



**INTERNATIONAL GEOGRAPHICAL UNION
(IGU / UGI)**

**COMMISSION ON LAND DEGRADATION AND DESERTIFICATION
(COMLAND)**



REPORT OF ACTIVITIES 2022

Matija Zorn (Chair) and Owen Graham (Secretary)

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www.comland.org

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The Commission on Land Degradation and Desertification (COMLAND) is a Commission of the International Geographical Union (IGU). See <http://igu-online.org/> for further information on the IGU.

0 PURPOSE AND SCOPE OF COMLAND

Most environments are affected by common factors that favour and increase land degradation processes. Two main topics are widely responsible: a) climatic conditions and changes, and b) anthropic impacts through land use. There is an urgent need to achieve a better practical and theoretical understanding of land degradation processes which affect the world's landscapes. In order to achieve these objectives, the working plan of the Commission is as follows:

- to promote and coordinate interdisciplinary research on land degradation and desertification in our changing global environment;
- to study the effects of environmental change, both natural and human-induced, and their implications for land degradation and desertification;
- to conduct regional case studies under different climatic regimes and environmental risks (forest fires, floods, river channel changes, soil erosion, water depletion, water quality), study the planning and design of conservation measures and the potential conflict between ecological sustainability and economic viability;
- to alert authorities as to the importance of adequate surveillance of land degradation processes;
- to develop and communicate the best techniques for monitoring changes and collecting data, and
- to sponsor and support activities leading to the exchange of information regarding land degradation and desertification.

I COMLAND MEMBERSHIP

Steering Committee

Chair:

Assoc. Prof. Matija Zorn

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COMLAND MEMBERS – members per country

| | | | |
|-------------------|------------|----------------------|---|
| (country unknown) | 30 | Korea, Rep. | 3 |
| Australia | 27 | New Zealand | 3 |
| USA | 22 | Slovenia | 3 |
| Poland | 18 | Canada | 2 |
| China | 17 | China, Rep. (Taiwan) | 2 |
| United Kingdom | 15 | Thailand | 2 |
| Israel | 13 | Albania | 1 |
| Germany | 12 | Algeria | 1 |
| Iceland | 11 | Argentina | 1 |
| Brazil | 8 | Belgium | 1 |
| Italy | 8 | China (Hong Kong) | 1 |
| India | 9 | Greece | 1 |
| Netherlands | 6 | Iran | 1 |
| Portugal | 6 | Ireland | 1 |
| South Africa | 6 | Mexico | 1 |
| Spain | 6 | Mongolia | 1 |
| Japan | 6 | Nigeria | 1 |
| France | 5 | Romania | 1 |
| Hungary | 5 | Russia | 1 |
| Austria | 5 | Singapore | 1 |
| Armenia | 3 | Sweden | 1 |
| Chile | 3 | UAE | 2 |
| Finland | 3 | Turkey | 1 |
| TOTAL | 277 | | |

People are welcome to join COMLAND by sending their name, affiliation, country and email via the “Contact” page on the www.comland.org website. Members will be sent emails on an irregular basis advising of meetings and other relevant matters including messages from the IGU.

II MEETINGS & ACTIVITIES

2022

1) IGU Paris 2022: Time for Geographers – Paris, France. July 18–22, 2022

COMLAND hosted a session titled “*Land Degradation: An Underestimated Environmental Challenge*” that was chaired by three COMLAND Steering Committee members (Owen Graham, Andrea Vacca and Matija Zorn). Along with the session a Business Meeting of the commission was also held at the conference.

