

REPORT OF COMMISSION ACTIVITIES 2021

Submitted to the Interim Secretary-General
International Geographical Union (IGU)
Prof. Dr. Barbaros Gönençgil

by

Dr. Suraj Mal
Chair: Commission on Biogeography and Biodiversity
Dr. Maria Bobrowski
Vice-Chair: Commission on Biogeography and Biodiversity

Supported by the steering committee of the
IGU Commission on Biogeography and Biodiversity

Officers:

Chair: Dr. Suraj Mal, Shaheed Bhagat Singh College, University of Delhi, India,
suraj.mal@sbs.du.ac.in
Vice-Chair: Dr. Maria Bobrowski, University of Hamburg, Germany, maria.bobrowski@uni-hamburg.de

Outline

The annual report of our commission, i.e., Biogeography and Biodiversity, is presented in the following five sections:

- 1. Membership
- 2. Meetings
- 3. Networking
- 4. Publications
- 5. Archival contributions

1. Membership

1.1 Steering Committee Members

The following colleagues had been appointed as steering committee members of the IGU Commission on Biogeography and Biodiversity for the period 2016-2020:

Dr. Suraj Mal (Chair), Department of Geography, Shaheed Bhagat Singh College University of Delhi, India. Email: suraj.mal@sbs.du.ac.in

Dr. Maria Bobrowski (Vice-Chair), Department of Geography, University of Hamburg, Bundesstr. 55, 20146 Hamburg, Germany, Ph.: +49 428384911, Email: maria.bobrowski@uni-hamburg.de

Prof. Dr. Kazuharu Mizuno, Department of Geography, Graduate School of Letters, Kyoto University, Japan, Ph. Email: mizuno.kazuharu.7n@kyoto-u.ac.jp.

Prof. Dr. Zerihun Woldu, Department of Plant Biology and Biodiversity Management, Director of Research of Addis Ababa University, College of Natural Sciences, Addis Ababa University, Ethiopia. Email: zerihun_woldu@yahoo.com.

Prof. Dr. Ram Prasad Chaudhary, Emeritus Professor, Tribhuvan University, Kirtipur (TU), Kathmandu, Nepal. Coordinator, MAB Committee, Nepal National Commission for UNESCO. Email: am@cdbtu.wlink.com.np

Prof. Dr. John Sinclair, Natural Resources Institute, University of Manitoba, Winnipeg, Manitoba, Canada, Ph. Email: john.sinclair@umanitoba.ca.

Dr. Harald Pauli, Head of the GLORIA coordination; Austrian Academy of Sciences, Institute for Interdisciplinary Mountain Research & University of Natural Resources and Life Sciences, Vienna (BOKU), Center for Global Change and Sustainability, Vienna, Austria. Email: harald.pauli@oeaw.ac.at.

Prof. Dr. Arkady Tishkov, Russian Academy of Sciences, Institute of Geography, Staromonetny per., 29, Moscow 119017, Russia. E-mail: tishkov@biodat.ru.

Prof. Dr. Monica Dumitrescu, Institute of Geography, Romanian Academy 12, Dimitrie Racovita, sect. 2, Bucharest. Email: stefania_dumitrescu@yahoo.com.

Dr. Ana Sabogal, Pontifical Catholic University of Peru | PUCP, Faculty of Liberal Arts and Humanities, Lima, Lima, Peru, Director Maestria Desarrollo Ambiental, Coordinador Sección Geografía en Pontificia Universidad Católica del Perú, E-mail: asabogal@pucp.pe.

Dr. Maksim Kulikov, University of Central Asia, 138 Toktogul Street, 720001, Bishkek, Kyrgyz Republic, Kyrgyzstan. Email: maksim.kulikov@ucentralasia.org

Dr. Antje Burke, Enviroscience Namibia, Windhoek Namibia. Email: enviroscience@gmx.com

Prof. B.W. Pandey (Secretary), Department of Geography, Delhi School of Economics, University of Delhi, India. Email: bwpdsegeo@gmail.com

IGU Liaison

Prof. Dr. Udo Schickhoff, Department of Geography, University of Hamburg, Bundesstr. 55, 20146 Hamburg, Germany, Ph.: +49 428384911, Email: udo.schickhoff@uni-hamburg.de

Current Corresponding Members

Current corresponding members of the Commission on Biogeography and Biodiversity are listed below, arranged by countries. This membership list has more than 260 members currently but does not

include numerous delegates from respective host countries attending the annual meetings.

