



Commission 8

Dear Friends and Delegates of Commission 8,

Welcome to the first edition of the FIG Commission 8 newsletter! The news has been collated from our direct activities, as well as from delegates and friends of the Commission. This first newsletter is a special edition dedicated to the activities of the Commission during the FIG Working Week 2023 in Orlando, as well as the new developments in the commission.

Have you given a thought leadership presentation or published a paper relevant to Commission 8 lately? We'd love to hear from you about any newsworthy items for the Commission - please send these to figcommission8@fig.net.

1. Join Commission 8 on Whatsapp!

We're thrilled to invite you to join our FIG Commission 8 community on WhatsApp - please take a moment now to join using this link (<https://chat.whatsapp.com/BFCmtozNLV0G7Ov1FLCFbu>) and to introduce yourself. We'd love to hear where you are, and what excites you most about the 2023-2026 theme of 'Responsible Transfer Knowledge Transfer and Innovation in Spatial Planning'!

2. FIG Commission 8 Annual Meeting 2023



The FIG Commission 8 meeting took place during the Working Week with 12 participants. The goal of the Commission Meeting was to update delegates and friends of the commission on our activities, especially with regards to the Workplan. The meeting had a presentation of the workplan in general, with the present Working Group Chairs presenting the plan for the Working Groups. The friends and delegates present got to question the Workplan, and were able to suggest inputs in the Workplan. The Commission Meeting was followed by a joint Commission Dinner with Commissions 3 and 9.

3. Introduction of the new Commission Vice-Chairs

During the Commission meeting, Roshni Sharma (Australia) and Charles Atakora (Germany) were appointed Vice-Chairs of the Commission for Administration and Technical respectively.



Charles is a geodetic Engineer in Dortmund Germany, where he works for a private survey office. His current role involves data processing to update cadaster database in the NRW region in Germany. Charles' research interests include but are not limited to sustainable reporting, Urban and regional planning, land consolidation/land use consolidation and rural development.

Roshni is a geospatial professional based in Sydney, Australia. She works for FrontierSI and runs spatial labs programs to foster geospatial innovation across government, industry and academia. Outside of work, she has five beautiful chihuahua's who keep her busy. She loves cooking and trying as many new types of foods and recipes as possible, has a vibrant garden, and reads widely at every opportunity.

4. 2023-2026 Commission 8 Work Plan



To kickstart the technical work of the commission, the Commission Work Plan was presented to the FIG General Assembly, which was approved.

You can watch the workplan overview via this link <https://youtu.be/f2lnW0N9ILc> and access the full work plan document here [Comm8_Workplan](#).

The theme for the Commission for this FIG Term (2023-26) is “**Responsible Transfer Knowledge Transfer and Innovation in Spatial Planning**”. Globalisation, in tandem with limited natural resources, has placed spatial planning and land management activities at the core of overcoming the global challenges of the day. The mission of Commission 8 is to explore new approaches to spatial planning and governance, and so the focus of our commission for this four-year period are to:

- Explore the short-, medium-, and long-term strategies for responsible knowledge transfer and innovation in the spatial planning sphere, with respect to the development of spatial planning tools.
- Discuss the processes of land and spatial policy conception, development, and implementation to support knowledge transfer and innovation.
- Explore rural-(peri-)urban dependencies and relations and raise awareness of planning issues for responsible solutions.
- Discuss and extend the impacts of digital transformation in the area of spatial planning and land management (in collaboration with Commission 7).
- Investigate the role of valuation of informal and rural settlements in the development of spatial planning instruments and policies (in collaboration with Commission 9).
- Investigation of the spatial planning on global challenges and well as the role of the former in the mitigation of the later.
- Raise awareness of the need for responsible, participatory, and smart spatial planning decisions towards supporting sustainable social, economic, and environmental development.

5. FIG Working Week 2023 Technical Sessions

Commission 8 had a very lively Working Week, with several technical sessions including those covering the themes of Urban and Rural Land Linkages, Climate Change, GIS and Digital Transformation. These sessions all had captive audiences who shared thought-provoking and relevant discussions. The following is a summary of the sessions' activities:

Opportunities and Challenges for Climate Change Adaptive Strategies (together with YSN)

This was the first technical session of the Commission. The session was run together with the Young Surveyors Network with Mr. Charles Atakora (Germany) as the chair, and Roshni Sharma (Australia) as rapporteur.



