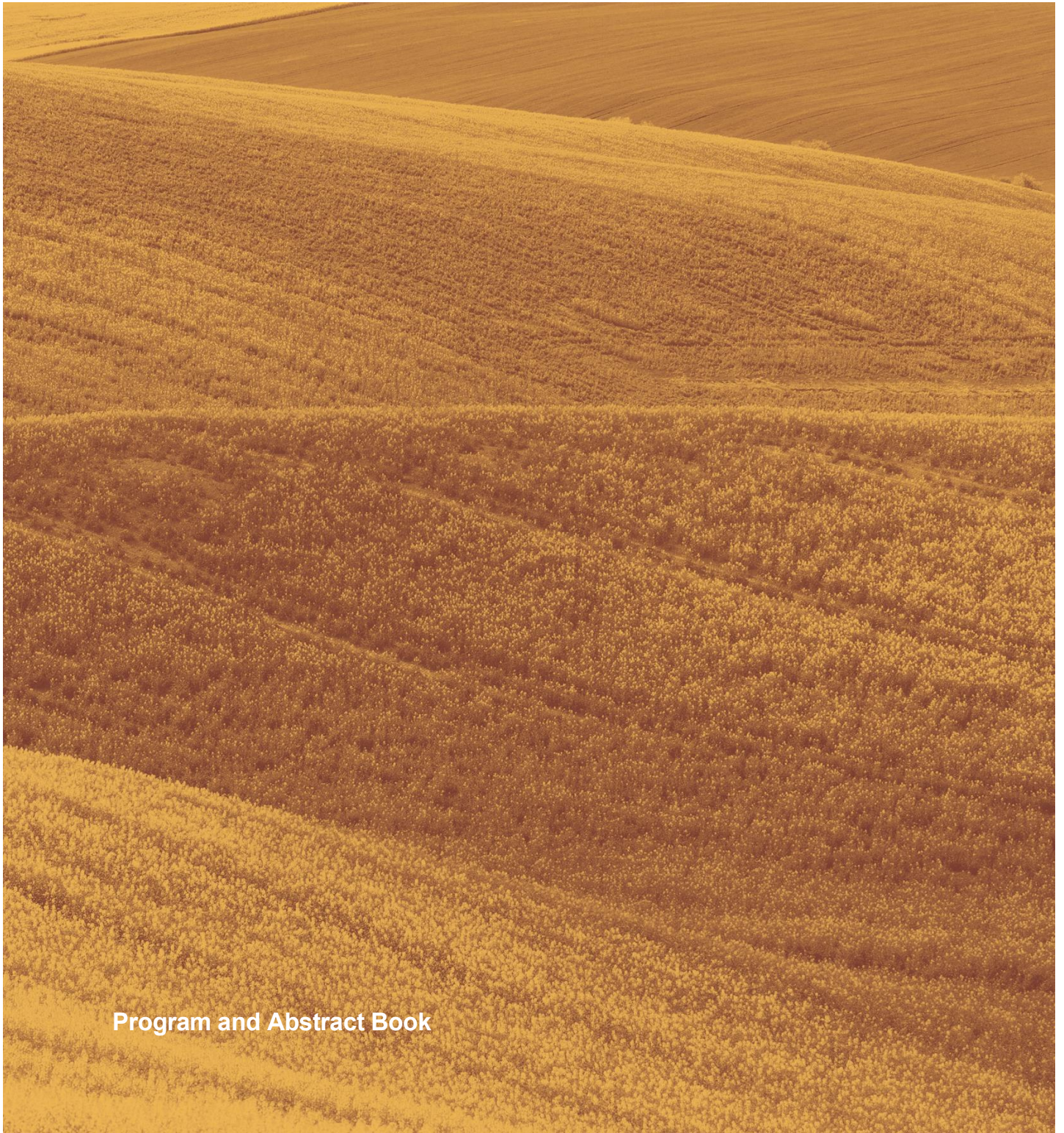


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2025
Conference

The 2nd International Electronic Conference on Land

4-5 September 2025 | Online



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Welcome from the Chair

Dear Colleagues,

It is a great pleasure to announce the upcoming virtual conference “**Land Entropy and Challenges for Restoration and Future Development**”, which will take place from 4 to 5 September 2025.