Argentina

Alessandro, M.B., Mendoza

Australia

Kull, C.A., Clayton; Millington, A., Adelaide, Carter, J., Queensland.

Austria

Geitner, C., Innsbruck; Grabherr, G., Vienna; Pauli, H., Vienna

Brazil

Melo e Souza, R., Aracaju; Rezende da Silva, S., Sao Paulo; Tavares Rocha, Y., Sao Paulo

Canada

Mitchell, S., Ottawa; Sinclair, J., Winnipeg; Tews, J., Ottawa

Chile

Cabalar Fuentes, M., Santiago; Quintanilla, V., Santiago; Rojas, C., Concepcion

China

Cai, Y., Shanghai; Chen, R., Shanghai; Ming, J., Zhangye; Ren, Z., Beijing; Venevsky, S., Beijing;
Zhang, X., Beijing;

Costa Rica

Gutierrez, MG

Egypt

Moatamed, A., Egypt

Ethiopia

Bekele, T., Shashemene; Desta, H., Addis Ababa; Woldu, Z., Addis Ababa

Finland

Hietala, R., Turku

Georgia

Gegechkori, A., Tbilisi

Germany

Albrecht, C., Giessen; Anhuf, D., Passau; Audorff, V., Bayreuth; Baranova, A., Hamburg; Becht, M., Eichstätt; Beierkuhnlein, C.; Bayreuth; Bittner, T., Bayreuth; Block, J., Erlangen; Block, M., Erlangen; Bobrowski, M., Hamburg; Böhling, N., Kirchheim u. Teck; Böhmer, H.J., Bonn; Borchardt, P., Hamburg; Bräuning, A., Erlangen; Bürzle, B., Hamburg; Chmielewski, F.M., Berlin; Cikovac, P., Köln; Deil, U., Freiburg; Dlugosz, A., Trier; Dotter, D., Regensburg; Dulamsuren, C., Göttingen; Ehlkes, L., Hamburg; Engwald, S., Frankfurt a.M.; Fartmann, T., Münster; Faude, U., Bonn; Feilhauer, H., Erlangen; Filz, K., Trier; Finch, O.D., Oldenburg; Fränzle, O., Kiel; Friedmann, A., Augsburg; Gawlik, J., Erlangen; Gebel, M., Dresden; Gebhardt, H., Karlsruhe; Glawion, R., Freiburg i.Br.; Gleich, A., Erlangen; Griessinger, J., Erlangen; Hahn, I., Münster; Harter, D., Bayreuth; Hochhut, E.S., Mainz; Hohnwald, S., Göttingen; Holler, S., Hamburg; Hözel, N., Münster; Hoppe, F., Hamburg; Jaeschke, A., Bayreuth; Jahan, R., Hamburg; Jedicke, E., Karlsruhe;

