

# FIG - Com7

## WORKING GROUP:

### Framework for Effective Land Management



**UN-GGIM**  
UNITED NATIONS  
COMMITTEE OF EXPERTS ON  
GLOBAL GEOSPATIAL  
INFORMATION MANAGEMENT



**Amalia Velasco**

FIG Article of the Month, March 20

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## TACKLING THE GLOBAL CHALLENGES

**FIG represents the interests of surveyors worldwide**

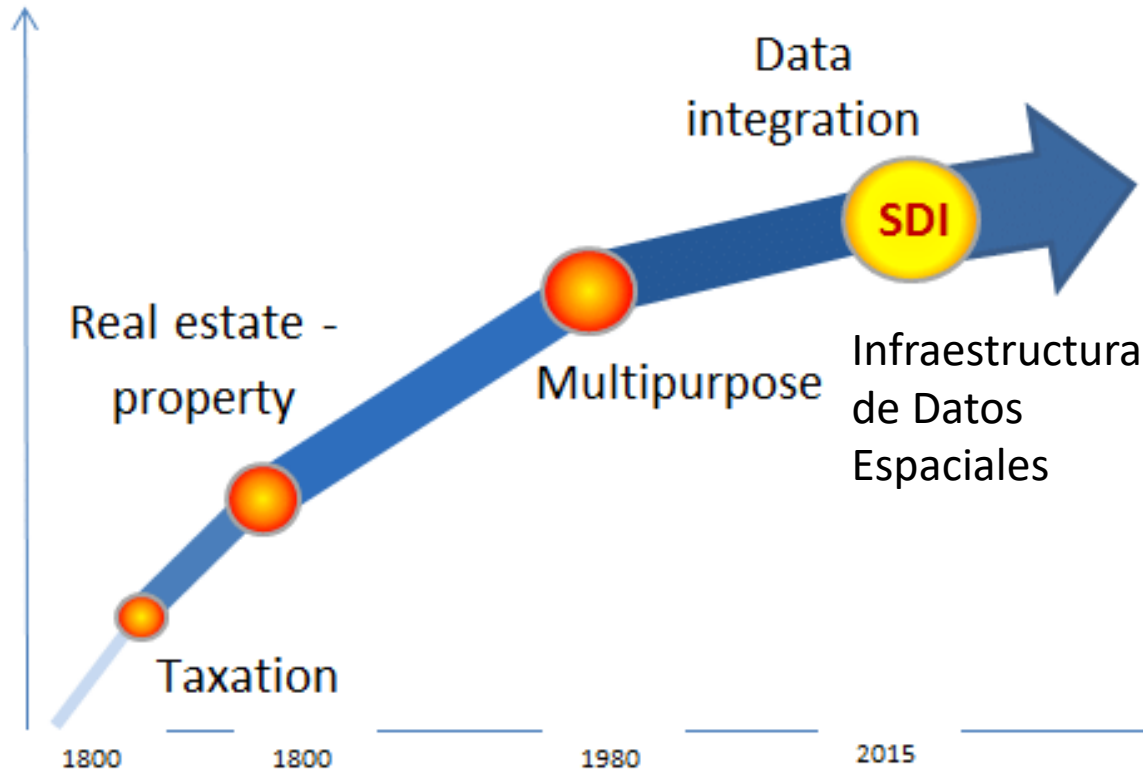
FIG was founded in 1878 and is a United Nations and World Bank recognized non-governmental organization of national member associations, cadastral and mapping agencies and ministries, universities and corporates from over 120 countries. FIG covers the whole range of professional fields within the global surveying community, hereunder surveying, cadastre, valuation, mapping, geodesy, hydrography, geospatial, and quantity surveyors and provides an international forum for discussion and development aiming to promote professional practice and standards.

Fundado en el siglo xix

La ONU y el Banco Mundial lo reconocen como la organización no gubernamental de asociación nacionales de técnicos, de agencias de catastros, universidades cooperantes, técnicos etc... de 120 países, en temas como topografía , catastro, valoración.