Two out of the four slated presentations were held, with a summary of the two others provided as a basis for the discussion as presenters were unfortunately unable to attend due to visa challenges. Perspectives from Nigeria, Zimbabwe, Switzerland, and Chinese Taipei were deliberated on. We had one peer reviewed paper which highlighted the Ground Risk Monitor fully automatic and remote controllable deformation early warning system for difficult measurement conditions, which was well received.

The key takeaways from the session were:

- The Ground Risk Monitor (GRIMONIT) is able to monitor and record deformations of bridges, dams, and buildings independent of weather conditions as well as in underground mining scenarios.
- Surveyors should partner governmental agencies to implement realistic and realizable policies.
- There is a need for surveyors to consider the development of a reliable formula for on-site equipment data transformation to inform a better forecast or evacuation during disasters.
- There is the need for a Climate related hazard Portal, which has the interoperability function across continental divides to enhance exchange of knowledge among surveyors globally.

Urban and Rural Land Linkages

The second Technical Session of the Commission was the session on Rural-Urban Land Linkages, chaired by FIG Vice President, Kwame Tenadu (Ghana), and rapporteur by FIG Young Surveyors Vice Chair, Shirley Chapunza (Zimbabwe). The session had a total of three papers presented with one provided for further reading. The guiding questions for the discussion were “*How do rural urban linkage manifest between regions?*” and “*How is sustainability addressed in planning efforts?*”.



The key takeaways from the session were:

- Augmented Reality (AR) can be a good source of interaction between governments and citizens in Spatial Planning.
- Resource exploitation-led urbanisation does not necessarily lead to sustainable urban growth, but requires monitoring.



GIS for Sustainable (Geo-) Spatial Planning

This is a session jointly held with Commission 3, chaired by Geom. Cromwell Manaloto (Italy) and Prof. Markus Schaffert (Germany). The session focussed on the study of current and future GIS - and other digital tools - for geospatial planning, services, applications, and standards to ensure a future that supports a sustainable world. The guiding questions for the session were; “*Are the current fit for purpose approaches to spatial planning fit for purpose?*” and “*How can these approaches be transferred across regions?*”

The session saw presentations on the applications of GIS on Spatial Planning around the world, for meeting challenges such as dam spillage, mapping of waterways, mining and food security, and illegal mining activities.

Rural Development and Land Markets

The session was chaired by Mr. James Kavanagh (United Kingdom) and had Mr.Charles Atakora (Germany) as rapporteur. This session considered perspectives of rural development and land markets as well as the social, cultural and ecological market values of land use approaches. Case study contributions were considered from Indonesia, Norway and Ghana, which fueled much relevant discussions.



The key takeaways from the session included;

- The use of UAV (unmanned aerial vehicles) and drone survey aided development of tourism in certain cities in Indonesia to give a facelift in terms of value to previously unnoticeable areas.
- The foundation of land consolidation approaches based on legal structures (courts and acts) protects the rights of stakeholders.
- Customary perspectives play a key role in land use considerations and can only be realised when qualified land valuers are engaged in the entire process of land negotiation.

Spatial Revitalisation through Urban-Rural Land Linkages (with NUST, HSF, and GLTN)

This special session was chaired by Prof. Eugene Chigbu (Namibia) and rapporteur by Dr. Oluibukun Ajayi (Namibia). The special session was held to bring together work done so far by FIG Commission 8, the Namibian University of Science and Technology (NUST), GLTN, and the Hanns-Seidel-Foundation (HSF) on Urban-Rural Land Linkages. As a hybrid session, it had relatively more people joining online. The working paper for the session can be viewed via this link <[URLL Paper](#)>



Spatial Planning and Socio-Economic Influences

This session was chaired by Prof. Eugene Chigbu (Namibia) and Mr.Charles Atakora (Germany) as rapporteur. The session explored beyond the spatial boundaries of spatial planning, looking to bring to the fore the socio-economic influences on spatial planning and how these can be better incorporated into spatial planning tools. The guiding questions for the session’s discussion were: “What lessons have been learnt in the past few years on rural and urban land values and planning?” and “How do non-market land



values influence spatial planning?”.Highlights from the session included perspectives from Indonesia, Denmark and Italy.