Jentsch, A., Bayreuth; Jungkunst, H., Göttingen; Jurasinski, G., Rostock; Kappas, M., Göttingen; Karl, H.V., Göttingen; Kiehl, K., Freising; Kreft, H., Göttingen; Kreyling, J., Bayreuth; Krummel, T., Göttingen; Kuhlmann, M., Münster; Kuhn, E., Gackenbach; Küster, H., Hannover; Lange, J., Greifswald; Lembeck, R., Hamburg; le Mellec, A., Göttingen; Lingenhöhl, D., Erlangen; Link, M., Gießen; Löffler, J., Bonn; Loos, G.H., Oberhausen; Lötters, S., Trier; Löw, A., Hamburg; Mahecha, M., Jena; Menz, G., Bonn; Metzing, D., Oldenburg; Meyn, A., Potsdam; Miehe, G., Marburg; Mühlner, S., Leipzig; Müller-Hohenstein, K., Bayreuth; Nagy, L., Bayreuth; Najmi, U., Greifswald; Neff, C., Karlsruhe; Nezadal, W., Erlangen; Nüsser, M., Heidelberg; Nutz, L., Karlsruhe; Pape, R., Bonn; Peters, M., München; Peters, T., Erlangen; Platten, H., Koblenz; Poschwitz, H., Frankfurt a.M.; Pott, R., Hannover; Reimer, F., Bonn; Reiss, M., Marburg; Reu, B., Leipzig; Richter, M., Erlangen; Rödder, D., Bonn; Rollenbeck, R., Mannheim; Runkel, U., Trier; Russow, F., Bensheim; Samimi, C., Bayreuth; Sattler, D., Leipzig; Scheid, A., Karlsruhe; Schickhoff, U., Hamburg; Schiller, H., Eitorf; Schlütz, F., Göttingen; Schmidlein, S., Karlsruhe; Schmitt, T., Bochum; Schmitt, E., Giessen; Schröder, H., Erlangen; Schröder, B., Mannheim; Schröder, B., Rostock; Schulz, E., Würzburg; Schulz, N., Erlangen; Schwab, N., Hamburg; Schwabe, B., Erlangen; Siewert, A., Hamburg; Steinbauer, M., Bayreuth; Steinecke, K., Bremen; Stenzel, S., Bonn; Strewe, R., Bad Zwischenahn; Sturm, H.J., Frankfurt a.M.; Szarzynski, J., Mannheim; Thannheiser, D., Hamburg; Treter, U., Erlangen; Vanselow, K.A., Erlangen; Vater, G., Berlin; Venzke, J.F., Bremen; Veste, M., Hamburg; Völkel, J., Regensburg; Wehberg, J.-A., Hamburg; von Wehrden, H., Halle/Saale; Wagner, F., Bremen; Wallossek, C., Köln; Weiß, W., Erlangen; Weis, M., Freiburg; Wellstein, C., Bayreuth; Werner, W., Heidelberg; Werner, M., Mainz; Wesenberg, J., Leipzig; Wilmking, M., Greifswald; Wollesen, D., Bochum; Zemmrich, A., Greifswald; Kurse, L., Betz, F.

Great Britain

Hill, J., Bristol; Jones, B., Oxford; Syfert, M., Cambridge

Hungary

Szemethy, L., Hungary.

India

Bhardwaj, M., Lucknow; Bhat, M.S., Srinagar; Chauhan, D., Jaipur; Chauhan, G.S., Bhopal; Das, S.A., Mysore; Deka, D., Guwahati; Eswarappa, B., Bangalore; Fazal, S., Aligarh; Jana, N., Bardwan; Jayakumar, K.V., Kozhikode; Jeet, I., Jammu; Kala, C.P., Kosi-Katarmal; Kanth, T.A., Srinagar; Khuroo, A., Srinagar; Kishan, B., Hyderabad; Kumar, A., Delhi; Kumria, P., Delhi; Maithani, D.D., Srinagar (Garhwal); Mal, S., Delhi; Dehradun; Nagabhushanam, N., Tirupati; Nandeshwar, M.D., Kozhikode; Negi, V.S., Delhi; Pandey, U.N., Bilaspur; Panwar, M.S., Srinagar (Garhwal); Pathak, M., Bhurkura; Prasad, R., Jaipur; Rahman, M.; Gauhati; Sarkar, A., Delhi; Sharma, P., Gauhati; Sharma, V.R., Delhi; Singh, M., Rohtak; Singh, P.K., Lucknow; Singh, R.B., Delhi; Sreekesh, S., Delhi; Srinagesh, B., Hyderabad; Suresh, M., India; Tiwari, V.K., Bilaspur; Wodeyar, A.K., Bangalore; De, J., Calcutta; Shah, M.B., Imphal; Singh, B.V.R., Rajasthan; Biswasroy, M. West Bengal; Upadhyaya, H. Lucknow; Varghese, N. Delhi; Dutta, S. West Bengal; Praveen, U., Delhi;

Hungary

Szemethy, L., Hungary;

Ireland

Taylor, D., Dublin

Japan

Fujita, T., Kyoto; Kimoto, K., Hiroshima; Koarai, M., Tsukuba; Mizuno, K., Kyoto; Teshirogi, K.,

Tokyo; Kazuharu, K., Kyoto; Wang, R. Tsukub;
Kyrgyzstan
Kulikov, M., Bishkek; Laskov, G., Bishkek; Usupbaev, A., Bishkek

Mexico
Patricia, P., Guadalajara; Velázquez, J.A., Mexico City
Mongolia
Damdinsuren, O., Khovd

Myanmar
Mar Yee, K., Yangon

Namibia
Bethune, S., Windhoek; Curtis, B., Windhoek; Joubert, D.F., Windhoek

Nigeria
M. Fasona, Lados;