Foro internacional para compartir información y defender derechos y opiniones

## Evolution of the concept of Cadastre



The Cadastre as a fundamental piece of the digital ECOSYSTEM for the governance of the territory

El desarrollo sostenible exige una administración y gestión de la tierra efectiva. La administración y gestión efectiva de la tierra apoya el desarrollo sostenible.



FIG draws its membership from practitioners working in communities with both the public and private sectors, from the scientific, research and academic community, as well as from the spatial technologies and services community.



## FIG Definition of the Functions of the Surveyor

A surveyor is a professional person with the academic qualifications and technical expertise to conduct one, or more, of the following activities;

- to determine, measure and represent land, three-dimensional objects, point-fields and trajectories;
- to assemble and interpret land and geographically related information,
- to use that information for the planning and efficient administration of the land, the sea and any structures thereon; and,
- to conduct research into the above practices and to develop them.

Ásociaciones de técnicos tanto privados como públicos.  
Investigadores, universidades etc...

- Técnicos de medición
- Expertos en información geoespacial
- Los que interpretan y usan estos datos para la administración del territorio, los océanos etc
- Los investigadores del sector

FIG's technical work is led by ten Commissions.

Los trabajos de la FIG se realizan en 10 grupos de trabajo llamados comisiones



**Commission 1 – Professional Standards and Practice**



**Commission 2 – Professional Education**



**Commission 3 – Spatial Information Management**



**Commission 4 – Hydrography**



**Commission 5 – Positioning and Measurement**



**Commission 6 – Engineering Surveys**



**Commission 7 – Cadastre and Land Management**



**Commission 8 – Spatial Planning and Development**



**Commission 9 – Valuation and the Management of Real Estate**



**Commission 10 - Construction Economics and Management**



## What we do

For the term 2023-2026 FIG Commission 7 will be working on:

- **WG 7.1 - Framework for Effective Land Administration (FEELA)**
- **WG 7.2 - Fit for Purpose Land Administration (FFPLA)**
- **WG 7.3 - 3D and LADM (3D/LADM)**
- **WG 7.4 - Artificial Intelligence 4 Land Administration (AI4LA)**
- **WG 7.5 - Women's Access to Land and S4HL**
- **WG 7.6 - Integrated Land Management**
- **WG 7.7 - Education in Land Administration**
- **WG 7.8 - Comparative Land Administration**



Chair of FIG Commission 7:  
**Rohan Bennett, Australia**

General ▾

**FIG Commission 7** ▾

Work Plan

Activities ▾

News

Library ▾

Terms ▾

Commission Officers & Delegates



## What about the Commission 7?

1. **FELA** :: Stories are being captured; tools under development
2. **FFPLA** :: It's happening at scale; successes and challenges
3. **3D/LADM** :: Are going hand in hand; continuous development is key
4. **AI&RS** :: Many new methods, many new sources; but, still a way to go!
5. **Women** :: FIG publication24 review underway! We stick with women.
6. **Comparative Cadastres** ::
7. **LA Education** :: What are the boundaries? Where are the students?

# Why FIG should help?

## Global Driver



The 2030 Sustainable Development Agenda, adopted by world leaders in 2015

## National Association Driver



National Association and here especially Com 7 members are often responsible for delivering Land Administration services and to report on SDGs indicators related to land.

## OBJETIVOS DE DESARROLLO SOSTENIBLE



técnicos de la FIG son a menudo responsables

- de proporcionar los servicios de la administración del territorio
- y de los indicadores de los ODS



*“...50% de los objetivos de la Agenda 2030 (UN) para el desarrollo sostenible están relacionados con la tierra”.*

**"... 50% of the goals of the 2030 Agenda (UN) for sustainable development are related to land."**

Dieter Lübeck  
Revista GIM, agosto 2016





2.4.1 | Proportion of agricultural area under productive and sustainable agriculture

5.a.1 | (a) Proportion of total agricultural population with ownership or secure rights over agricultural land, by sex; and (b) share of women among owners or rights bearers of agricultural land, by type of tenure

9.1.1 | Proportion of the rural population who live within 2 km of an all season road