The conference will address the philosophy and key interdisciplinary and transdisciplinary methodological approaches of land system sciences. Considering the UN Sustainable Development Goals (SDGs), we aim to discuss the state of the art in the nexus of land systems and global change, the intersection of food, land, water, energy, socioeconomic and political land issues, land–climate interactions, land use planning and architecture, ecosystem services, women’s land rights, and the challenges posed by land entropy in the global South. Agreements such as the European Landscape Convention and their relevance in protecting and restoring cultural landscapes, the natural heritage, and the diversity of land systems are expected to be discussed. Other relevant governance instruments and governance mixes that translate land system science outputs into policies and conventions will be debated against their efficiency and success in order to assess how to further develop them.

This conference aims to bring together the LAND community in its widest sense to discuss these latest advances. Sessions on land system science advances and their societal relevance will be chaired by leading researchers. Additionally, we aim to select a significant number of oral presentations from early stage researchers based on their submitted abstracts.

We look forward to seeing you online!



Prof. Dr. Hossein Azadi
Conference Chair

Department of Economics and
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Agro-Bio Tech, University of Liège,
Gembloux, Belgium



land

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Land (ISSN 2073-445X) is an international, interdisciplinary and cross-disciplinary open access journal of:

- Land system science and social–ecological system research;
- Land/land-use/land-cover change;
- Land management including agriculture, forestry, the built environment and others;
- Landscapes, landscape design and landscape planning;
- Land–climate interactions, including climate–biosphere–biodiversity interactions;
- Land/Soil/Water Systems: the interconnecting networks of biological, chemical, and physical systems;
- Urban contexts, urban–rural interactions and urban planning and development;
- Assessment and evaluation frameworks, indicators, indices, methods, tools and approaches (ecosystem services, multifunctionality and sustainability);
- The water, energy, land and food (WELF) nexus;
- Land, biodiversity and health nexus;
- Emerging technologies of data processing (deep learning/machine-based learning).

It publishes reviews, regular research papers, perspective and discussion papers, short communications and research notes, and there is no restriction on the maximum length of the papers.

Our aim is to encourage scientists to publish their empirical, experimental and theoretical research in as much detail as possible.

Full experimental and/or methodical details and data documentation must be provided for research articles. Computed data or files regarding the full details of the experimental procedure, if unable to be published in a normal way, can be deposited as supplementary material.

Research papers should ideally go beyond describing narrow case studies. They should either relate case studies to their regional/social–ecological/global context and address issues of transferability considering the usefulness for and interest of an international auditorium or should at least be based on comparative study designs. Contrariwise, communications or short notes can introduce (interim) case study results and experiences.

The unique features of this journal for which contributions are particularly invited and welcome are:

- Manuscripts regarding research perspectives, proposals and research ideas;
- Manuscripts concerning summaries and surveys on research cooperation and projects (that are founded by national governments, the EU or others) providing information for a broad range of users;
- Manuscripts that document how to transfer research findings to practice and implement findings in planning, decision making or policy processes;
- Manuscripts that introduce innovative modeling and/or impact assessment tools including prototypes and conceptual approaches;
- Manuscripts that report on failures (methods, approaches, hypotheses, assumptions, analytics and interpretation) and discuss how these could be avoided;
- Lead papers that introduce a Special Issue but go beyond a summary of the contributions (synthesis + review and conclusions).

Journal Webpage: <https://www.mdpi.com/journal/land>

Program Overview

Day 1 (Morning) 4 September (9:00–12:00 CEST)	Day 2 (Morning) 5 September (9:00–12:30 CEST)
Session 2: Landscape Architecture and Land Restoration	Session 4: Big Earth Data for Land Monitoring Session 5: Land Use Dynamics and Socio-Ecological Systems
Break	
(Afternoon) (14:00–18:00 CEST)	(Afternoon) (14:00–18:00 CEST)
Session 3: Soil Carbon Sequestration and Climate Change Mitigation Session 1: Urbanization and Land Use: Navigating the Future of Cities	Session 6: Climate Action on Land Use Session 7: Resilient Agricultural Landscape Systems