Neatherlands
Clec'h, S.C. Wageningen;

New Zealand
Wearing, A., Dunedin

Nigeria
Aweto, A., Ibadan

Norway
Lundberg, A., Bergen, Vetaas, O., Bergen

Poland
Bokwa, A., Krakow; Dudek, A., Warsaw

Romania
Baltescu-Socol, O., Bucarest; Grigorescu, I., Bucarest; Romanescu, G., Iasi

Russia
Alekseeva, N., Moscow; Belonovskaya, E., Moscow; Dikareva, T.V., Moscow; Kharuk, V. I., Krasnoyarsk; Makhinov, A.N., Khabarovsk; Milanova, E., Moscow; Petrushina, M., Moscow; Sorokin, L. V., Moscow; Tishkov, A.A., Moscow; Zolotov, D., Barnaul., Dmitry Ganyushkin, St Petersburg; Marina Petrushin, Moscow;

Slovenia
Valjavec, M.W. Koper; Ribeiro, D. Koper; Zupan, S. Koper

South Africa
Mukwada, G., Phuthaditjhaba

Spain
Infante Fabres, N.O., Barcelona; Lozano Valencia, P.J., San Sebastian

Switzerland

Beck, J., Basel; Brügger, R., Bern; Jeanneret, F., Bern; Nagel, P., Basel; von Fumetti, S., Basel; Vonlanthen, C., Bern; Wolf, S., Zürich, Simon K Allen, Zurich.

Thailand

Schmidt-Vogt, D., Bangkok

Tunisia

Ayache, F., Sousse; Mondher, C., Manouba

Uganda

Benita, R., Kampala

Ukraine

Gerasimenko, N., Kiev

Uruguay

Gonzalez-Gervasio, A., Montevideo

USA

Blumler, M., Binghamton; Hessing-Lewis, M., Corvallis; Mishra, N. B., Wisconsin

Vietnam

Pham Binhh, T., Ha Noi

West Indies

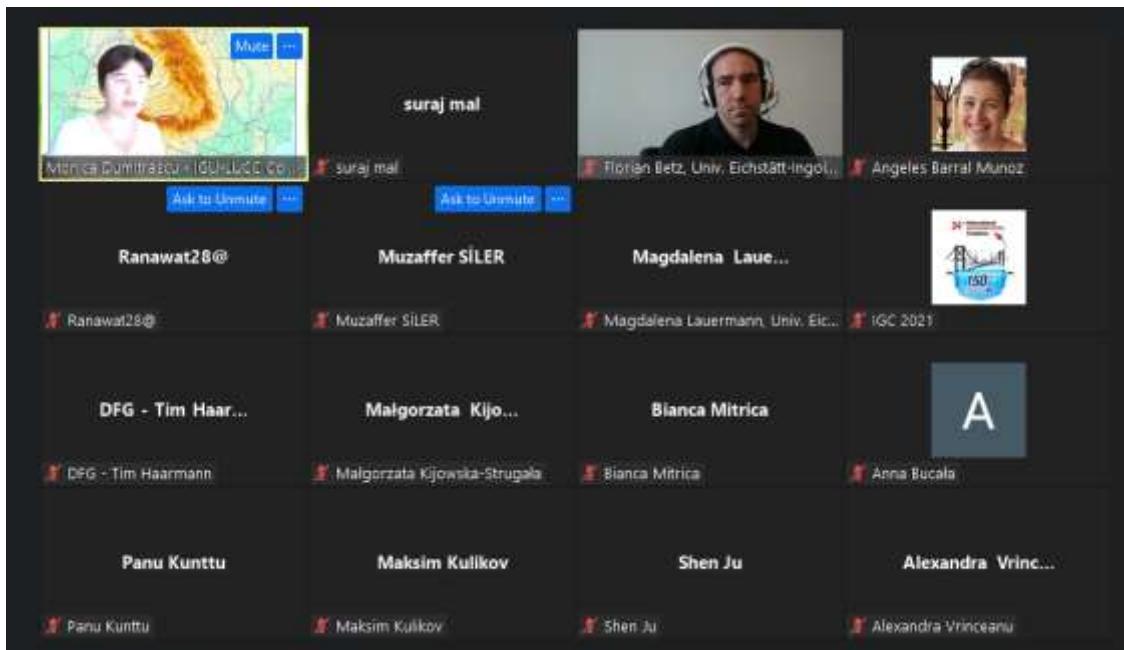
J. Jacob, Jamaica

2. Meetings**2.1 Meetings (Conferences/Seminars) collaborated/participated in 2021****2.1.1 34th INTERNATIONAL GEOGRAPHICAL CONGRESS (IGC) CONFERENCE ON
GEOGRAPHY: BRIDGING THE CONTINENTS, ISTANBUL, TURKEY DURING 16-
21 AUGUST, 2021.**

