. Taylor, Duncan J. Quincey, Mark W. Smith, Fredy S. Monge
	9:50	Working at the boundary: interdisciplinarity study of risks and hazards in the context of climate change Fredy S. Monge & Duncan J. Quincey
	10:10	Hazard assessment among mountain beings: Anthropological perspectives on glacial politics Noah Walker-Crawford
	10:10	Question and answer period
9:30 – 10:25	Concurrent Oral Presentation Session 3.2: Hydroclimatic and socioeconomic change in glaciated basins Chair: Carolina Adler	
	9:30	Storage and flows from headwater systems and water availability for downstream human and ecosystems across a Transect of the Americas Jan Boll, Mark Stone, Alexander Fremier, Julie Padowski, Marygold Walsh-Dilley, Christopher Scott
	9:40	Glaciología participativa como forma de adaptación al cambio climático y gobernanza glaciar Jorge Luis Ceballos
	9:50	An integrated approach for the construction of socio-economic scenarios in the Rio Santa catchment area, Peru Christian D. León, Wolfgang Weimer-Jehle
	10:00	Integrating Climate and Socio-Economic Scenarios in a Hydrological Model for the Santa River Basin, Peru Claudia Teutsch, Faizan Anwar, Jochen Seidel, András Bárdossy, Christian Huggel, Alina Motschmann, Christian León, Fabian Drenkhan
	10:10	Question and answer period
9:30 – 10:25	Concurrent Oral Presentation Session 3.3: Sustainable land management and ecosystem services Chair: Manuel Peralvo	
	9:30	What clues do satellites provide about why bofedales of Bolivia are degrading? Gabriel Zeballos, Bryan Mark, Alvaro Montenegro, Karina Yager, Rosa Meneses.

	9:40	How does land management affect useful plant composition in the páramo ecosystem? The case of the páramo complex Guantiva-La Rusia (Boyacá, Colombia) Martin Baruffol, David Granados, Mauricio Diazgranados
	9:50	Community forest management and ecosystem conservation in the Chikllarazu microbasin, Ayacucho, Peru Tulia García León, Walter Victor Castro Aponte, Lauren T. Cooper, Erica Castro Aponte
	10:00	How do the Páramos store water? The role of plants and people France Gerard, Ed Rowe, Wouter Buytaert, Adriana Espinosa-Ramirez, María Paula Escobar, Conrado Tobón, Mike Wilson, David Large, Dominic Moran, Charles George, Christopher Barry, Boris Ochoa-Tocachi, Jeffrey Prieto, Susan Conlon, Antonia Liguori, Tania Ganitsky, Angelica Cabeza Spino, Juan Camilo Afanador, Andrew Bradley, Martin Baruffol, Ce Zhang, Mauricio Diazgranados
	10:10	Question and answer period
10:25 – 11:20	Concurrent Oral Presentation Session 4.1: Hazards, risks, and their management (cont.) Chair: Christian Huggel	
	10:25	PEGASUS: Producing EnerGy and preventing hAzards from SURface water Storage in Peru – Project Update Duncan J. Quincey, Jorge Darwin Abad Cueva, Emily Potter, Jonathan Carrivick, Andrew Ross, Daniel Horna, Pedro Rau, Daniel Parsons, Chris Skinner, Joshua Wolstenholme, Fredy S. Monge, Nilton Montoya, Joshua Castro, Randy Muñoz, Jahir Anicama Díaz, Sofia Castro, Anita Arrascue, Simon Cook, Francesca Pellicciotti, Stephan Gruber
	10:35	Análisis y reconstrucción de la cadena de procesos GLOF en la laguna Salkantaycocha (Cordillera Vilcabamba, Perú) Oscar Vilca, Martin Mergili, Holger Frey, and Christian Huggel
	10:45	GLOF Early Warning System in Carhuaz, Peru: What can we learn? Holger Frey, Alejo Cochachin, Fabian Drenkhan, Javier Fluixá-Sanmartín, Javier García Hernández, Christian Huggel, Christine Jurt, Randy Muñoz, Karen Price, Luis Vicuña
	10:55	Question and answer period
10:25 – 11:20	Concurrent Oral Presentation Session 4.2: Hydroclimatic and socioeconomic change in glaciated basins (cont.) Chair: Carolina Adler	
	10:25	Transformando el río Teusacá a partir del fortalecimiento de gobernanza del agua, una experiencia regional de ciencia ciudadana Lina Zuluaga

