



# International Geographical Union **COMMISSION ON LAND USE AND LAND COVER CHANGE**



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**COMMISSION REPORT 2022**

# International Geographical Union COMMISSION ON LAND USE AND LAND COVER CHANGE

## COMMISSION REPORT 2022

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## A. MEMBERSHIP

### Steering committee (August 2020 - August 2024)

#### **Monica Ștefania Dumitrașcu (chair)**

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**Matej Gabrovec (past-chair)**

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**Members**

There are 225 members in the IGU Commission on Land Use and Land Cover Change. We can find out the country origin for 76% of them.

Currently, the Commission on Land Use and Land Cover Change counts a total of 225 members from 40 countries (Fig. 1). Based on the estimation of the Members of the Steering Committee, about 30-50 members are considered active in the sense that they participate in the meetings organized by the Commission, the sessions within the events organized by the IGU, contribute with articles/chapters in the volumes and special issues of the Commission or of the IGU, etc. However, all members are informed about all the events organized by IGU or related to it. Overall, most members are from Japan ( and Romania (20 members each), followed by Czech Republic (18), but also China (15) and Slovakia (10) (Fig. 2).

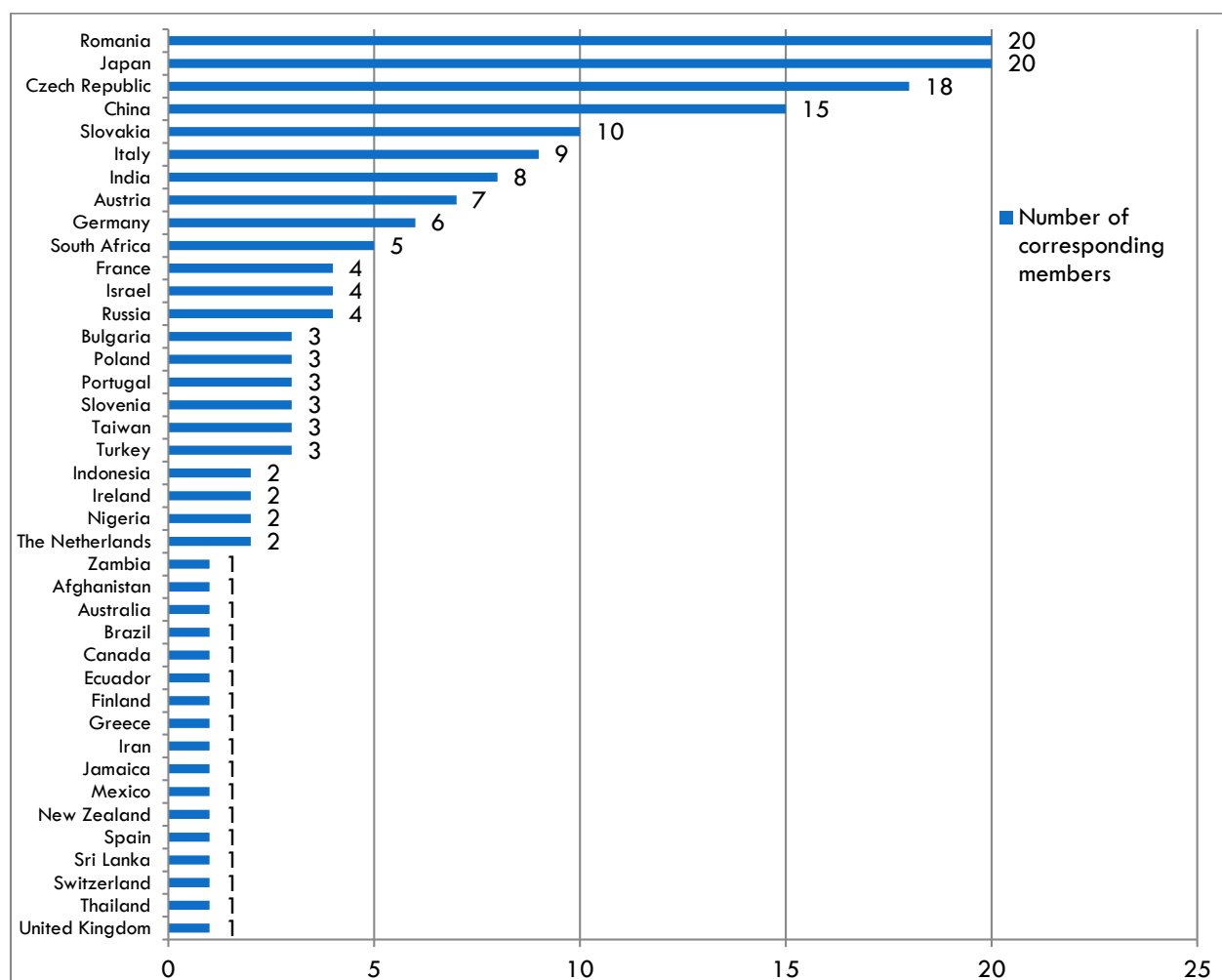


Figure 1. Number of Corresponding Members by country, 2022

