

COMMISSION ON LAND DEGRADATION AND DESERTIFICATION
(COMLAND)

INTERNATIONAL GEOGRAPHICAL UNION



Report of Activities: 2012 – 2016

Paul Hudson (Chair) and Owen Graham (Secretary)

1. Membership

A. Steering Committee as at 31 Dec 2015 (in alphabetical order)

Guðrun Gísladóttir	(Iceland)
Owen Graham	(Australia) - Co-Secretary
Dr. Paul F. Hudson	(Netherlands) - Chair
Dr Takashi Oguchi	(Japan) - Co-Secretary
Prof. Gregory S. Okin	(USA)
Dr. Gregor Ollesch	(Germany)
Dr Pawel Prokop	(Poland)
Hugo Romero	(Chile)
Prof. Kate Rowntree	(South Africa)
Dr. Xavier Ubeda	(Spain)
Dr Andrea Vacca	(Italy)
Dr. Lea Wittenberg	(Israel)

B. number of COMLAND members by country as at 31 Dec 2015

Australia	33
USA	29
Poland	21
China	18
(country unknown)	18
United Kingdom	17
Iceland	12
Germany	11
Israel	11
Italy	8
France	7
Japan	7
South Africa	7
India	6
Netherlands	6

Spain	6
Argentina	5
Brazil	5
Portugal	5
Hungary	4
Korea, Rep.	4
Mexico	4
Sweden	4
Belgium	3
Finland	3
Slovenia	3
Thailand	3
Armenia	2
Canada	2
Ireland	2
New Zealand	2
China, Rep. (Taiwan)	2
Austria	1
Bangladesh	1
Chile	1
Greece	1
China (Hong Kong)	1
Kuwait	1
Mongolia	1
Morocco	1
Oman	1
Russia	1
Singapore	1
UAE	1
Total:	282

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

C. URL for Commission web site

comland.org

2. Meetings

A. Meetings over 2012-2016

2012:

- Sardinia, Italy: COMLAND Field Meeting in Cagliari, Sardinia and surroundings (October, 2012). Held in association with the Department of Chemical and Geological Sciences, University of Cagliari. 21 participants.

- Cologne, Germany: IGU Main Congress (August 2012)

Two themed sessions, including Land Degradation and Desertification in the context of Global Environmental Change: Management, Vulnerability, and Policy and Land Degradation and Geomorphology: Monitoring, Assessment, and Theory Development.

2013:

- Kyoto, Japan: IGU Regional Meeting and COMLAND Field Meeting (August 2013). Field trip held in association with and supported by local academic and agency institutes. 16 field trip participants.

2014:

- Tasmania, Australia: COMLAND Field Meeting in central and southern Tasmania (October, 2014). Held in association with the Environment Institute of Australia and New Zealand. Over 100 attendees at the EIANZ Conference, 13 field trip participants.

- Krakow, Poland: IGU Regional Meeting and COMLAND Field Meeting (August 2014). Held in association with the University of Silesia and Jagiellonian University. 13 formal papers and approx. 25 field trip

participants.

B. Themes addressed

The overall theme to all COMLAND meetings and organized sessions was land degradation in the context of management and environmental change, especially in the context of human impacts to environmental processes. The major focus was in changes to geomorphic, soil, and hydrologic processes, but especially in association with land use change caused by human drivers.

C. 2016: forthcoming meetings

- Ljubljana, Slovenia: COMLAND field meeting (June 2016). Held in association with 2016 Carpatho-Balkan-Dinaric Conference on Geomorphology.
- Beijing, China: IGU Main Congress (August 2016): COMLAND meeting and Congress session entitled Land Degradation and Environmental Change.

3. Networking and communication

A. Collaboration with IGU Commissions

- no formal collaboration with other IGU Commissions during the prior period however some COMLAND members maintain network contact with participants of other IGU Commissions.