Our commission actively participated in the IGC Istanbul conference. The conference was jointly organized by Istanbul University, the Turkish Geographical Society, and IGU with a focus on Geography: Bridging the Continents. Our commission had the following sessions and papers scheduled.

Session 1: Land use/cover change impacts on the mountain landscape (Chair: Suraj Mal)

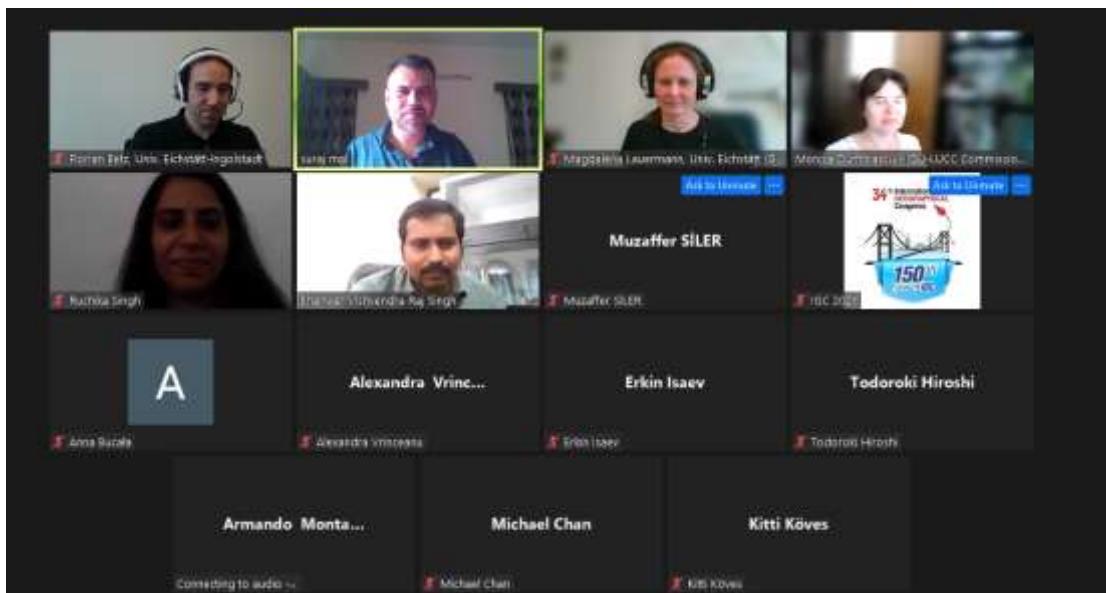
- Land use/cover change impacts in the Romanian Carpathians: Insights from selected protected areas by Monica Dumitraşcu, Gheorghe Kucsicsa, Dan Balteanu, Ana-elena Popovici, Ines Grigorescu, Alexandra Vrinceanu, Cristina Dumitrica.
- Derivation of flood plain habitats from remote sensing data in the Naryn Basin. Kyrgyzstan by Magdalena Lauermann, Florian Betz, Bernd Cyffka
- Importance of parent material on the natural regeneration and spreading of ASPEN (*Populus Tremulal.*) in Erciyes mountains, Central Anatolia by Ibrahim Atalay, Hüseyin Kozan, Refik Gündüz, Uğur Efe, Özdal Yağan, Sevda Altunbaş, Muzaffer Siler



Participants in our commission session

Session 2: Mountain ecosystem responses to climate change (Chair: Suraj Mal)

- Changes of Shunkalpa glacier during the past century (1886-2017) in the central Himalaya, India by Suraj Mal, Udo Schickhoff, Manish Mehta and RB Singh
- Sensitivity and Response of a Himalayan near-natural treeline to climate change by Niels Schwab, Karolina Janecka, Ryszard J. Kaczka, Jürgen Böhner, Ram Prasad Chaudhary, Thomas Scholten, Udo Schickhoff
- Climate change in extreme microsystems: An example in microbialites Andean Lakes by Patricio Guillermo Villafañe, Carlos Cónsole-gonella, Leonardo Fadel Cury, Maria Eugenia Farias
- Vegetation trend analysis in Batken Oblast of Kyrgyzstan by Maksim Kulikov