11.3.1 | Ratio of land consumption rate to population growth rate

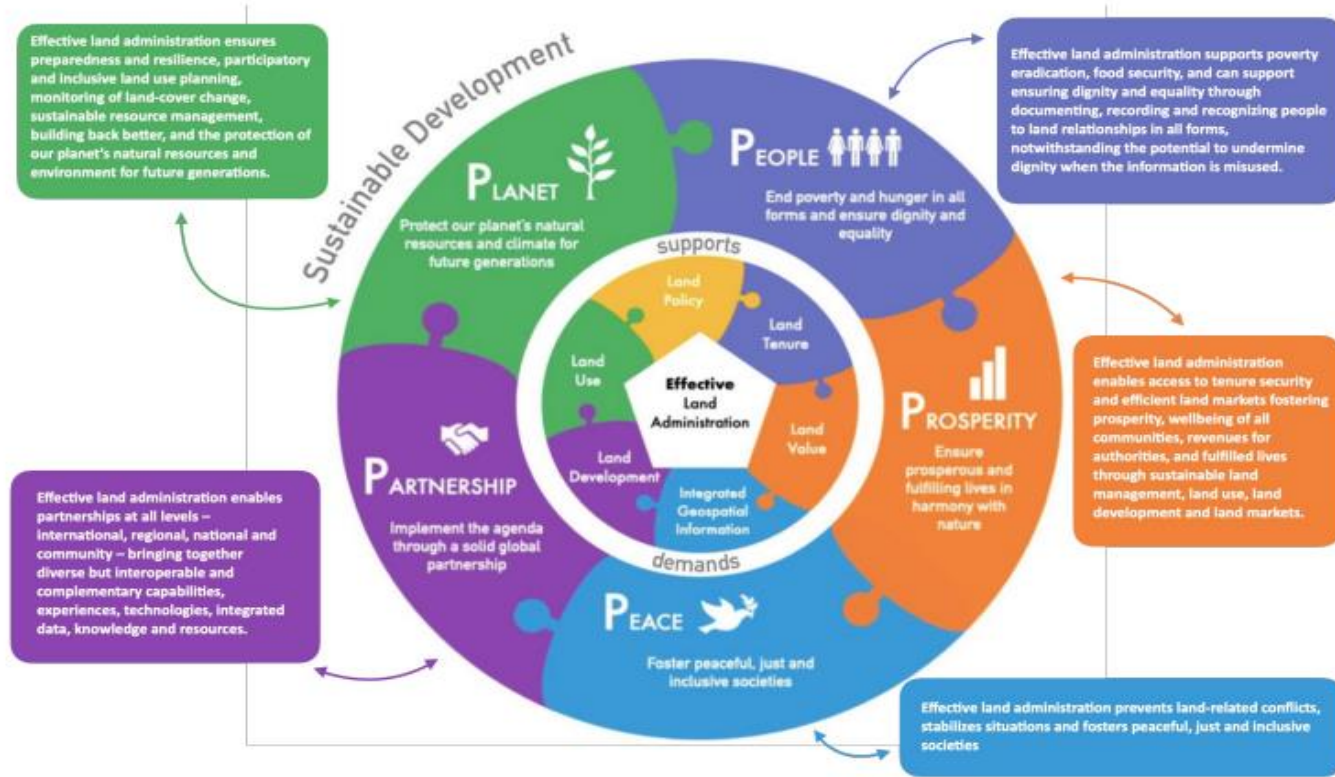
11.7.1 | Average share of the built-up area of cities that is open space for public use for all, by sex, age and persons with disabilities

15.1.1 | Forest area as a proportion of total land area



## The Framework for Effective Land Administration

Sustainable development demands effective land administration



El Desarrollo sostenible demanda una efectiva administración del territorio **ejecutada a través de la información geoespacial**, para las políticas del territorio, la tenencia, la valoración y el desarrollo del territorio

Sustainable development demands effective land administration, realized through integrated geospatial information, for land policies, land tenure, land value, land use, and land development.

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## OBJETIVOS DE DESARROLLO SOSTENIBLE



# How FIG should help?

## Working Group Propo

With FELA now being adopted, there is a great opportunity to disseminate amongst Com7 members and to jointly work on its implementation at a country level.



