



AfricaGIS 2025



UN-GGIM: AFRICA
UNITED NATIONS
GLOBAL GEOSPATIAL
INFORMATION MANAGEMENT

AfricaGIS 2025 and UN-GGIM: Africa XI Joint Conference

Harnessing Geospatial Intelligence for Africa's
Sustainable and Resilient Future

17-21 November 2025, Alisa Hotel, Accra, Ghana



International Federation of Surveyors
Fédération Internationale des Géomètres
Internationale Vereinigung der Vermessungsingenieure



UNIVERSITY
OF GHANA



**Dr Diane Dumashie, FRICS
FIG President**

**The Imperative for Increasing Impact:
Professionals in
Spatially Enabled Land Governance**

**AfricaGIS 2025 and
UN-GGIM: Africa XI Joint Conference**

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Akwaaba

Africa is on the critical path for the sustainability of the planet



2030 Road Map... and beyond



2063 - The Africa We Want

2030 Sustainable and holistic development:

- People
- Partnership
- Peace
- Planet
- Prosperity



Transforming Our World

2030 AGENDA



FOR SUSTAINABLE DEVELOPMENT

It is all about People!

- **The 2030 Agenda:** agreed and united global policy to transform the social, economic and environmental dimensions of humanity and our planet

FIG Vision & Agenda 2023- 2026:

- The need for a sustainable profession that
 - delivers sustainable services to clients
 - addresses the 2030 agenda,
 - including acting now to address the Climate agenda

SDG's Sustainability To Resilience Professionals Imperative



SDGs our 'imperative' to act:

- Sustainable impact & measure,
- Resilience, capacity to withstand
- And, adding value requires us to step up...

To ensures we,

- **Connect,**
- **Collaborate and**
- **Creating a meaningful Contribution**

Picture: Jack Dangermond ESRI President ESRI UC, July 2023

Geospatial sector greater contribution is now an imperative....



Sobering report:

- 35% of targets are on track
- Nearly half progress too slowly, and
- 18% targets are regressing.
- In response UN call for ambitious action in six critical areas: Including Digital transformation



- How we add value is explained...

F6 = food systems, energy access, digital transformation, education, jobs and social protection, and climate and biodiversity



Overview

1. Community

2. Connect

3. Collaborate

4. Creating our Contribution



Overview

1. Community FIG: Who What and How

2. Connectivity

3. Collaborate

4. Creating our Contribution

Who and What: International Federation of Surveyors

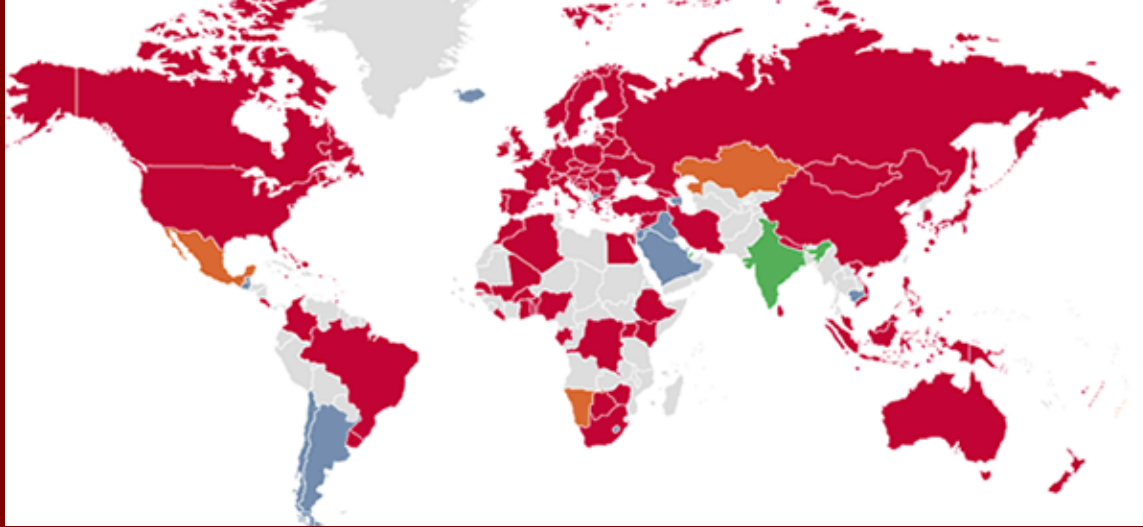


FIG:

- Members organisation (incl Host Ghana/ LiSAG), Academics, Affiliates and Corporate members
- Drawing from over 120 countries
- **Delivering:** knowledge generation, outreach and capacity building i.e.....