The session

The session and the business meeting were organised on July 21, 2022. For the session nine papers were announced, but unfortunately just three presenters delivered their papers (*):

| A101522MZ-01 – Land Degradation: An Underestimated Environmental Challenge | | |
|---|---|---|
| 🕒 14:30 – 16:15 – Panthéon Room 307 | | |
| A102890mi – COMLAND– Past, Present and Future 👤 Moshe INBAR, university of Haifa, Israel, Israel | ✗ | |
| A105354RD – The impact of coal mining waste on land degradation – examples from the Upper Silesian Coal Basin, Poland 👤 Renata DULIAS, University Of Silesia In Katowice, Faculty Of Natural Sciences, Institute Of Earth Sciences, Poland | | ✓ |
| A105471YC – Recognition and modeling of spatial problems as a result of mining exploitation, La Guajira Colombia 👤 Yosef Harvey CORTES MILLAN, Universidad Distrital Francisco Jose de Caldas, Colombia | ✗ | |
| A105603CO – Acidic salt attack and damage to geoarchaeological site in Japan 👤 Chiaki OGUCHI, Saitama University, Japan | | ✓ |

| A101522MZ-02 – Land Degradation: An Underestimated Environmental Challenge | | |
|---|---|----|
| 🕒 16:30 – 18:30 – Panthéon Room 307 | | |
| A104278JF – Positive and negative effects of forest management on water and sediment in a small experimental catchment: the Vernegà River, Catalonia, Spain 👤 Xavier ÚBEDA, University of Barcelona, Spain Joaquim Farguell | ✓ | 👁️ |
| A102681DC – DESERTIFICATION, LAND DEGRADATION AND VULNERABILITY ASSESSMENT THROUGH BIOTECHNOLOGY: A CASE STUDY OF RAJASTHAN STATE OF INDIA 👤 Dr. T.s. CHOUHAN, University of Rajasthan, India | ✗ | 👁️ |
| A105146PK – Assessment of degradation of the Ramsar site of Kanwar lake in Begusarai district of Bihar, India 👤 Prince KUMAR, CENTRAL UNIVERSITY OF JHARKHAND, India | ✗ | 👁️ |
| A104980DD – Soil Loss Estimation of Digaru Watershed, Assam, India using the RUSLE Model 👤 Dhanjit DEKA, Department of Geography, Gauhati University, India | ✗ | 👁️ |
| A103442AD – Assessment of Land Degradation through Metal Abundances and Distribution in Soils from Different Land-uses in a megacity city in India 👤 Arohi DIXIT, Kirori Mal College, Delhi University, India | | ✗ |

The issue of “no show” by presenters was not just a problem of our session but of the whole conference.

(*) A late apology was received advising that Moshe Inbar would be unable to attend.