# Implementing the Framework for Effective Land Administration

Sustainable development demands effective land administration

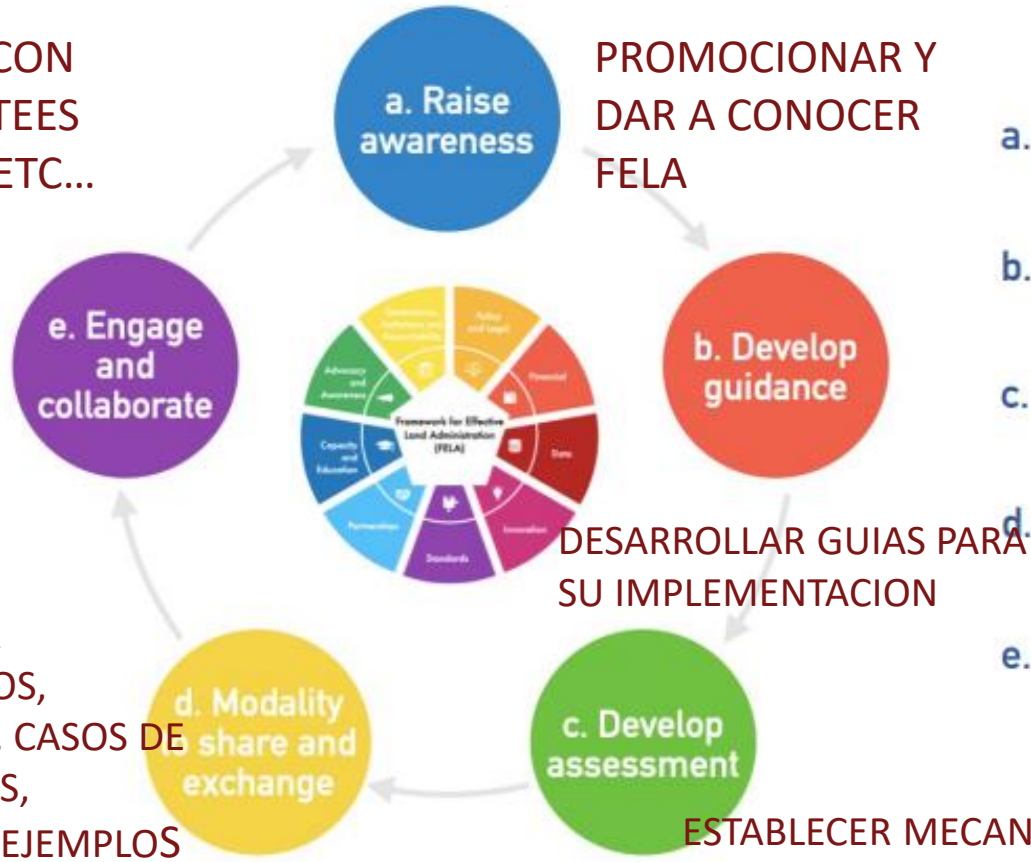


## FIG Members can help in

### Implementing the Framework for Effective Land Administration

COLABORAR CON OTROS COMITEES REGIONALES ETC...

INTERCAMBIAR CONOCIMIENTOS, INFORMACIÓN, CASOS DE USO, PRÁCTICAS, EXPERIENCIAS, EJEMPLOS



- Raise awareness and promote the usefulness of the FELA;
- Develop guidance to implement the FELA utilising the IGIF Implementation Guide;
- Develop an assessment mechanism to support the implementation of the FELA;
- Share and exchange knowledge, information, use cases, practices, experiences and examples; and
- Engage and collaborate with regional committees, in particular, UN-GGIM: Africa

- With other FIG Commissions and Task Forces in regards to FELA
- With OICRF
- With other FELA initiatives such as e.g. EuroSDR
- With the UN-GGIM EG LAM

Within FIG creating a broader ownership - getting others on board and providing those national associations and individuals a platform

CREAR UNA PLATAFORMA E INCORPORAR A MAS INTERESADOS

COLABORAR CON OTROS GRUPOS DE TRABAJO SOBRE FELA COMO EUROSDR, UNGGIMLAM, UNGGIM REGIONAL ETC...

e. Engage and collaborate



b. Develop guidance

Discuss and probably develop guidance on how to integrate the FELA pathways and references in national land policies

