# Report to the 45<sup>th</sup> General Assembly FIG Congress 2022, Warsaw, Poland

# FIG Commission 8 – Spatial Planning and Development

# Report of Activities 2021/2022

## 1. General

In a world of limited resources, of which land is the most prominent in the domain of spatial planning, the mission of commission 8 is to provide access to planning processes for all and balance the various interests in pursue of a sustainable spatial development at all governance levels both for the short-and long-term.

Based on this overall mission statement, the work of commission 8 takes shape in five working groups. The work of the working groups is carried out in addition to the yearly working weeks or four-yearly congress. At the working weeks the sessions in the technical programme play an important role to exchange and discuss latest developments, trends and solutions in the broader field of spatial planning in relation to land administration between professionals, academics and the business.

In the current working period, the work of FIG is significantly hampered by the spread of the coronavirus and related measures. The same is true for Commission 8, which is why the goals formulated in the original work plan had to be slightly adjusted. Still, with the help of the FIG community and international partner organisations, many activities were organised over the course of the term as were various publications accomplished (FIG publication 'Good practice for resilience planning to address Water Governance challenges in Africa', FIG publication about Land Consolidation practice, and 'Urban-Rural Land Linkages: A Concept and Framework for Action').

Unfortunately, last year's activities were still affected by the COVID-19 pandemic. After the successful online FIG Working Week in June 2021, things slowly started to open up again. Then followed again by another lockdown over autumn/winter 2021/2022, which made it difficult to plan for any events. All in all, this means that – like most commissions – we faced mainly an online term with an onsite start and end at respectively the FIG Working Week in Hanoi, 2019 and the FIG congress in Warsaw, 2022. Most of the activities in between were organised online.

In line with the general working practices of Commission 8, in the following sections the work and events are not so much assigned to individual working groups, but rather treated as a whole.

## 2. Events

#### Commission 8 at the FIG Working Week 2021

The Working Week 2021 took place online, 20-25 June 2021. Commission 8 held its annual meeting and (co-)organized a number of sessions covering Commission 8 areas within the WW's theme of Smart Surveyors for Land and Water Management.

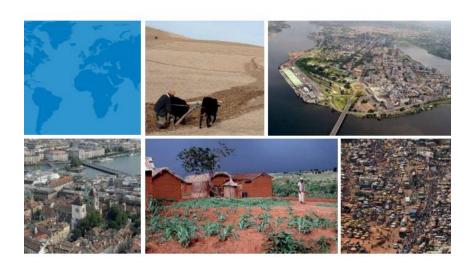
- Spatial Planning, Land Use, and Land and Water Management (organised by Commission 8)
- Land Consolidation: from Plan to Implementation (organised by Commission 8)
- Generic Tool for Land Consolidation (organised by Commission 8)
- GIS for Monitoring and Evaluation of Sustainable Land Use (jointly organised by Commissions 3 and 8)

- Fit for Purpose (FFP) for Land and Water Management –The Relationship of the Water and Land Tenure Nexus (jointly organised by FAO and Commission 8)
- The Role of Land Banking in Support of Land Consolidation (jointly organised by FAO and Commission 8)
- Launch of "Urban-Rural Land Linkages: Concept and Framework for Action (organised by UN-Habitat / GLTN and active involvement from commission 8 due to the publication of the joint report Urban-Rural Land Linkages, see below)
- 9th FIG Workshop on the LADM/ 3D Land Administration: Session 4 LADM Standards Developments (organised by FIG Standards network and active involvement from commission 8 among others)
- Annual commission 8 meeting discussing progress and upcoming activities.
- FIG General Assembly: Session 4 The work of FIG. Contribution about 'water governance' related to commissions' 8 FIG publication about Water Governance.

More details about the activities are included in the proceedings of the FIG Working Week 2021, which can be retrieved from FIG's website:

https://fig.net/resources/proceedings/fig\_proceedings/fig2021/techprog.htm.