IECL 2025 Program

4 September 2025 (Thursday)

*Session 2: Landscape Architecture and Land Restoration**Time: 9:00 (CEST, Basel) | 3.00 (EDT, New York) | 15:00 (CST Asia, Beijing)*

CEST Time	Speaker	Title
9:00–9:10	Prof. Dr. Hossein Azadi Event Chair	Opening Speech by the Event Chair
9:10–9:20	Prof. Dr. Thomas Panagopoulos Session Chair	Welcome from the Session Chair
9:20–9:35	D. Ben Ghida Selected Speaker	Sustainable and Inclusive Cities? Strategic Urban Regeneration of Decommissioned Industrial Sites in France
9:35–9:50	Clara Stella Vicari Aversa Selected Speaker	The Strait Bridge as an opportunity for careful strategic architectural and urban regeneration
9:50–10:05	Jing Zhang Selected Speaker	Dialogue Between Palace and Land—Rain Garden and Hydrological Restoration Strategies for Sustainable Landscape Renewal at the Alhambra
10:05–10:20	Kenjiro Kito Selected Speaker	Characteristics of Decision-Making Regarding Stormwater Management and Blue–Green Infrastructure in Large Development Plans in Norway
10:20–10:35	Celestina Fazia Selected Speaker	Reuse of brownfield sites along water edges
10:35–10:50	Vânia Morgado Selected Speaker	Strategic planning of linear green spaces that connect green areas in Lagos, improving ecological connectivity, and providing various benefits for both the environment and the city's inhabitants
10:50–11:05	Indishe Senanayake Selected Speaker	Assessing the Performance of Landform Evolution Models in a Natural Catchment Analogous to a Post-Mining Landform
11:05–11:20	Udisha Sarkar Selected Speaker	Reviving Mehrauli: Integrating Landscape Design for Ecological Restoration and Heritage Renewal
11:20–11:35	Alexander Omondi Imbo Selected Speaker	Conservancies: A Demonstrable Local-Level Action for the Sustainable Development Goals in an African Indigenous Frontier
11:35–14:00	Break	

*Session 3: Soil Carbon Sequestration and Climate Change Mitigation**Session 1: Urbanization and Land Use: Navigating the Future of Cities**Time: 14:00 (CEST, Basel) | 8.00 (EDT, New York) | 20:00 (CST Asia, Beijing)*

CEST Time	Speaker	Title
14:00–14:10	Prof. Dr. Nick B. Comerford Session Chair	Welcome from Session Chair
14:10–14:30	Dr. Susan Crow Invited Speaker	From soil carbon to climate action: Metrics that matter
14:30–14:45	Yanbin Chen Selected Speaker	Reframing Grassland–Livestock Systems for Sustainable Land Transitions: A Digital Modeling Approach Aligned with Climate- and Nature-Based Goals
14:45–15:00	Rajan G. Rejith Selected Speaker	Generation of Synthetic Hyperspectral Image Cube for Mapping Soil Organic Carbon using Proximal Remote Sensing
15:00–15:15	Vaishali Sharma Selected Speaker	Spatio-Temporal Assessment of Carbon Sequestration Potential and Land Use-Based Carbon Stock Distribution in Sirmaur District Using InVEST Model (1993–2023)

IECL 2025 Program

15:15–15:30	Juan Carlos Valverde Selected Speaker	Total belowground carbon flux response of Eucalyptus genotypes to water deficit in Mediterranean Chile
15:30–15:35	Prof. Dr. Chuanrong Zhang Session Chair	Welcome from Session Chair
15:35–15:50	Prof. Dr. Chuanrong Zhang Session Chair	How Does the Small Area Fair Market Rent (SAFMR) Policy Affect Housing Prices?
15:50–16:05	Chengpeng Li Selected Speaker	Mapping the High-density Urban Land from a 3D Perspective: The Future Land War Between Surface Space and Low-altitude Space
16:05–16:20	Fatiha Hakimi Selected Speaker	Urban and Peri-Urban Agriculture and Its Role in Land System Dynamics: Insights from Meknès, Morocco
16:20–16:35	Muhammad Salem Selected Speaker	Urbanization and Land Use Dynamics in Greater Cairo: Planning for Sustainable Urban Futures
16:35–16:50	Sergio Cappucci Selected Speaker	New perspectives on geothermal energy usage over the past 30 years in Italy: its impact on society, the economy, and land management
16:50–17:05	Sheyla Cevallos-Misco Selected Speaker	Accelerated Fragmentation of Papagayo Forest: Urgency for Protection Amid Urban Pressure in Guayaquil
17:05–17:20	Angelica Stan Selected Speaker	Assessing the Formal Quality of Parceling Grids, Relevant for Urban Resilience