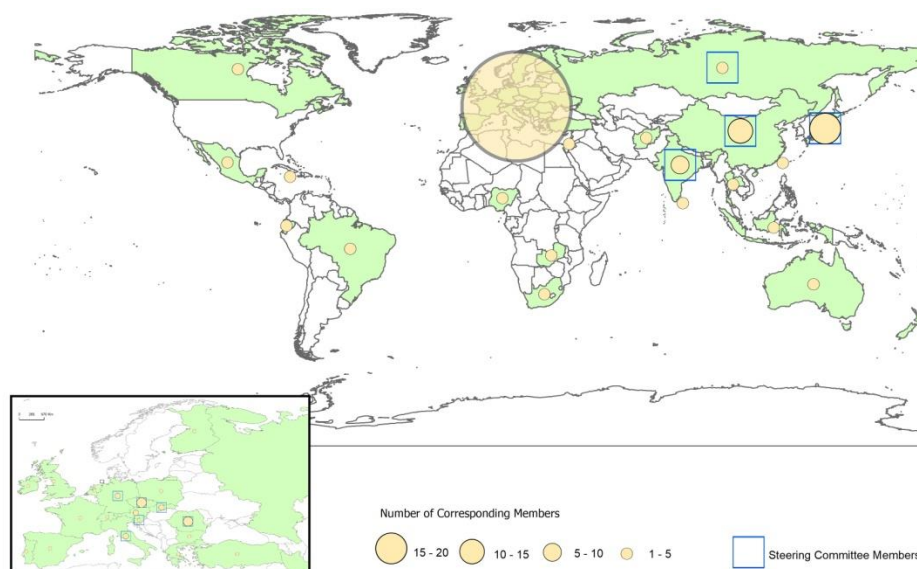


Figure 2. The spatial distribution of the Steering/Corresponding Members by country, 2022

## B. MEETINGS

### Last meetings

Paris, France, IGU Centenary Congress, July 18-22, 2022



As part of this scientific event, the IGU Commission on Land Use and Land Cover Change held 4 sessions proposed by some of the Steering Committee/Corresponding Members covering the following topics:

1. Land Use/Land Cover Change Driving Forces and Impacts; **Chairs:** Monica DUMITRASCU, Institute of Geography, Romanian Academy, Romania, Gheorghe KUCSICSA, Institute of Geography Romanian Academy, Romania
2. Long-Term Land Use/Land Cover Changes Evaluation: Towards the Definition of General Concepts in Land Use/Land Cover Science; **Chairs:** Lucie KUPKOVÁ, Charles University Prague, Czech Republic, Monica DUMITRASCU, Institute of Geography Romanian Academy
3. Land Use/Land Cover Change Mapping: Data and Methodology, **Chairs:** Monika KOPECKA, Institute of Geography, Slovak Academy Of Sciences, Slovakia, Monica DUMITRASCU, Institute of Geography Romanian Academy, Romania
4. Land Use/Land Cover Changes and Land Degradation in the Anthropocene; **Chairs:** Dan BALTEANU, Institute Of Geography, Romanian Academy, Romania, Monica DUMITRASCU, Institute of Geography Romanian Academy

Of the 39 submitted papers, 35 were presented, grouped in 9 slots, and 2 papers were presented online (one from India and one from Ukraine) on the 21<sup>th</sup> and 22<sup>th</sup> of July, 2022.