REPORT 3 /2021



URBAN-RURAL LAND LINKAGES: A CONCEPT AND FRAMEWORK FOR ACTION

A world in which everyone enjoys secure tenure rights



#### Commission 3 + 8 workshop, 20-21 July 2021 Prato, Italy

In 2021, Commission 8 once had again the opportunity to enjoy the hospitality of our Italian colleagues. Enrico Rispoli, Chair of the joint Commission 3&8 Working Group 'GIS for Spatial Planning' and Maria Scorza, Chair of the Local Organizing Committee, organized the event. The joint Workshop of FIG Commissions 3 and 8 on "Spatial information management to optimize Spatial planning and Sustainable development" was held in Prato, Italy, on July 20-21, 2021, as part of the XXII edition of the "International Summer School", organized by Comitato Internazionale di Fotogrammetria Architettonica. The Prato conference, in the context of global environmental policies, was important to encourage and publicize planning works and proposals based on the management of geospatial data as a paradigm of the urban regeneration project and opportunities for sustainable city development.

Welcome addresses were given by FIG president Rudolf Staiger online, by President of Consiglio Nazionale Geometri e Geometri Laureati, Maurice Salvoncelli in person, and other high-level speakers. Practical cases of strategies to transform and improve cities on themselves were illustrated by a number of high-level speakers, FIG Honorary President Chryssy Potsiou, Chairs of Commission 1, 3 and 8, to name a few.

The Workshop was held both onsite and online. The hybrid setup was a good choice and attracted a big audience. With full simultaneous translation available, a number of up to 950 participants attended online. A big thank you to the organizers for organizing such a fruitful and successful event.



Maurice Savoncelli, President CNGeGL



Marije Louwsma, Commission 8 Chair



Speaker's photo



Beautiful Prato, Italian evening

#### 13<sup>th</sup> LANDNET meeting in North Macedonia, Skopje

The 13th LANDNET workshop took place in a hybrid format (physically and virtually) from 25 to 27 May in Skopje, North Macedonia. The objectives of the workshop were:

- Revitalize the regional technical network,
- Provide an overview of good practices on land banking in Europe,
- Present and discuss lessons learned from the introduction of land consolidation in North Macedonia,
- Discuss policy options to address land abandonment.

Recordings are available at: <u>https://www.youtube.com/watch?v=gqpue9zYJRo</u>, <u>https://www.youtube.com/watch?v=iX-hKaqtub8</u>, and <u>https://www.youtube.com/watch?v=Zv6KmDL8giA</u>



### Commission 8 at the upcoming FIG Congress, 11-15 Sept 2022 Warsaw, Poland

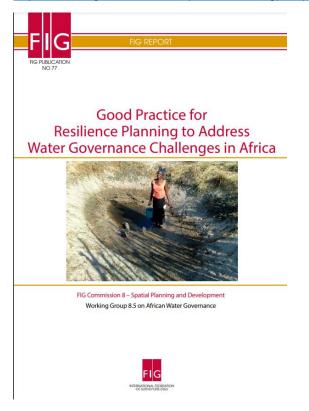
The FIG congress is to take place onsite at the venue with some of the sessions broadcasted online. So, a partly hybrid event. Commission 8 will hold its annual meeting, commission dinner (together with commission 3, and (co-)organize a number of technical sessions.

- Land policy instruments for regional development (organised by Commission 8)
- Addressing sustainability in spatial planning planning efforts in rural and urban areas (organised by Commission 8)
- Spatial planning and affordability of housing space (jointly organised by Commissions 8 and 9)
- Climate Smart Planning with GIS (jointly organised by Commissions 3 and 8)
- Land Use Planning and Management fed by Spatial Analyses (jointly organised by Commissions 3 and 8)
- GIS for 3D urban planning, construction and valuation (jointly organised by Commissions 3, 8 and 9)
- Special session about Rural-Urban Linkages (organised with LOC WW Poland)
- Best Practices and Lessons Learnt on the VGGT Implementation in Eastern Europe and Central Asia: Capacity Development for Land Consolidation and Land Banking (jointly organised by FAO and Commission 8)
- Commission 3 and 8 will jointly organise a commission dinner onsite to march the end of a 4year collaboration.