5 September 2025 (Friday)*Session 4: Big Earth Data for Land System Monitoring and Modeling
Session 5: Land Use Dynamics and Socio-Ecological Systems: Modeling Across Scales**Time: 9:00 (CEST, Basel) | 3:00 (EDT, New York) | 15:00 (CST Asia, Beijing)*

CEST Time	Speaker	Title
9:00–9:10	Prof. Dr. Hanoch Lavee Session Chair	Welcome message from Session Chair
9:10–9:30	Dr. Gamal El Afandi Invited Speaker	To be announced
9:30–9:45	Tarun Teja Kondraju Selected Speaker	A Google Earth Engine-based Application for Monitoring Soil Moisture using Sentinel 1 Synthetic Aperture Radar Data
9:45–10:00	Mahdi Hasanlou Selected Speaker	Urban 3D Multiple Deep Base Change Detection by Very High-Resolution Satellite Images and Digital Surface Model
10:00–10:15	Angelos Alamanos Selected Speaker	Assessing the Sustainability of Land Use Changes and SDG15 in Greece
10:15–10:25	Prof. Dr. Christine Fürst Session Chair	Welcome message from Session Chair
10:25–10:40	Beatrice Petti Selected Speaker	Diachronic analysis of agro-forestry landscape in Latium region
10:40–10:55	Leonid Petrov Selected Speaker	Institutional Dynamics of Land Use in the Makazhoy Hollow Between the 19th and 21st Centuries
10:55–11:10	Eduardo Gomes Selected Speaker	Modelling the impacts of land-use change on Cultural Ecosystem Services
11:10–11:25	Isabel Adriana Chuizaca-Espinoza Selected Speaker	Mining-Driven Land Use and Land Cover Changes in Quilombola Territories of the Brazilian Amazon
11:25–11:40	Daniela Romero-Bermeo Selected Speaker	Geospatial Tools and Mining Laws: Analysis of Regulatory Efficiency in the Ecuadorian Amazon
11:40–11:55	Carlos Alberto Falquez-Chávez Selected Speaker	Assessing the Impact of Illegal Gold Mining on the Fluvial Morphology of the Punino River in the Ecuadorian Amazon
11:55–12:10	Divar Castro-Rodas Selected Speaker	A Comparison of Supervised Classification Algorithms in Guayaquil Land Use and Land Cover Data: An Evaluation with Landsat and MapBiomias
12:10–12:25	Abdullah İzzeddin Karabulut Selected Speaker	Temporal Analysis of Groundwater Quality in the Harran Plain: Linking Land Use Change to Water Contamination (2005–2025)
12:25–14:00	Break	

*Session 6: Climate Action on Land Use**Session 7: Resilient Agricultural Landscape Systems**Time: 14:00 (CEST, Basel) | 8:00 (EDT, New York) | 20:00 (CST Asia, Beijing)*

CEST Time	Speaker	Title
14:00–14:10	Dr. Nir Krakauer Session Chair	Welcome from Session Chair
14:10–14:40	Prof. Chuanrong Zhang Keynote Speaker	Leveraging AI and Remote Sensing for Housing Market Risk Assessment under Climate-Driven Land Changes
14:40–14:55	Niranjika Wijesooriya Selected Speaker	Canopy Cover for Cooler Cities: A Meta-Analysis of Urban Greening and Temperature Reduction Strategies
14:55–15:10	Ronald C. Estoque Selected Speaker	Recent trends in global tropical forest loss: Implications for climate, biodiversity, and disaster risk reduction