A considerable number of Steering Members participated in Paris, including the formers and current Chair, (*Yukio Himiyama, Matej Gabrovec, Monica Dumitraşcu, Monika Kopecka, Daniela Alexandra Teixeira da Costa Ribeiro, Matjaž Geršič*), to which was added a satisfactory number of corresponding members (nearly 50, 25%).

The issues discussed during the sessions focused on the assessment of various theoretical, methodological and practical aspects of land use/land cover change in countries with diversified economic, social and political systems such as: Belgium, China, Czech Republic, Ecuador, France, Germany, Hungary, India, Israel, Italy, Lithuania, Japan, Poland, Romania, Rep. of. Korea, Slovakia,



Slovenia, Thailand, Ukraine, and USA.

The main topics of discussion focused on: the impact of extreme events on land use/land cover change, the driving forces of land-use changes, land cover and landscape change using historical maps; the impact of socio-economic and political changes on land use/land cover change, urban expansion.. The wide spatial coverage of the discussed topics and the participation of outstanding scholars from prestigious universities and research institutions have revealed various ideas, experiences and models related to land use/land cover changes.

Each slot was attended by an average of 15 to 20 participants, which was conducive to active discussions on the topics presented, as well as discussions on the future activities of the LUCC Commission and the possibilities of expanding it.

Also, the chair of the IGU LUCC commission was invited to participate as a panellist in one of the round tables organized during the IGU Centenary Congress, proposed by the IGU president, Prof. Michael Meadows with the topic *Did you say Anthropocene?* On this occasion, a presentation was made regarding land use changes as one of the main global environmental changes in the current period.

## Forthcoming meetings

Year	Event	Period	Location	Organizer(s)
2023	<b>IGU Scientific Seminar Health, Environment and Sustainable Development</b> jointly organized with <i>Commissions on Health and the Environment &amp; Local and Regional Development</i> <a href="https://iguche2020.com/">https://iguche2020.com/</a>	13-16 June	Bucharest/Tulcea, ROMANIA	Faculty of Geography, University of Bucharest, Institute of Geography, Romanian Academy
2024	<b>Pre-Congress Meeting of the IGU Commission on Land Use and Land Cover Change</b>	August	Cork, IRELAND	University College Dublin, NUI Galway
2024	<b>35th International Geographical Congress</b> <i>Celebrating a World of Difference</i>	25-30 August	Dublin, IRELAND	TBD - Support from the University College Dublin, NUI Galway

After the successful Thematic Conference organized in 2017 in Romania in Bucharest and Tulcea by the IGU Commissions Land use and Land Cover Changes, Local and Regional Development, Health and Environment and Biogeography and Biodiversity they joined again (without the commission for Biogeography and Biodiversity) for organizing in 2023 the **IGU Scientific Seminar *Health, Environment and Sustainable Development*** which will take place in **Bucharest, Romanian Academy, Calea Victoriei 125, between 13<sup>th</sup> and 16<sup>th</sup> June 2023.**

The International Geographic Union, Commissions **Land Use and Land Cover Change, Health and Environment, and Local and Regional Development** and the Local Organizers, the Faculty of Geography–University of Bucharest and the Romanian Academy–Institute of Geography seek to bring together academics, researchers and post-doctoral fellows, graduate students and practitioners with a common interest in geography, public health, environment, territorial planning, and other related fields.

**Main themes:**

- Environmental Changes and Human Health: Vulnerabilities, Impacts and Inequalities
- Health, Wellbeing and Sustainable Development in Urban and Rural Areas: facing the Challenges of Covid-19
- Public Health & Healthcare Systems after Pandemic: Changes, Challenges and Opportunities
- Health Systems Responsiveness to the Changing Social and Natural Environment
- Socio-economic Disparities, Local and Regional Development in the Post-Covid Era.
- Land Use/Cover Change and Land Degradation
- Land Use/Cover Change Driving Forces and Impacts
- Applications of Land Use/Cover Change and Impacts at Various Spatial Scales
- Cross-border Cooperation, Peripheral Areas and Neighbourhood Policies
- Territorial competitiveness, Cohesion and Sustainability

Initially planned to take place in 2020, this event was postponed due to the pandemic.

More details at <https://iguche2020.com> or answer any questions sent to [iguche2020@gmail.com](mailto:iguche2020@gmail.com)



## C. NETWORKING

The LUCC commission collaborated with the commissions on Local and Regional Development, Biogeography and Biodiversity, as well as Land Degradation and Desertification. Also LUCC commission collaborated with Commission on Geography for Future Earth: Coupled Human-Earth Systems for Sustainability and Commission on Health and Environment.