GUIA DE COMO INTEGRAR LAS 9 VIAS DE FELA Y LAS POLITICAS NACIONALES

JUNTO CON UNGGIM LAM PUBLICAR DOCUMENTOS CON EJEMPLOS DE IMPLEMENTACION EXPLICANDO LOS BENEFICIOS PARA LOS PAISES Y PARA LOS PROFESIONALES

Joint UN-GGIM EG LAM and FIG Com7 Publication on the Implementation of FELA, documenting examples of implementier FELA and its benefits for countries and surveying professionals in particular

d. Modality to share and exchange

c. Develop assessment

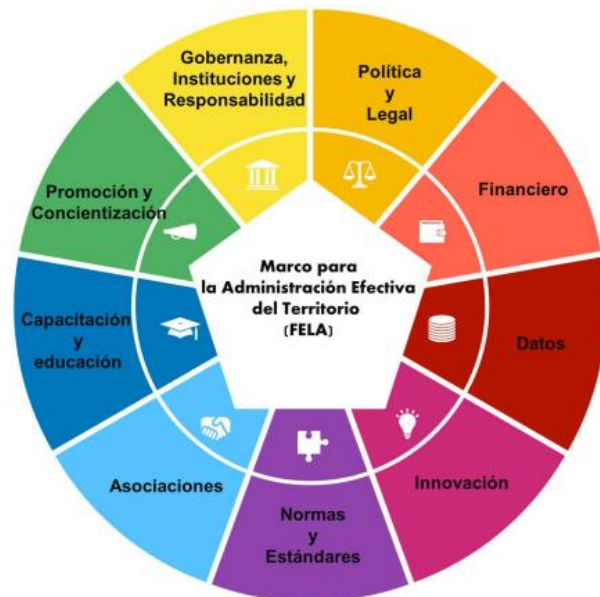
Assist developing countries to finance or encourage donors and investors in land tenure initiatives (FFPLA, PPP, etc.)

AYUDAR A LOS PAISES EN VIAS DE DESARROLLO E IMPLICAR A DONANTES E INVERSORES EN INICIATIVAS COMO FFPLA O PPP

The final objectives of this group is

Ensuring awareness of FELA in National Land Administration institutions as a tool to detect problems and propose solutions with special attention on developing countries.

Making FIG members aware of the application of the principles of the FELA in their professional activity.



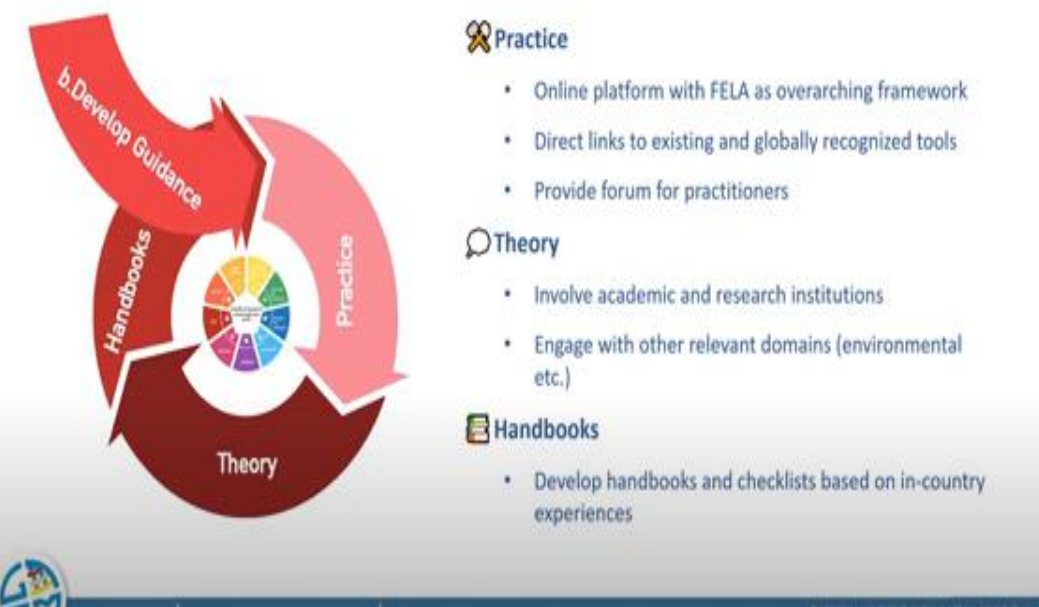
**The FIG works on FELA can be very useful for national cadastres in justifying a strategic plan and in defining its strategic indicators.**

Ofrecer una herramienta a las administraciones para detectar problemas y proponer soluciones  
Implicar a los profesionales.