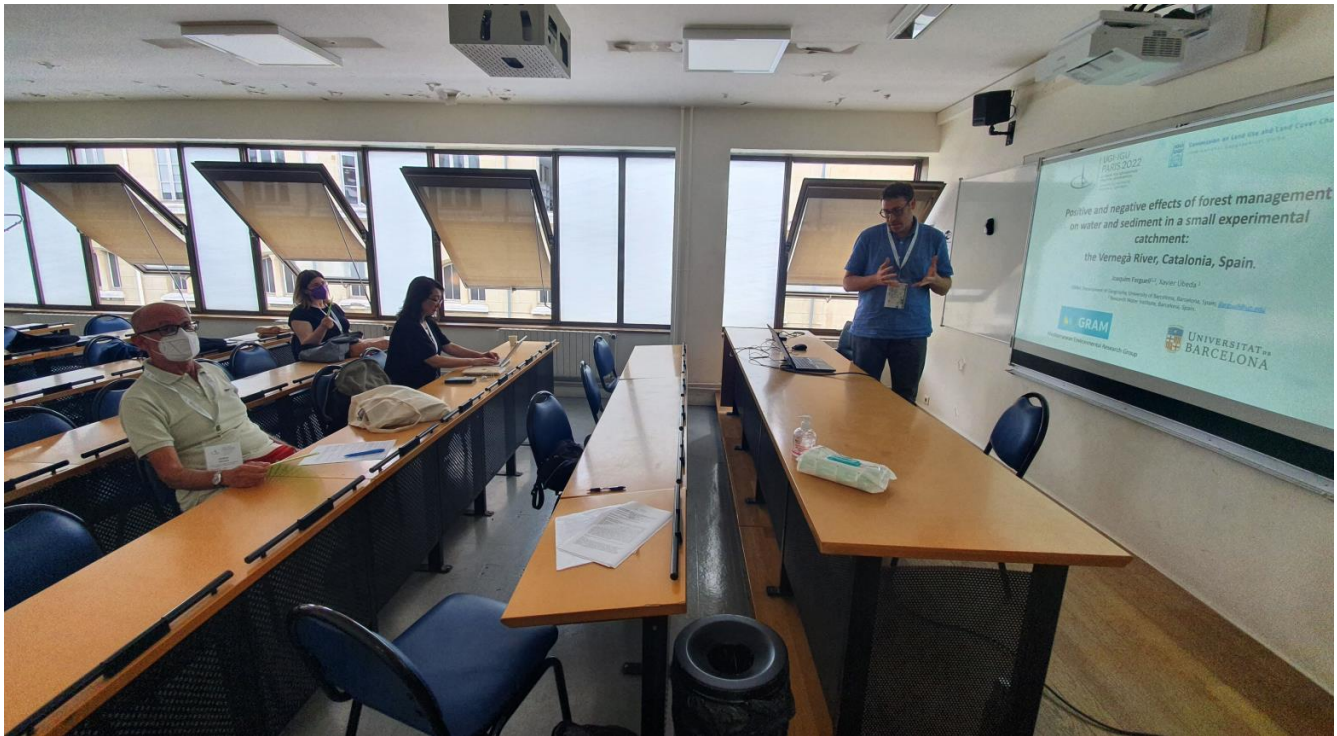


Figure: Some attendants at the COMLAND session (Photo: Matija Zorn).

Business meeting

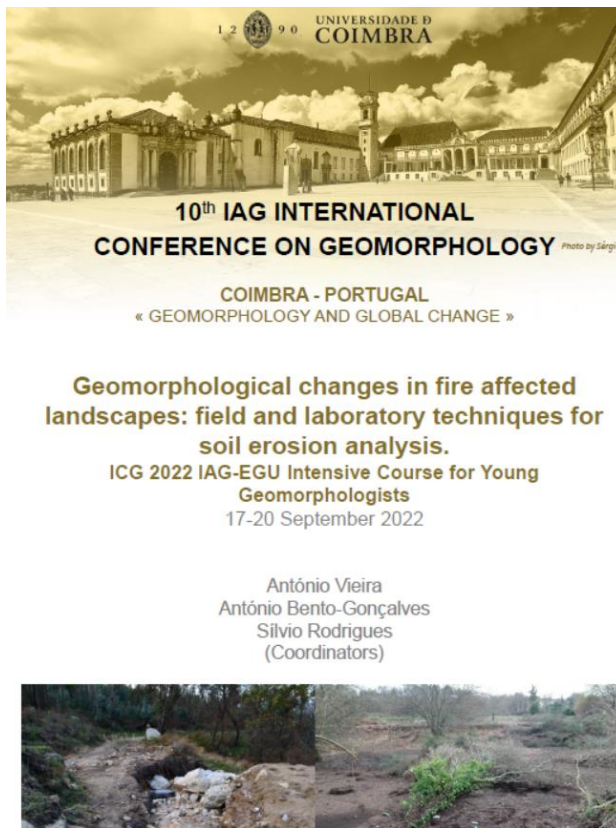
At the business meeting the chair presented the Commission activities in 2021 and 2022 as well as possible future activities:

- a session and a business meeting at the EUGEO Congress (Barcelona, Spain, September 4–7, 2023);
- a session, excursion and a business meeting at the IGU 2024 congress (Dublin, Ireland, August 25–30, 2024);
- workshop with an excursion on the topic of desertification; together with the IGU Commission on Sustainability of Rural Systems (Djelfa, Algeria, 2024).