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15:10–15:25	Sahil Chauhan Selected Speaker	Biomass Storage and Natural Regeneration in Sacred Groves of the North–Western Himalayas: A Study on Ecological Preservation and Environmental Benefits
15:25–15:40	Salvador Garcia-Ayllon Selected Speaker	Effects of the phenomenon of diffuse territorial anthropization in the context of climate change on the Mediterranean coast during the last decade: from the environmental disaster of the Mar Menor of 2015 to the floods of 2024 in Valencia
15:40–15:55	Catarina de Sousa Silva Selected Speaker	How can we effectively plan urban green infrastructure to address environmental and social crises?
15:55–16:10	Alexandru-Ionut Petrisor Selected Speaker	Metropolitan Water Resilience: Resilient Urban Planning Strategies for Climate Challenges
16:10–16:15	Prof. Dr. Veera Gnaneswar Gude Session Chair	Welcome message from Session Chair
16:15–16:45	Prof. Dr. Veera Gnaneswar Gude Keynote Speaker	Understanding the Social Implications of Agrivoltaics in Farmlands
16:45–17:00	Mian Muhammad Ahmed Selected Speaker	Restoring Agricultural Landscapes: A Case Study on the Role of Microbial Diversity in Salt–Alkaline Stress Mitigation
17:00–17:15	Djifa Fidele Kpalari Selected Speaker	Regulated effect of fertilization and irrigation on greenhouse gas emissions in salt-affected soil: meta-analysis
17:15–17:30	Julia Grochowska Selected Speaker	A Comparative Analysis of the Popularity of Regenerative Agriculture Practices in Poland, Germany, and Belarus
17:30–17:45	Sabrine Soltane Selected Speaker	Phyto-Acoustic Mulching: Paradigm for enhancing Allelopathic Weed Control
17:45–18:00	Bernus Zinsou DJIGBE Selected Speaker	The Impact of Integrated Farming on Soil Chemical and Microbiological Properties in Cashew Agroforestry Systems of Northern Benin
18:00–18:15	Pierre Tovihoudji Selected Speaker	The immediate and residual effect of cattle corralling and mineral fertilizer on maize cropping systems in the sub-humid zone of northern Benin: Yields, resource use efficiency, economic profitability, and post-harvest soil fertility
18:15–18:25	Prof. Dr. Hossein Azadi Event Chair	Closing Speech by the Event Chair

Session 2. Landscape Architecture and Land Restoration

sciforum-126524: The Strait Bridge as an opportunity for careful strategic architectural and urban regeneration

Clara Stella Vicari Aversa ^{1,*} and Celestina Fazia ²

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² Faculty of Engineering and Architecture; Kore University of Enna; Enna; 94100; Italy

The Strait of Messina occupies a strategic position in the Mediterranean, representing an environmental and territorial peculiarity. The Strait Area is today at the center of the political debate for the stable crossing project, a strategic infrastructure work for Italy and Europe. With the Strait Bridge, territorial arrangements, sea fronts, infrastructure systems, and urban and architectural dimensions will change. It appears necessary to prepare the territories and take advantage of all the opportunities related to future scenarios. The Strait Area is not only marked by the crossing, but the whole territorial and urban system—the coastal strip and inland areas—becomes an active part of the processes of territorial regeneration and development.

Methods: The article, after an examination of the best practices and experiences of the world's Straits, analyzes useful case studies to understand what processes and phenomena “cross” them and what works, what urban, spatial, and architectural interactions and strategies they intercept or lap up. Marine “straits” are unique, and one realizes that the strength of their peculiarities lies not only in their function as a natural link between two shores but also in their role in channeling flows and energies.

The goal is to understand their extraordinary potential to promote a synergistic and sustainable transformation, devising strategies to prevent the opportunity of the construction of the Strait Bridge from becoming a missed opportunity for the enhancement of its shores as catalysts for rebirth and innovation. The paper addresses the relationship with the environment and design responses with respect to the intervention priorities that emerged from the case studies, proposing a regeneration model. Attempts are made to identify possible design strategies so that the bridge does not merely unite two shores but relates to socio-economic issues, regeneration, and architectural and urban enhancement, involving resources and actors in the Straits area.



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