	10:35	Economic losses from changing hydrology under future climate change, glacier shrinkage and growing water demand in the Tropical Andes Fabian Drenkhan, Randy Muñoz, Christian Huggel, Holger Frey, Alina Motschmann
	10:45	Hydroclimatic vulnerability in the Tropical Andes: Contributions from the Transdisciplinary Andean Research Network (TARN) and the path forward Bryan Mark, Michel Baraer, Robert Hellström, Alfonso Fernández
	10:55	A methodology to downscale water demand data with application to the Andean region (Ecuador, Peru, Bolivia, Chile) Charles Zogheib, Boris F. Ochoa-Tocachi, Simon Moulds, Juan Ossa-Moreno, Marcos Villacis, Carlos Verano, Wouter Buytaert
	11:05	Question and answer period
10:25 – 11:20	Concurrent Oral Presentation Session 4.3: Sustainable land management and ecosystem services (cont.) Chair: Gustavo Valdivia	
	10:25	Five scale challenges in Ecuadorian forest and landscape restoration governance Daniel Wiegant, Manuel Peralvo, Pieter van Oel, Art Dewulf
	10:35	New insights on land use, land cover, and climate change in human-environment dynamics of the equatorial Andes Santiago Lopez, Maria Fernanda Lopez Sandoval, Jin-Kyu Jung
	10:45	Optimal selection of conservation areas in a mountainous region in the Tropical Andes Enrique Angel Sanint, Lorena Tatiana Cortés Izquierdo
	10:55	Monitoreo de los ecosistemas altoandinos de Colombia y sus servicios ecosistémicos: una propuesta con enfoque integrado hacia el desarrollo y la adaptación al cambio climático Liz Johanna Díaz, Jorge Luis Ceballos, Luis Daniel Llambí, Manuel Peralvo, Edgar Andrés Avella, María Teresa Becerra, Martín Baruffol, Ana Belén Hurtado, Natalia Norden
	11:05	Question and answer period
11:20 – 11:35	Break	
11:35 – 12:50	Roundtable 2: Conéctate A+: Moving forward	
	11:35	TBD

	11:50	TBD
	12:05	TBD
	12:20	Question and answer period
12:50-13:00	Closing remarks	

5 About Conéctate A+

Conéctate A+ is a network of researchers, practitioners and institutions interested in deepening the interdisciplinary exchange and rigorous, and comparative analysis of top-priority problems linked to ecosystems, climate change, health, and sustainable development in the Tropical Andes – Central America region (Andes+). By critically thinking through the potential of the UN 2030 Agenda and its Sustainable Development Goals (SDGs), among other global and regional policy processes, this network seeks to identify critical gaps as well as opportunities in developing, implementing, and monitoring for effective action on sustainability in this region. Conéctate A+ responds to an urgent need for a hub in the Andes+ region that fosters effective collaborative research with an integrated approach, allowing a more systematic and long-term effort to address research knowledge needs and gaps on sustainable development.

The main objectives of Conéctate A+ are to:

- Foster an inter- and transdisciplinary collaboration between researchers, research institutions, and practitioners, initially between Switzerland and the Andes+ region with scope for further South-South and North-South collaboration.
- Articulate the most relevant findings and current debates in sustainable development and environmental governance in academic research in the Andes+ region.
- Produce knowledge on sustainable development and environmental governance in the Andes+ region, bridging knowledge and action in key decision making and policy processes in the region.
- Contribute to the formulation and implementation of new sustainable development strategies and projects.

Conéctate A+ is supported by the swissuniversities Development and Cooperation Network (SUDAC) 'Clusters of Cooperation in the Global South' (CLOCs) programme, which offers targeted support for collaboration between the various types of Swiss higher education institutions and their partners from the Global South in order to achieve an excellent standard of education, research and innovation on global challenges.

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- Andean Forest Program, financed by the Swiss Agency for Development and Cooperation (SDC)