Puede ser muy útil a las instituciones catastrales para confeccionar sus planes estratégicos



## Implementing the Framework for Effective Land Administration



### Practice

- Online platform with FELA as overarching framework
- Direct links to existing and globally recognized tools
- Provide forum for practitioners

### Theory

- Involve academic and research institutions
- Engage with other relevant domains (environmental etc.)

### Handbooks

- Develop handbooks and checklists based on in-country experiences

## Working Group 7.1 – Framework for Effective Land Administration (FELA)

FIG C7 provides the ideal network to support awareness, implementation and monitoring of FELA. It can also help to improve FELA. WG 7.1 will drive this advocacy of FELA across Member Associations, collect case stories and best practices, and also ensure FIG has its say, staying *relevant*, in the UNGGIM Expert Group on Land Administration and Management and regional UNGGIM events.

### Policy Issues

- Poverty Reduction; Gender Equality; Sustainable Cities and Communities; Reduced Inequalities; Climate Action; Life on Land; Partnerships (i.e., SDGs 1, 5, 10, 11, 13, 15, 17 – including diagnosis and monitoring of)
- FELA Pathways: All

### Chair

- Amalia Velasco, Spain
- Key Players: Eva-Maria Unger, Netherlands; Carmen Ribera, Spain
- Cooperation: UNGGIM Expert Group on Land Administration and Management (Kean Huat Soon and Victor Khoo)

### Specific project(s)


- FELA Advocacy and Awareness
- FELA Case and Lesson Capture

### Publication(s)

- FELA & FIG: Implementation, Practice and Lessons (Report or Guide)

### Timetable

- 2023: Kick-off including state-of-play and recap of previous developments
- 2024: Case and Lesson Capture 1; Advocacy and Awareness 1
- 2025: Case and Lesson Capture 2; Advocacy and Awareness 2
- 2026: Reporting and finalisation

Some people have already shown their interest and we have formed a group: 

We have people from all 5 continents.

From land administration organizations, universities, IT companies etc...



Please, if you are interested contact with me:  
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For this and allaying with other work of FIG commission 7, and based in the skeleton plan for the intended publication (scheduled for 2025-26) our plan is to establish two lines of work

1. FELA country examples': analysing examples of national cases, with a especial focus in how to resolve the main problems encountered by national land administration organizations in implementing FELA principles.
2. and 'new tools for FELA application" as develop a recommendations list for FIG members in application of FELA principles or develop a FIG guide on FELA implementation at national level.

These 2 lines of work are also fully aligned with UNGGIM-LA in the objectives that they have set: leadership and advocacy;

- promote and encourage the implementation of the FELA at the country level;
- integration of terrestrial, maritime, built, and cadastral domains;
- innovation in land administration and management to strengthen resilience and sustainability

but from a very practical point of view that we want to be the main way of acting of our working group

## Digital Transformation of Land Administration: Stages, Status, and Solutions

Rohan BENNETT, Australia, Suren TOVMASYAN, Armenia, Indra HUTABARAT,  
Clava PATRAMA PUTRA GINTING, Aulia LATIF, Indonesia, Eva-Maria UNGER,  
Austria, Vincent VERHEIJ and Haico van der VEGT, The Netherlands

