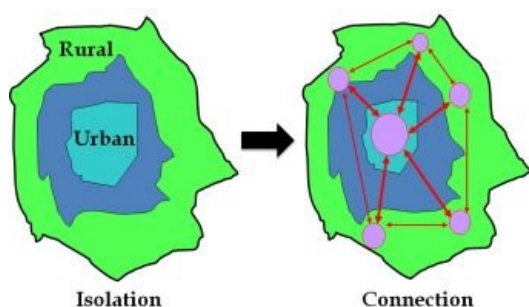
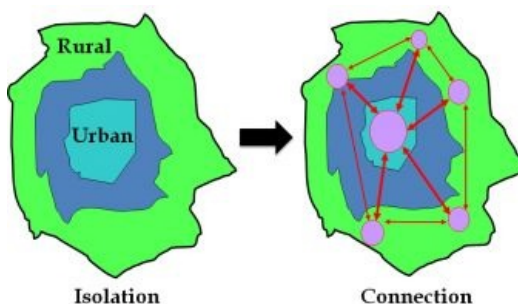


FIG COMMISSION 7: CADASTRE AND LAND MANAGEMENT

Land Challenges in a Revolving World



Has your world changed in the last four weeks? It has for Commission 7 also, and we are adjusting quickly to the new needs of our world. Commission 7 is about the relationship between land and people, and how surveyors and other professions support nations to administer their land resources.



During this pandemic, every day the COVID19 virus is changing how we relate to our land from border closures to restrictions to citizens to be confined into private parcels. The current pandemic has shown how important it is to have a land inventory (the cadastre), and to be able to understand and change it (hopefully temporally) in terms of rights, restrictions and responsibilities of owners and occupiers.



The Commission's Work Plan: Focusing on where land matters most

Our Commission 7 Work Plan for 2019-2022 was designed during our 2018 annual meeting in Bergen, Norway. The Commission's work plan is based on the pressing issues that challenge developed and developing countries. With COVID19 pandemic, the focus of Commission 7 is more important than ever. Our focus for the next four years is:

- The role of the private sector in land tenure systems,
- Tracking land-related SDG indicators,

- Digital twin and new technologies,
- The role of the cadastre surveyor and
- Urban challenges (with Commissions 8 and 9).

Thanks to the great work of Commission 7's working group chairs, delegates, friends and other colleagues, the Commission has made progress in all of its topics and we are responding rapidly to the needs during the pandemic. Below is a explanation of each of topic and papers submitted to the 2020 Working Week program.

Private sector role in land tenure

The role of the private sector in land tenure has been a key topic for many years in the international community. Commission 7 has been integral in supporting developing and developed countries to better understand this role. We have made joint efforts with the UNECE Working Party in Land Administration (WPLA) to provide updated principles for use of public-private partnerships (PPPs) as an instrument to engage the private sector in land reform projects. Kirsikka Riekkinen, Deputy Chair of WPLA, is leading the taskforce of outstanding colleagues that have volunteered for this review, including Gerda Schennach from Austria, former chair of Commission 7.

Session [TS02H](#) in our FIG2020 program provides great insights into how new financial instruments are used in land administration

systems for involving the private sector.



Figure 1: FIG Commission 7 Annual Meeting. (source: Korea LX)

Tracking SDGs

For a long time FIG has been committed to supporting the UN and many other international organizations in achieving the SDGs globally. SDGs are universal development goals. Many developed nations, along with developing nations, have committed to them as they have a fundamental role to play in the climate crisis.

Since 2002 Commission 7 has been helping countries in benchmarking their land administration systems. During the time of Ian Williamson as Chair of the Commission, the website www.CadastreTemplate.org was created by Daniel Steudler from the Swiss Cadastre in 2002 (almost 20 years ago!) After all these years, Commission 7 is continuing with this effort, and it is now working with Professor Abbas Rajabifard from Melbourne University on new indicators and systems to track land-related SDGs in the context of community resilience. Many of the underpinning concepts and technologies are present in the special SDGs sessions [TS07F](#) and [TS08F](#).

Digital twin and future land technologies

The new technological trends occurring in our daily life - such as mobile devices, automation and cloud systems - also influence how land information systems in the private and public sector, are developed. In 2019, [Korea LX](#) (Korea's national cadastre institution) hosted an outstanding Commission 7 meeting where countries around the world showcased their development, challenges and opportunities. Koreans are leading the way on the digital twin followed closely by important developments in Australia and UK.

Commission 7 has continued fostering and expanding these discussions to increase understanding of the best role new technologies can play in solving land tenure issues. I was very pleased to see an outstanding proliferation of articles during our 2020 Working Week program, which we have clustered by regions in the following way:

- Papers from Latin-America and the Caribbean in session [TS06H](#)
- Asia, Pacific and Oceania in session [TS07C](#)
- Africa in [TS07H](#)
- [TS08H](#) shows the experiences in the Netherlands (host of the Working Week)
- [TS06C](#) presents cases in Europe and the Middle East

The role of the cadastre surveyor

In a changing world, the only certainty we have is that nothing will stay the same. The COVID19 crisis is testing our resilience, and demanding that surveyors need to be ahead of the game. Commission 7 has been putting an effort into enabling an open platform for everyone to discuss potential new and exciting roles for the cadastre surveyor, and what changes need to be made to current responsibilities based on emerging technologies and the needs of citizens.