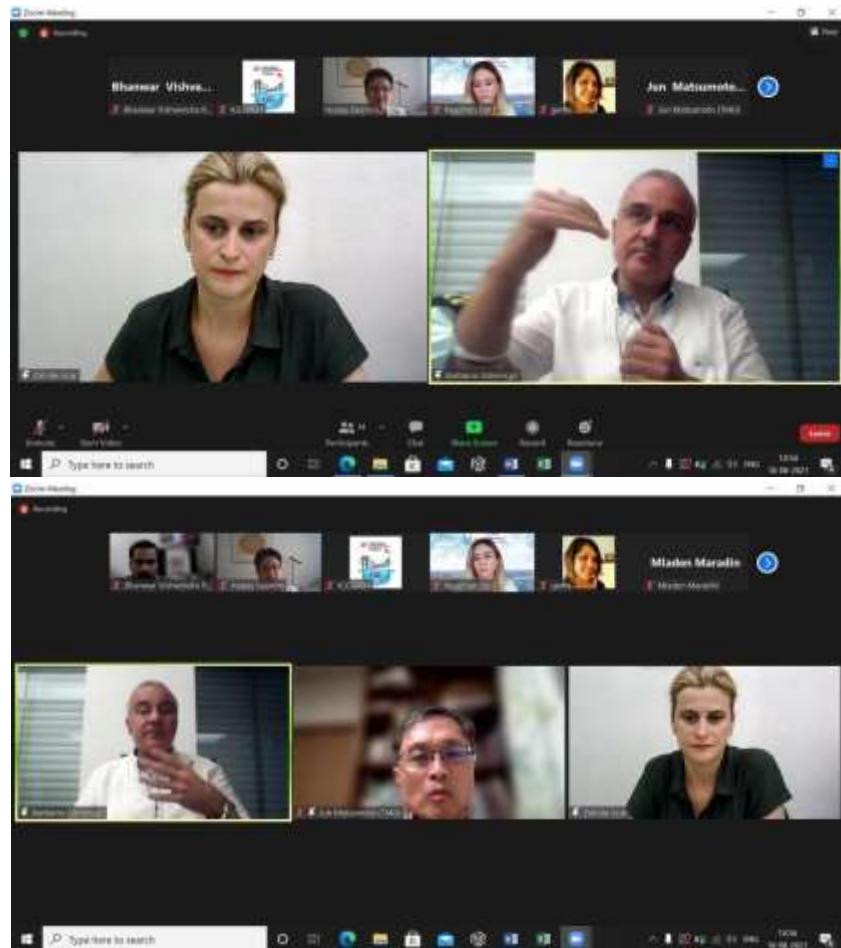


Participants in our commission session

Session 3: Recent developments and expansions in Biogeography (Chair: Udo Schickhoff)

- Human-wildlife conflicts in the tiger corridor of Rajasthan: Case study of Ranthambore, India by Bhanwar Vishvendra Raj Singh

- Comparative assessment of carbon sequestration potential of terminala Superba Engl. & Diels and nauclea diderrichii (De Wild & T. Durand) Merrill. Plantations in forestry research institute of Nigeria, Ibadan, Oyo State by Bolanle Lisa Olajiire-ajayi, Adeniyi Sulaiman Gbadegesin, Adegoke Adejimi
- Biogeomorphology from space: Assessing the dynamic interaction between hydrogeomorphology and vegetation along the Naryn River in Kyrgyzstan based on dense satellite imagery time series by Florian Betz, Magdalena Lauermann, Gregory Egger, Bernd Cyffka



Participants in our commission session (Source: Dr. BVR Singh)

2.2 FORTHCOMING CONFERENCES/SEMINARS TO BE SUPPORTED/COLLABORATED BY OUR COMMISSION IN 2022

2.2.1 IGC Paris “The Time for Geographers: The Centennial Congress” is scheduled to be held in Paris-France on 18-22 July 2022. Our commission has proposed the following sessions and are accepted.