**Key words:** Armenia, Indonesia, UN-GGIM, FELA

Table 1. Digital Transformation opportunities and challenges

Pathway	Opportunities and Challenges
<b>Governance, Institutions and Accountability</b>	Vision for ATR/BPN digital transformation that is holistic Digital transformation <b>champions</b> at multiple levels Alignment of digital strategies with ATR/BPN and with external stakeholders
<b>Law and Policy</b>	Legislative and regulatory <b>harmonisation</b> Assessment of a <b>positive system</b> of land registration Ensuring workable, enforceable, and are adequately <b>resourced</b> law
<b>Finance</b>	<b>Sustainable business model</b> post-2025 Government <b>business enterprise</b> model exploration Audit and assessment of <b>PPP</b> service models <b>Performance metrics</b> redesign around benefits realisation and SDGs
<b>Data</b>	Vision for data governance across ATR/BPN, post-2025 R&D audit and review on cadastral and land registration data <b>Fast-tracking</b> mapping 126M parcels by 2025 (keep going!) Developing and implementing better <b>quality assurance</b> standards Ensuring a robust federated <b>database infrastructure</b> is developed
<b>Innovation</b>	Formalised innovation <b>bench making</b> program across ATR/BPN <b>Incentive schemes</b> at all levels Formalise R&D collaborations across sector <b>Digital divide</b> audit
<b>Standards</b>	Audit <b>governance</b> of standards in ATR/BPN Assess range of <b>technology</b> and data initiatives in terms good practices Development of both internal and industry-wide <b>certification</b> protocols Fostering of a <b>community of practice</b> to support awareness raising
<b>Partnerships</b>	Reviewing partnership and establishment new partnership <b>ecosystem</b> (NGOs) Assess PR 38/2015 with regards to land sector <b>PPPs</b> <b>PaLaR</b> (i.e., FPPLA) review on embeddedness into PTSL <b>Donor-working group</b> creation for optimisation
<b>Capacity and Education</b>	Plan for <b>keeping capacity</b> in ATR/BPN <b>Fast-tracking skill areas</b> for maintaining the data Support professional bodies and encourage <b>self-accreditation</b>
<b>Communications and Awareness</b>	Revisit key <b>stakeholder</b> lists and related communications plans Ensure <b>World Bank project</b> comms are institutionalised Examining the current <b>monitoring and evaluation</b> mechanisms

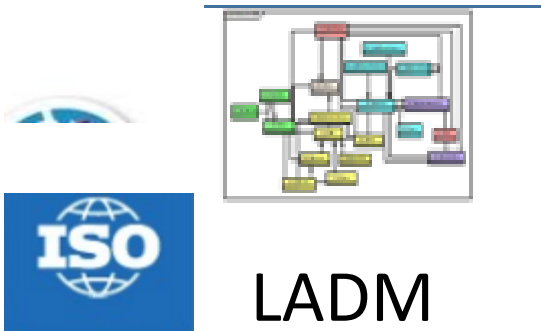
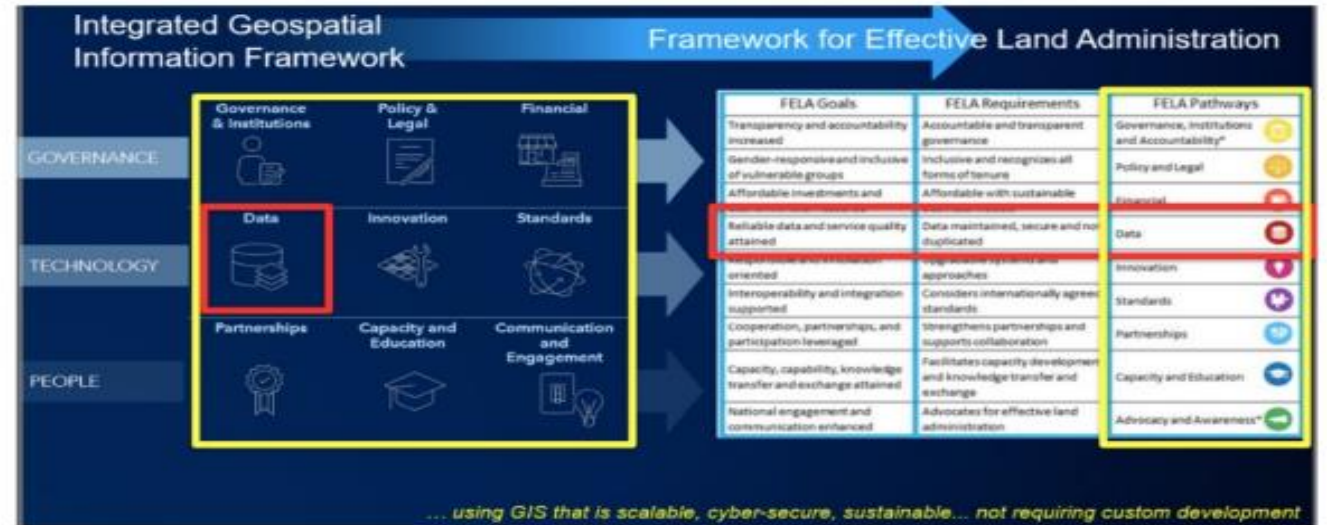
The fact that the private sector, such as software vendors, is considering FELA is important, indicates that businesses and, in the land sector donors, recognise the importance of effective land administration.