2) International Association of Geomorphologists (IAG) Conference on Geomorphology – Coimbra Portugal. September 12–16, 2022

COMLAND financially supported the IAG Intensive Course for Young Geomorphologists “Geomorphological Changes in Fire Affected Landscapes: Field and Laboratory Techniques for Soil Erosion Analysis”.

COMLAND was well represented on the pre- and post- Conference field trips to Cape Verde as well as Minho & Galicia.



ICG 2022 IAG-EGU Intensive Course for Young Geomorphologists on
 “Geomorphological changes in fire affected landscapes: field and laboratory
 techniques for soil erosion analysis”

Programme Committee

António Vieira, University of Minho, Portugal
Sílvia Rodrigues, Federal University of Uberlândia, Brazil
Marta Della Seta, Sapienza University of Rome, Italy – IAG Training Officer
Susan Conway, University of Nantes, France
Marisa Palucis, Dartmouth College, USA
António Bento Gonçalves, University of Minho, Portugal
José Rocha, University of Minho, Portugal
Sarah Santos, University of Minho, Portugal
Adélia Nunes, University of Coimbra, Portugal
Isabel Paiva, University of Coimbra, Portugal

Organisation Committee

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António Bento Gonçalves, University of Minho, Portugal
Sílvia Rodrigues, Federal University of Uberlândia, Brazil
Saulo Falharini, University of Minho, Portugal
Sara Silva, University of Minho, Portugal
Sarah Santos, University of Minho, Portugal
Jorge Novais, University of Minho, Portugal
José Rocha, University of Minho, Portugal
Tiago Marques, University of Minho, Portugal

Supporting and organizing Institutions:

IAG – International Association of Geomorphologists
EGU – European Geosciences Union

~~*APGcom – Portuguese Association of Geomorphologists*~~

*COMLAND – The Commission on Land Degradation and Desertification of the
 International Geographical Union (IGU)*

GFG – French Geomorphology Group

Figure: COMLAND was acknowledged in the course booklet stated as a supporting organisation.

At the conference a COMLAND Steering Committee member Sunil Kumar De was elected the IAG president.

3) IGU Thematic Conference on “Sustainability, Future Earth and Humanities: Opportunities and Challenges” - Mahendergarh, India. November 24–25, 2022

COMLAND was amongst the IGU commissions sporting the event.

III NETWORKING AND COLLABORATION:

Other IGU Commissions:

COMLAND has an active working relationship with the Commission on Hazard and Risk and is developing such relationship with the Commission on Land Use and Land Cover Change, Commission on Geography for Future Earth and Commission on Sustainability of Rural Systems.

IV PUBLICATIONS

COMLAND continues to publish papers from its sponsored sessions and conferences, with most appearing in international peer reviewed journals. This is on an opportunistic basis.

The COMLAND website is maintained by the COMLAND Secretary and operational costs are covered through IGU grants. The COMLAND website contains information that includes upcoming and past meetings, the Steering Committee, awards, reports and publications. The website contains all of COMLAND's available archival information. Web URL: www.comland.org

COMLAND Members receive occasional emails that publicise upcoming COMLAND and some IGU events. Members are referred to the COMLAND website for the latest information on matters. This communication takes the place of newsletters.

V ARCHIVAL CONTRIBUTIONS:

Archival material is available from the Commission's Annual Reports. These usually include relevant photographs from meetings, field excursions and other events.

VI USE OF IGU GRANTS:

The IGU Grant to COMLAND is used for operational expenses in maintaining the COMLAND website on a commercial platform (*www.comland.org*) which includes domain registration expenses, website hosting and internet access charges.

COMLAND has also supported events/conferences that are relevant and/or advantageous to COMLAND's interests. The COMLAND Steering Committee has agreed that these funds are allocated to events to support the active attendance of young scientists. It is usually at the discretion of the event organisers on who and how these funds are allocated or pooled. This means that any COMLAND funding support is usually to event organisers and not directly to individuals. COMLAND seeks recognition through verbal and/or written acknowledgement and use of its logo where possible.