- Mountain Ecosystem Responses to Climate and Land use change.
- Geography of Nature in the 21st Century: An Epistemology for the Anthropocene
- Development of Biogeography
- Dynamic Narratives and trends in biodiversity conservation and sustainable development
- Ecouter Et Entendre Le Territoire En Temps De Changements : Que Nous Disent Les Sons Des Dynamiques Et Des Interactions Entre Sociétés Et Environnement ?
- Environnements Et Covid : Vers De Nouvelles Relations Aux Vivants ?

2.2.2 2nd GORILLA Conference in Kampala, Uganda in December 2022 is already under the planning phase. The commission on Biogeography and Biodiversity, African Studies, and Geography of Future earth have agreed to collaborate in this scientific event. More details will be available soon.

2.2.3 IGU thematic conference on Sustainability, Future earth, and Humanities: Opportunities and Challenges is scheduled to be held in Central University of Haryana, India from 24th to 25th November 2022. In this event, in addition to our commission, 15 other IGU commissions are collaborating. Here is the link for the conference <https://igu2022.cuh.ac.in/index.php>

2.3 FORTHCOMING TRAINING/CAPACITY-BUILDING PROGRAM TO BE SUPPORTED/COLLABORATED BY OUR COMMISSION IN 2022

2.3.1 We are planning a two-day workshop/training on Vegetation health and snow cover dynamics for early Ph.D. students during the IGU thematic conference on Sustainability, Future earth, and Humanities: Opportunities and Challenges is scheduled to be held in Central University of Haryana, India from 24th to 25th November 2022.

2.3.2 There is also a plan to do a capacity-building program for the young researchers at the proposed 2nd GORILLA Conference in Kampala, Uganda in December 2022. This is however at a very early stage. More details will be available soon.

3 Networking

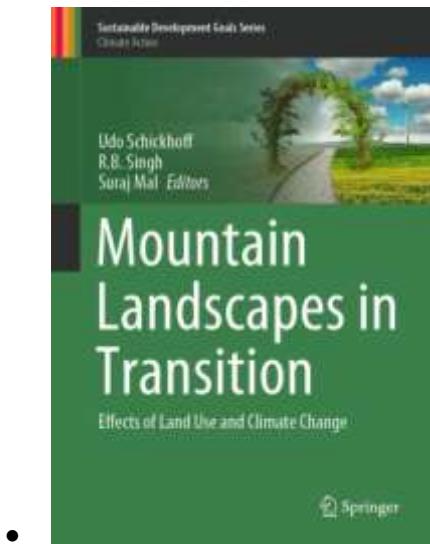
During 2021, there were not many activities amid COVID-19. Therefore, there has not been much development on the networking aspects in 2021. However, in the year 2022, we are committed to speeding up our commission activities, as the Covid situations have slightly improved. We are already collaborating with many IGU commissions in the IGU thematic conference on Sustainability, Future earth, and Humanities: Opportunities and Challenges is scheduled to be held in Central University of Haryana, India from 24th to 25th November 2022. The commission on Biogeography and Biodiversity, African Studies, and Geography of Future earth will collaborate through 2nd GORILLA Conference in Kampala, Uganda in December 2022.

We are continuously working to engage and collaborate with new scientific organizations, particularly in developing and under-developed countries e.g. in Africa.

4 Publications

The following section provides some of the important publications that our commission members are part of. Also, some collaborative works with other commissions are provided.

- Schickhoff, U., Singh, R., Mal, S. (Eds.), 2021. Mountain Landscapes in Transition - Effects of Land Use and Climate Change. Springer Nature Switzerland AG. doi:<https://doi.org/10.1007/978-3-030-70238-0>. This volume explores the Climate and Land-use change effects on the world mountains with specific case studies. Further information about the publication can be found at <https://www.springer.com/gp/book/9783030702373>