We want to include all this tools

**GIS in Land Administration  
Can Help You Implement the FELA  
and Support the SDG's**

BRANDON TOURTELOTTE, USA

Key words: Land Administration, Framework for Effective Land Administration, FELA, Operationalize, Standards



Source: [https://fig.net/resources/proceedings/fig\\_proceedings/fig2022/papers/ts02a/TS02A\\_tourtelotte\\_11559.pdf](https://fig.net/resources/proceedings/fig_proceedings/fig2022/papers/ts02a/TS02A_tourtelotte_11559.pdf)

ONGOING:

## Research on the Framework of Effective Land Administration (FELA) Whith EURO SDR

- Comparative research using FELA across countries and regions allows for the identification of common challenges and successful strategies. Sharing of best practices, enabling countries to learn from each other's experiences.

Now only European Countries but extensible to other regions

## This research

- contributes to the ongoing efforts **to bridge implementation gap** by examining key factors of the framework's adoption
- identify gaps in knowledge and capacity using the FELA, helping international organizations and governments tailor their support to meet specific needs.
- show how private sector actors are engaging with the FELA principles and how they can contribute to the framework's successful implementation.
- Research on FELA adoption further support UN-GGIM to coordinate their efforts more effectively. It allows to target support to countries where it is most needed and to ensure that the frameworks principles are consistently applied and adapted to different contexts.
- Finally, FELA is closely linked to several Sustainable Development Goals, particularly those related to poverty reduction, gender equality, and others. Research on FELA's adoption and impact can contribute to the achievement of the 2030 Agenda.

Estudiar por qué la implementación está costando y cuales son los factores claves.

Conocer los Problemas en capacitación y conocimiento ...ayudando a los países a aplicarlo de una forma mas especifica a cada situación.

Mostrar como el sector privado sigue los principios de FELA y como pueden colaborar en el éxito de la implementación

Colaborar con UNGGIM en la investigación de como se está implementando y dirigir los esfuerzos en donde mas se necesita

Estudiar er como los principios de FELA ayudan a los ODS



# FIG Working Week 2024

19-24 May **Accra, Ghana**

Your World, Our World: Resilient Environment and Sustainable Resource Management for All

General

Location

Programme

Presenters

Sub Events & Tours

Registration

Social

Exhibition

## WELCOME TO FIG WORKING WEEK 2024

Accra, Ghana 19 - 24 May 2024



**AKWAABA! WELCOME TO ACCRA!**

FIG Working Week is no ordinary conference; it is a week-long celebration of innovation and collaboration that unites the global community of surveying and spatial professionals. Here, you will have the unique opportunity to bridge the gap between science and the policymakers and stakeholders who drive real-world change. With the theme

**Your World, Our World: Resilient Environment and Sustainable Resource Management for all**

the conference will focus on how geospatial technologies and innovations as well as connectivity become major tools in ensuring resilient environment and sustainable natural resource management for all.



Thanks for you attention

# Framework for Effective Land Administration

A reference for developing, reforming, renewing, strengthening, modernizing, and monitoring land administration



**UN-GGIM**  
UNITED NATIONS  
COMMITTEE OF EXPERTS ON  
GLOBAL GEOSPATIAL  
INFORMATION MANAGEMENT



**Amalia Velasco**