Figure 2: Trimble's SiteVision Integrated Positioning System. (source: paper 10463 by Michaud and Harrington in session TS02H)

Many of our top thinkers in land administration have been instrumental in providing a path forward and we were blessed with their fantastic papers in sessions [TS01H](#). Also, Commission 7 members made a specific effort to present analyses of the relationship between land and other resources. In this regard, and focusing on the theme of the conference, water management and its relationship to land rights was the focus of session [TS05H](#).

In considering the future role of surveyors, it is important to highlight the contribution of the World Bank as a key protagonist of development and of poverty reduction through land tenure investments, as well as ESRI as a provider of important technologies to solve complex spatial problems. Others are funding many initiatives to accelerate land tenure security and improve the new role of the surveyor, such as Trimble with their fantastic technologies and equipment as well as donors and international agencies from USA, UK, the Netherlands and other countries.

All of these institutions are key partners of our Commission and we thank them for their fantastic contribution and commitment to solving land tenure issues around the globe.

Urban environment and land tenure

Traditionally, Commission 7 has focused on rural tenure issues. Now there is an increased pressure in cities to improve land administration systems and ensure urban and rural development are linked. In this regard, and thanks to the fantastic leadership of GLTN, Commission 7 currently leads the Urban-Rural Land linkage Framework development. This work is being supported by the GLTN Professional Cluster.

This framework, expected to be released early in 2021, would support countries to better understand the interrelationship between urban and rural land issues and opportunities for synergies in their development projects, policies and regulations.



Figure 3: Shift from a focus on the urban-rural divide to urban-rural connections. (Source: Dr Eugene Chigbu- Munich Technical University and technical lead of the GLTN Urban-Rural Land Linkage Framework project)

Commission 7 future: Thinking beyond COVID

In the immediate future, FIG Commission 7, The University of Melbourne and ESRI Colombia are coming together in an effort to rapidly produce a paper on the geospatial mobile technologies used as tools to respond to the pandemic. If you are interested to contribute to this

paper, by reviewing current applications in your own country, language or region, please contact us at figcommission7@fig.net

No matter where you are in the world, recovering from COVID19 is likely to be underpinned by the country's land resources. Without their good administration, recovery will be long and will not meet the needs of the people. More than ever our world is in need of better land tenure systems to improve productivity so governments can stabilise their economies and, hopefully, local and regional conflict will be reduced or avoided.

We envisage that at Commission 7 we will be busier than ever in the next 5 years. For our Working Week in 2021 in the Netherlands, we all need to bring our best ideas and analysis to support economic and social recovery from the tragedy of the pandemic. In this regard, we cannot forget our commitment to our natural environment. We, as surveyors, need to be part of key discussions to ensure pandemic recovery solutions do not just resolve immediate problems, but are part of a long-term sustainable development pathway addressing bigger issues such as climate change.



Figure 4: Daniel Paez, Chair of Commission 7, visiting the Licensed Surveyors Association of Ghana offices in Accra. Very generously, the local organisers for the Working Week 2021 from Ghana have offered that the FIG Working Week that should have taken place in the Netherlands in 2020, can be held in the Netherlands in 2021 (instead of Ghana). It is a very special and generous offer from the Ghanaian Local Organising Committee for which both FIG Council and the Dutch Local Organisers are very grateful. This is showing real FIG spirit to come up with such an offer! (Source: Daniel Paez)

Further readings:

[FIG Working Week 2020 Proceedings](#)

[FIG Surveyors Reference Library](#)

[FIG Peer Review Journal](#)

[FIG Publications](#)

FIG Commission 7 Sessions:

- [TS01H: Game Changers in Land Administration](#)
- [TS02H: Financial and Technical Innovation in Land Administration](#)
- [TS03H: Cadastre and Land Management I](#)
- [TS04H: Cadastre and Land Management II](#)
- [TS05H: Land, Water and other Rights Interactions](#)
- [TS06H: Solving Land Issues in Latin-America and the Caribbean](#)
- [TS07H: Africa Innovation and Developments in Land Administration](#)
- [TS08H: Netherlands and Land Administration: Best Practice and Vision for the Future](#)
- [TS06C: Europe and Middle East Experiences in Land Administration](#)
- [TS07C: Asia, Oceania and the Pacific Land Administration Experiences](#)
- [TS03J: GLTN Conceptual Framework for Urban-Rural Land Linkage Framework \(open session\)](#)
- [TS06F: Making the World a Better Place with Your Skills! SPECIAL SDG SESSION](#)
- [TS07F: Empowered by the Sustainable Development Goals - SPECIAL SDG SESSION](#)
- [TS08F: Ending Poverty & Securing Land Rights: the Role & Contribution of Land Administration - SPECIAL SDG SESSION](#)

FIG Commission 7 website:

- [General](#)
- [Work Plan 2019-2022](#)
- **Working Groups**
 - [Working Group 7.1 – Cadastre Technologies and Smart City \(2 years\)](#)
 - [Working Group 7.2 – Fit-for-purpose \(FFP\) implementation](#)
 - [Working Group 7.3 – Cadastral Template 2.0 and the SDGs](#)
 - [Joint Working Group – Urban Challenges](#)