The key takeaways from the session included but not limited to ;

- There is a need for a collaborative engagement with government and local authorities to the fulfil goals of land tenure, land use, land ownership and general land utilization.(in the case-study of spatial and land thematic maps in he relocation project of Indonesia)
- The transformation of rural areas into sustainable energy landscapes can be achieved through a holistic inclusion of local content and perspectives, intelligent use as well as a multipurpose use of available rural space.
- The introduction of home grown spatial planning instruments like “Super Bonus” in Bologna by Italian surveyors is an innovative approach to have an all inclusive perspective which impacts the building landscape and its perception from citizens.

Digital Transformation in Land Management and Spatial Governance

This was run as a joint session with Commission 7, with Dr. Claudia Stöcker (Germany) as Chair of the session and Commission 8 Chair, Dr. Kwabena Asiamah (Ghana) as the rapporteur. The session was developed on the back of the FIG Publication 80 on Digital transformation and land administration – Sustainable practices from the UNECE region and beyond ([link](#)). This session sought to find digital transformation reshapes our everyday lives and land administration processes. This session took up the challenge and explored how digital transformation could improve the integration of land management and administration and spatial planning processes.



The session was divided into two parts, the first part looking at the roles played by digital transformation in reshaping our everyday lives and land administration processes, and the barriers that emerge. The second part looked at the sustainability of digital transformation initiatives, especially after the pandemic.

The two key takeaways from the session were:

- The need for and advantages of digital transformation for integrated government services.
- Digital transformations need the underpinning laws to be sustainable in the long term.

6. 2023-2026 Commission 8 Working Groups

Under the Four-year Work Plan, five working groups were formed to reach these goals. The following are the Working Groups and their lead persons:

Working Group 8.1 - Urban-Rural Land Linkages

Chair: Prof. Uchendu Eugene Chigbu,
Namibia University of Science and Technology, Namibia.
Email: echigbu@nust.na



Urban and rural development, in terms of land issues, affects people in many ways. In busy cities and markets, people depend on the backward-forward exchange of agricultural goods to and from rural areas. Transport networks (including rivers) are crucial for rural residents who want to travel to the city and for urban residents who want to travel to rural areas. Agricultural activities, usually found in rural areas, provide leisure and food security for urban residents. These urban-rural (and their intersecting peri-urban) functions are intrinsically linked. They are hindered by different, as well as common, land challenges. Efforts to improve their management must ensure that the land they occur on is secure and that the rights of those who use the land are protected. Tackling these land-related problems (and leveraging their interdependencies) requires better coordination of urban-rural land linkages to achieve balanced urban-rural spatial development. The concept of urban-rural land linkages (URLs) and its framework for action emerged in response to land problems that affect urban and rural areas. It follows the work of other international institutions, particularly the UN-Habitat, on bringing together strategies that equally support urban and rural development.

Working Group 8.2 - Unregistered Land and Large-scale Acquisition/Compensation

Chair: James Kavanagh,
Director Land and Resources, RICS, UK
Email: jkavanagh@rics.org



Unregistered land rights are estimated to account for more than 70% of land rights in developing countries. Billions of investment dollars for large scale infrastructure projects are being held up due to a variety of problems. While international financial institutions such as the World Bank require compensation payments for recognizable rights holders, many projects face difficulties to pay compensation to stakeholders (deemed legitimate or otherwise) because of complex and unclear regulatory environments that often surround unregistered lands and technical difficulties to properly evaluate such lands. The problem is further compounded if the land is customarily used due to unclear boundaries, overlapping claims and political economy issues. Many projects need to find a way creatively by navigating through national legal systems to find some space, while also applying pressure on account of noncompliance. The UN GLTN Valuation of Unregistered Land—A Practice Manual – Global Land Tool Network (gltn.net) is the first global and cross profession operational manual to try to help valuers, land professionals, clients, policy makers and acquiring authorities get to grips with this complex subject.