### **Collaboration with IGU Commissions:**

- Commission on Local and Regional Development
- Commission on Biogeography and Biodiversity
- Commission on Geography for Future Earth: Coupled Human-Earth Systems for Sustainability;
- Commission on Mediterranean Basin
- Commission on Land Degradation and Desertification
- Commission on Hazard and Risk
- Commission on Health and Environment

### Other institutions:

- Institute of Geography, Romanian Academy
- *Anton Melik* Geographical Institute, Slovenia
- Charles University, Prague, Czechia
- Institute of Geography, Slovak Academy of Sciences
- Hokkaido University of Education
- National Institute for Geophysics, Geodesy, and Geography, Bulgarian Academy of Sciences
- Journal - *Open Geoscience*
- Journal - *Romanian Journal of Geography*
- India Geographical Society
- China Geographical Society
- Beijing Normal University
- Journal - *Geography and Sustainability*
- Journal - *Land (MDPI)*

The commission's website: <http://lucc.zrc-sazu.si/> updating and addition of new material.

## D. PUBLICATIONS

The majority of LUCC Atlases have been published on-line. They are available on the LUCC Commission website (<http://lucc.zrc-sazu.si/>)

- In 2022 the IGU LUCC - Volume XVI was published: **Karviná Doly: Post-mining landscape of Czech-Polish borderland**  
<http://lucc.zrc-sazu.si/Publications/Atlases/VolumeXVI>

**Editors:** Lucie Kupková, Vít Jančák, Pavel Chromý, Charles University, Czechia

### Contents:

- Disappeared landscapes of Czechia: Introduction and evaluation methods (Lucie KUPKOVÁ, Zdeněk LIPSKÝ, Miroslav ŠIFTA et al.)
- Jistebnicko: A defunct landscape of (sub)mountain agriculture in Česká Sibiř (Vít JANČÁK, Lucie KUPKOVÁ, Pavel CHROMÝ et al.)
- Karviná Doly: Post-mining landscape of Czech-Polish borderland (Vít JANČÁK, Lucie KUPKOVÁ, Pavel CHROMÝ et al.)
- Kladensko: Hnidousy, Dubí u Kladna (Vít JANČÁK, Lucie KUPKOVÁ, Pavel CHROMÝ et al.)
- Transformed cityscape (Libeň, Karlín), (Vít JANČÁK, Lucie KUPKOVÁ, Pavel CHROMÝ et al.)
- Nové Mlýny Reservoirs, (Vít JANČÁK, Lucie KUPKOVÁ, Pavel CHROMÝ et al.)
- Defunct landscape of pond system in Pardubice region (Vít JANČÁK, Lucie KUPKOVÁ, Pavel CHROMÝ et al.)
- Zahrádky u České Lípy: defunct feudal landscape (Vít JANČÁK, Lucie KUPKOVÁ, Pavel CHROMÝ et al.)
- Legacy of Iron Curtain in border landscape development (Martin DOLEJŠ, Petra ŠÍMOVÁ)
- Dynamics of wood-pastures in Czechia in the context of its historic changes in the last two centuries (Anna PEREPONOVÁ, Jan SKALOŠ, Michal FOREJT)

In 2022 a special issue is under preparation in the LAND (MDPI) Journal on the topic "*Urban Landscape Dynamics: Recent Trends and Future Challenges*", guest editors: Monika Kopecká, PhD., Monica Dumitrașcu, PhD., Lucie Kupková, PhD. More details are to be found at the following address:  
[https://www.mdpi.com/journal/land/special\\_issues/urban\\_landscape\\_dynamics](https://www.mdpi.com/journal/land/special_issues/urban_landscape_dynamics)

The IGU LUCC Commission has contributed a chapter to the volume **Bański J., Meadows M. (eds.), *Research Directions, Challenges and Achievements of Modern Geography***, Springer: **Chapter: Land Use and Land Cover Changes in Global Environmental Change Context** (Authors: Monica Dumitrașcu, Yukio Himiyama, Matej Gabrovec, Monika Kopecká, Lucie Kupková, Ivan Bicik)