- Source: <https://link.springer.com/book/10.1007/978-3-030-70238-0>
- A special issue “Mountains in Transition” under the “MDPI” Journal “Land” is open for submission, where Prof. Dr. Udo Schickhoff, Dr. Suraj Mal, Dr. Maria Bobrowski and Dr. Seema Rani are the editors for this special issue. The special issue invites contributions mainly focusing on, Historical and future climate change, climate change impacts on mountain cryosphere and hydrosphere, human population dynamics/causes and effects of migration, land use/cover changes, effects of climate and land-use change on mountain biosphere, and biodiversity, hazards-disasters-vulnerability, and risks in the mountains, agro-system changes, and crop diversity, impacts of infrastructure development in mountains, indigenous/local knowledge and conservation practices. Here is the link with details of the special issue https://www.mdpi.com/journal/land/special_issues/Mountains_Transition
- We are also in the process of a special issue on Sustaining Himalayan Environment and Future Earth with the International Journal of Ecology and Environmental Sciences, where Suraj Mal (Biogeography and Biodiversity Commission) and Pankaj Kumar (Assistant Secretary-General, IGU, and Commission on Mountain Studies) are the guest editors. The special volume is in the final stage and should be published soon.
- Bobrowski, M., Weidinger, J., Schickhoff, U., 2021a. Is New Always Better? Frontiers in Global Climate Datasets for Modeling Treeline Species in the Himalayas. *Atmos.* . <https://doi.org/10.3390/atmos12050543>
- Bobrowski, M., Weidinger, J., Schwab, N., Schickhoff, U., 2021b. Searching for ecology in species distribution models in the Himalayas. *Ecol. Modell.* 458, 109693. <https://doi.org/https://doi.org/10.1016/j.ecolmodel.2021.109693>
- Mal, S., Allen, S.K., Frey, H., Huggel, C., Dimri, A.P., 2021. Sectorwise Assessment of Glacial Lake Outburst Flood Danger in the Indian Himalayan Region. *Mt. Res. Dev.* 41. <https://doi.org/10.1659/MRD-JOURNAL-D-20-00043.1>
- Shugar, D.H., Jacquemart, M., Shean, D., Bhushan, S., Upadhyay, K., Sattar, A., Schwanghart, W., McBride, S., de Vries, M.V.W., Mergili, M., Emmer, A., Deschamps-Berger, C., McDonnell, M., Bhambri, R., Allen, S., Berthier, E., Carrivick, J.L., Clague, J.J., Dokukin, M., Dunning, S.A., Frey, H., Gascoin, S., Haritashya, U.K., Huggel, C., Kääb, A., Kargel, J.S., Kavanaugh, J.L., Lacroix, P., Petley, D., Rupper, S., Azam, M.F., Cook, S.J., Dimri, A.P., Eriksson, M., Farinotti, D., Fiddes, J., Gnyawali, K.R., Harrison, S., Jha, M., Koppes, M., Kumar, A., Leinss, S., Majeed, U., Mal, S., Muhuri, A., Noetzli, J., Paul, F., Rashid, I., Sain, K., Steiner,

- J., Ugalde, F., Watson, C.S., Westoby, M.J., 2021. A massive rock and ice avalanche caused the 2021 disaster at Chamoli, Indian Himalaya. *Science* (80-.). 373, 300–306. <https://doi.org/10.1126/science.abh4455>
- Mal, S., Dimri, A.P., Jeelani, G., Allen, S.K., Scott, C.A., Arora, M., Banerjee, A., Lone, S.A., 2021. Determining the quasi monsoon front in the Indian Himalayas. *Quaternary International*. doi:<https://doi.org/10.1016/j.quaint.2021.02.010>
 - More publications from the commission executive members can be found on the following links.

<https://www.researchgate.net/profile/Maria-Bobrowski>,
<https://www.researchgate.net/scientific-contributions/Kazuharu-MIZUNO-26321270>,
<https://www.researchgate.net/profile/Woldu-Zerihun-2>,
<https://www.researchgate.net/profile/Ram-Chaudhary>, <https://www.researchgate.net/scientific-contributions/A-John-Sinclair-37539411>, <https://orcid.org/0000-0002-9842-9934>,
<https://www.researchgate.net/profile/Maksim-Kulikov>,
<https://www.researchgate.net/profile/Monica-Dumitrescu>,
<https://www.researchgate.net/profile/Arkadiy-Tishkov>,
<https://www.researchgate.net/scientific-contributions/Antje-Burke-83581308>,
<https://www.researchgate.net/profile/Ana-Sabogal>.

5 Archival contributions

The commission each year prepares and provides an annual report to the Secretary, IGU. Besides, we request the lead or contact person of the scientific activities, conferences, and training supported by our commission/collaborated to provide short reports, which are archived on the commission website. These reports can be accessed from the conference website (<http://www.igubiogeography.in/index.html>)