# 3. Publications

#### Good Practice for Resilience Planning to Address Water Governance Challenges in Africa

Working group 8.5 has delivered a FIG report about water governance focusing on urbanized areas in Africa, being valuable for professionals, governments, and decision-makers in the surveying discipline. Facing the impact of climate change, the report addresses the importance of water governance to seek sustainable solutions in various contexts, and beyond administrative boundaries. The report, FIG publication No 77, was launched at the e-Working Week in 2021 and is available at <a href="https://www.fig.net/resources/publications/figpub/pub77/Figpub77.pdf">https://www.fig.net/resources/publications/figpub/pub77/Figpub77.pdf</a> .



#### Geospatial Data in the 2020s - transformative power and pathways to sustainability

Commission 8 contributed to the upcoming publication from commission 3 on 'Geospatial Data in the 2020s - transformative power and pathways to sustainability'. It will be published as a FIG Report addressing the role of geospatial data in the current decade. The list of authors shows the success of the efforts to bring together the different generations of professionals in the global FIG in a common project. Commission 8 contributed to three different chapters, focusing on the role of geo-information in spatial planning and vice versa. It shows again that both commissions are highly related in a further digitalized world.

#### Draft Table of Contents

1 General Introduction (Markus Schaffert, Germany)

- 2 Use cases
- 2.1 Spatial Planning

Spatial Planning and Geo-Information (Marije Louwsma, Netherlands, Cemre Sahinkaya- Özer, Germany/Turkey)

2.2 The Spatial Dimension of Health

2.2.1 Ubiquitous big geodata for measuring the change of pedestrian mobility patterns during COVID-19 (Avital Angel, Achituv Cohen, Pnina Plaut, Sagi Dalyot, Israel)
2.2.2 Towards an Integrated Geospatial Information Management for Public Sector Health Data - The COVID-19 pandemic seen through the lens of IGIF (Marije Louwsma, Netherlands and Hartmut Müller, Germany)

2.3 Diversity in Geospatial Context

How and why diversity and inclusion are vital for the future of geospatial data management and the surveying profession (Roshni Sharma, Australia)

2.4 Volunteered Geographic Information (VGI)

2.4.1 eVolunteering and Engaging Young Surveyors in the 2020s (VCSP team, Canada, Cemal Kivilcim, Turkey)2.4.2 Attributes and Ethical Preferences of Land Surveyors towards Data Contribution to Land Management Systems (Ruba Jaljolie, Sagi Dalyot, Israel)

2.5 Cadastre and Property Market

2.5.1 Introduction (Chryssy Potsiou, Greece)2.5.2 Dutch Use case (Marije Louwsma, Netherlands)2.5.3 Italian use case (Enrico Rispoli and Maria Scorza, Italy)2.5.4 Less developed systems (Chryssy Potsiou, Greece)

3 Discussion and Conclusions

#### Land Consolidation in practice

Working group 8.4 has been working on a second FIG publication from commission 8 about land consolidation. The publication aims to provide practical guidance for those involved in land consolidation. The publication is a collaboration of multiple international authors experienced in land consolidation in various countries. It will be published before the FIG Working Week in Warsaw. Below an outline of the table of contents.