B. Other governmental and non-governmental organizations and institutions

- International Association of Geomorphologists meeting in Paris (2013), co-sponsored a special session
- Polish Academy of Sciences and University of Silesia and Jagiellonian University, in development of COMLAND pre-IGU Regional Congress field trip
- Environmental Institute of Australia and New Zealand, University of Tasmania, Forestry Tasmania, and Copper Mines of Tasmania, in

development of COMLAND field meeting to Tasmania

- University of Cagliari, LAORE Sardegna, and AGRIS Sardegna in association with development of COMLAND Field Meeting in Sardinia
- Center for Spatial Information Science, University of Tokyo in association with organization of COMLAND Field Meeting pre IGU Regional Congress in Kyoto

C. Cooperative efforts with ISSC and ICSU programs

- nil

4. Publications

Special issues of refereed journals

In progress:

Hudson, P.F. and Zorn, M. (in progress). Land Degradation in a Complex Environment. special issue of Land Degradation & Development (advance proposal accepted, planned for 2017 publication)

- Papers to be published from the COMLAND meeting in Ljubljana Slovenia, June 2016.

Published:

Hudson P.F., Goudie A. & Asrat A. (2015), Human Impacts on Landscapes: Geomorphology, Environmental Change, and Sustainability (refereed special issue), Zeitschrift für Geomorphologie Supplementbände 59(2): 1-245.

- Papers published as part of a COMLAND co-sponsored session at the International Association of Geomorphologists in 2014 (Paris)

Hudson, P.F. and LaFevor & M. (Eds.) (2014), Management and Monitoring Land Degradation and Environmental Change (refereed special issue), Journal of Environmental Management 138: 1-96.

- Papers published from COMLAND meetings at IGU Regional Congress in Santiago, Chile (2012) and the IGU Main Congress in Cologne, Germany (2013)

Hudson, PF and Inbar & M (Eds.) (2012), Land Degradation and Geodiversity: Anthropogenic Controls on Environmental Change (peer reviewed special issue), Land Degradation & Development 23(4): 307-426.
- Papers published from the COMLAND meeting held in Haifa, Israel (2010)

5. Archival Contributions

- information archived on COMLAND web site (comland.org)

6. Continuation

A. Name

- Commission on Land Degradation and Desertification (COMLAND)

B. Concise summary (from front page of web site)

Many environments are susceptible to land degradation and desertification (a form of land degradation that occurs in drylands). The patterns and processes that trigger and sustain land degradation emerge from both local biophysical vulnerabilities and land use decisions. These local patterns and processes vary across landscapes and regions in response to differences in climate, soils, geomorphology, vegetation, history of disturbance, and human actions. Thus, land degradation emerges from the nexus of biophysical and socioeconomic systems.

There is an urgent need to gain better practical and theoretical understanding of land degradation processes and the feedbacks within and between the biophysical and socioeconomic systems that sustain negative impact on both humans and the environment.

In order to achieve these objectives, the working plan of the Commission is:

to promote and coordinate interdisciplinary research on land degradation and desertification in our changing global environment;
to study the effects of environmental and social change arising from natural and human processes 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);
to study the planning, design, and outcome of conservation measures to better understand interactions between humans and their environment;
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, analyzing, and archiving data;
to sponsor and support activities leading to exchange of information regarding land degradation and desertification, and
to train the next generation of interdisciplinary scientists to address practical and theoretical causes and consequences of land degradation and desertification.

C. List of Steering Committee

As at 31 Dec 2015 and listed alphabetically.

Guðrun Gísladóttir	(Iceland)
Owen Graham	(Australia) - Co-Secretary
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Dr. Xavier Ubeda	(Spain)
Dr Andrea Vacca	(Italy)
Dr. Lea Wittenberg	(Israel)

Some Steering Committee members are approaching their 12 year limit of tenure.

D. Summary of work for the 2016-2020 period

- continue with similar COMLAND theme (as outlined above),
- continue to support IGU Main and Regional congresses through organization of COMLAND special sessions,
- continue to publish special issues of international peer-reviewed journals,
- annual COMLAND Field Meetings with specific timing determined through local partnerships,
- more collaboration with external governmental and non-governmental organizations as well as other IGU Commissions