Working Group 8.3 - Spatial Planning Instruments and Climate Change

Chair: Prof. Dr. Adrianna Czarnecka,
Department of Spatial Planning and Environmental Sciences, Faculty of
Geodesy and Cartography, Warsaw University of Technology, Poland
Email: adrianna.czarnecka@pw.edu.pl



The role of spatial planning in climate action has been widely recognized. The challenges resulting from climate change affect as well the mechanisms of spatial planning, as its tools. Spatial planning addresses land-related issues either in a normative (land use regulation) or strategic way (creation of a framework that provides policy guidelines for territorial

development). Mitigation and adaptation to climate change require a reconsideration of the role and scope of both (land use planning and strategic spatial planning). The responsible implementation of spatial planning instruments such as land consolidation, land readjustment, compulsory land acquisition and land banking, among others, can support 'mainstreaming' of climate change actions. WG 8.3 will seek to connect scientists, professionals, and practitioners towards the transfer of experiences in implementing adaptive spatial planning tools, that focus on minimizing potential damage, coping with the consequences of impacts, and taking advantage of new opportunities.

Working Group 8.4 - Digital Transformation for Land Management and Spatial Governance

Chair: Prof. Dr. Ir. Walter Timo de Vries,
Technical University of Munich, Munich, Germany.
E-mail: wt.de-vries@tum.de



Digitisation, digitalisation and digital transformation are gaining prominence in policy efforts in many land-related areas around the world, as outlined in the recent FIG Publication No. 80. In addition to the benefits of efficiency and cost reduction of intra-sectoral processes, it also creates opportunities for cross-sectoral synergies that have hardly been exploited so far. This working group wants to expose best practices from cross-sectoral digital transformation efforts bridging land administration, land management, land use planning and spatial governance. It wants to highlight merits and synergies such as optimal data integration or interoperability but also explores challenges such as cybersecurity, capacity issues or alike. As digital developments have different impacts depending on the region, activities in this working group will pay attention to the diversity of regions highlighting particularities and ensuring that the same approach or evaluation scheme should not be applied everywhere.

Working Group 8.5 - Spatial Plan and Valuation Information in LADM Context

Chair: Dr. Abdullah Kara
Technical University of Delft, Delft, The Netherlands,
Email: a.kara@tudelft.nl



In 2018, it was decided to review LADM and to extend the scope of LADM (Lemmen et al., 2021). Even if the Edition I of the standard had a broad vision, the emphasis was mainly on land registration processes and parcels of real property. The marine georegulation, valuation information and spatial plan information were purposely left aside of the scope of the standard. LADM Edition II is being designed as a multipart standard, and each part as a standalone standard. Valuation and spatial plan information are included in Part 4 and 5, respectively. LADM Part 4 – Valuation Information is designed using the existing standard to represent all stages of administrative property valuation, namely representation of parties involved in valuations, identification of properties, assessment of properties through single or mass appraisal procedures, recording transaction prices, generation and representation of sales statistics, and dealing with appeals. It is expected that the proposed model in this standard may provide public bodies a common basis for the development of local and/or national information models and databases, enabling the

integration of valuation databases with land administration databases, and can act as a guide for the private sector. LADM Part 5 – Spatial Plan Information aims to provide the general reference model, as an extension of core LADM (both ISO 19152-1 and 19152-2), for all objects of spatial planning those covering land/water and below/on/above surfaces. It provides a conceptual model that represents and documents the complete view of RRRs from land administration and the spatial planning processes.

7. Help us Build the Commission 8 Community

Thank you for taking the time to peruse our newsletter - and please do take a moment now to email through anything you would like to include in the next iteration of our newsletter. We welcome any updates - from telling us about technical or thought leadership presentations you've been doing, papers you've been working on which are relevant to Commission 8, please do share photos and a paragraph or two with us at figcommission8@fig.net. Our hope is to build our Commission 8 community to be vibrant, alive and a force of nature to help us to achieve a stronger global impact.

Thank you again,
Kwabena Asiama (Chair)
Roshni Sharma (Vice-Chair)
Charles Atakora (Vice-Chair)