#### Draft Table of Contents

- 1 A general introduction to land consolidation
  - 1.1 The unique character of land consolidation
  - 1.2 Land consolidation its process and objectives
  - 1.3 Explaining terminology
  - 1.4 Tenure security and land consolidation
  - 1.5 Reading guide
- 2 Different forms of land consolidation
  - 2.1 Introduction
  - 2.2 Forms of land consolidation
  - 2.3 Organising land consolidation
  - 2.4 General preconditions
  - 2.5 Other land policy instruments
- 3 Public participation
  - 3.1 Introduction to public participation
  - 3.2 The various natures of public participation
  - 3.3 Participatory techniques
  - 3.4 Participation and form of land consolidation
  - 3.5 Participation and phase of land consolidation
  - 3.6 Participation and stakeholder group
  - 3.7 Considerations

- 4 Valuation
  - 4.1 Introduction
  - 4.2 Approaches and methodologies
  - 4.3 Valuation and form of land consolidation
  - 4.4 How to organize valuation
  - 4.5 Financial aspects related to valuation
- 5 Developing the land consolidation plan
  - 5.1 What does a land consolidation plan entail?
  - 5.2 The process of developing the land consolidation plan
  - 5.3 The role of land tenure professionals in developing the land consolidation plan
- 6 GIS tools for land consolidation
  - 6.1 The current situation
  - 6.2 Preconditions to use GIS tools in land consolidation
  - 6.3 Existing GIS tools
  - 6.4 Future developments -- generic land consolidation software
- 7 Monitoring and evaluation of programmes and projects
  - 7.1 The purpose of monitoring and evaluation
  - 7.2 Monitoring and evaluation of land consolidation projects
  - 7.3 Socio-economic impact assessments
  - 7.4 Evaluation of land consolidation programmes
  - 7.5 Conclusions
- 8 Conclusions

Apart from these FIG publications, working group members have written various papers for the FIG Working Weeks, book chapters or scientific articles about commission 8 topics. The paper about a generic tool for land consolidation as presented at last years Working Week is such an example.

# 4. Cooperation

#### Internal cooperation

Commission 8 has focused on intensifying the cooperation with various FIG commissions and introducing young professional colleagues to the work of FIG. Internal cooperation mainly took place with commissions that are topic-wise closely related to the domain of commission 8. As the previous sections show, collaboration with commission 3 spatial information management is excellent. It appears that many papers are submitted each year at the intersection of both commissions. The topic of GIS in spatial planning or vice versa is trending and it is expected that due to technical advancements it will remain so for the upcoming years. Also, several joint activities with commission 3 have been organised. Apart from that, cooperation with other commissions was organised, e.g. with commission 9, mainly through jointly organised sessions at the FIG Working Weeks. Furthermore, several young surveyors have been active in the working groups and/or activities from commission 8.

#### **External cooperation**

Commission 8 has worked closely together with FAO in special sessions at FIG Working Weeks and the Congress, and in the LANDNET network. Topics mainly focused on land policy related instruments in rural areas, among which land consolidation and land banking. Cooperation led to visible results such as joint activities (e.g. LANDNET meetings in 2019 and 2022, joint online workshop in 2020) and contributions to each other's publications (FAO's publication on legal framework for land consolidation

and FIG's publication on land consolidation). Cooperation has been fruitful and can hopefully be continued to further strengthen the domain of spatial planning and land policy in particular.

# 5. Concluding remarks

As this is the last report from the term 2019-2022, I would like to thank all the people who have contributed to the work of commission 8. All the work described, and the results achieved would not have been possible without the commitment and dedication of so many volunteers, who invested time – in addition to their regular jobs – to further advance the work of FIG. International cooperation seems more important than ever to support the role of a prosperous and sustainable profession of surveyors to provide solution functionality, reliably, affordably for a complex and rapidly changing world that cannot wait, and to translate a sustainable development agenda into action. Good international relations with peers from academia, industry and professionals is key to foster a such a sustainable spatial development. The COVID-19 pandemic has shown how important contact is to build and maintain a network among peers in the domain of surveyors. As such, I hope that we keep connected and meet (in person) again to keep up the good work.

Marije Louwsma

Chair, FIG Commission 8, 2019 - 2022

www.fig.net/commission8

June 2022