How: Depth of experience

- **Professional:** Build capacity
- **Global:** Standards, Best practice
- **Institutional Development:** Regional and International



**Africa
(ARN)**



Strength in Africa

- Capacity Development Network
- Young surveyors
- D&I Task Force: incl Kids Conference
- Senior Leadership

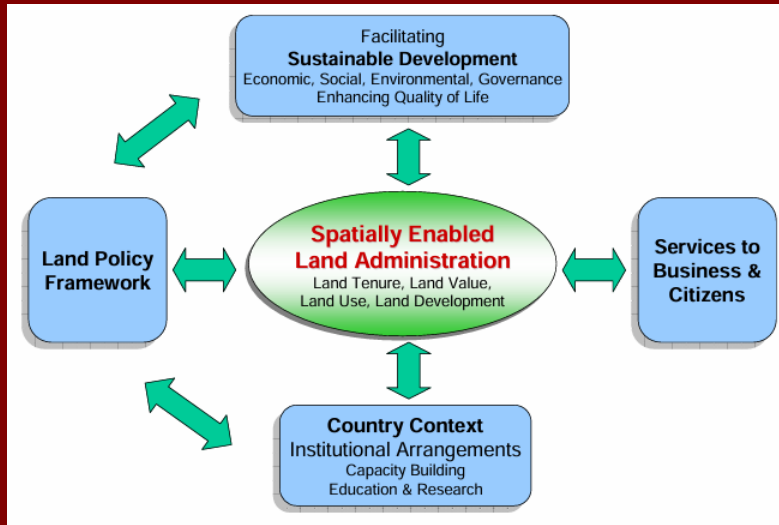
Commissions are our engine

Activity and outputs with Commissions:

1. Professional standards & practice
2. Professional Education
- 3. Spatial information management**
4. Hydrography
5. Positioning and measurement
6. Engineering surveys
7. Land management & cadastre
8. Spatial planning and economic development
9. Valuation and real estate
- 10. Construction economics**



Spatially Enabled Land Management (LM) activities....



.. reflect drivers of globalization and technology.

- LM activities **establish multifunctional information systems**, incorporating our technical diversity and other useful data.

In turn:

- **Sustainable development, demands comprehensive data information** about environmental, social, economic, and governance conditions along with other land related data.

LM: Applied in Geospatial Ecosystem



- Linda Foster, President NSPS, ESRI. FIG Brisbane 2025

Geo is our professional community

G E O S P A T I A L
E O D E S Y A R T H B S E R V A T I O N U R V E Y I N G O S I T I O N I N G U V S I M I N G G S I I D A R

- Linda Foster, President NSPS, ESRI. FIG Brisbane 2025

The Future We want to shape



FIG work plan aims to deliver and Demonstrate our resolve

Vision:

- **Serving Society, benefitting people and the planet**

Theme:

- **Tackling the Global Challenges (Trends and crisis)**

Graphic UN HABITAT



Overview

1. Community FIG

2. Connectivity – Geospatial Transformation

3. Collaborate

4. Creating our Contribution

UN Call for Effort – Critical Digital Transformation



Innovating in the Geospatial Sector to meet today's Sustainability Challenges

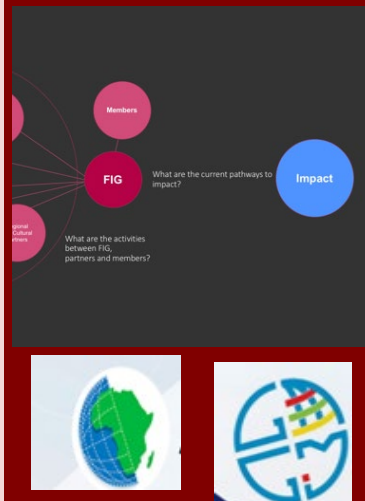


Collaborative AfricaGis 2025 and UNGGIM Africa

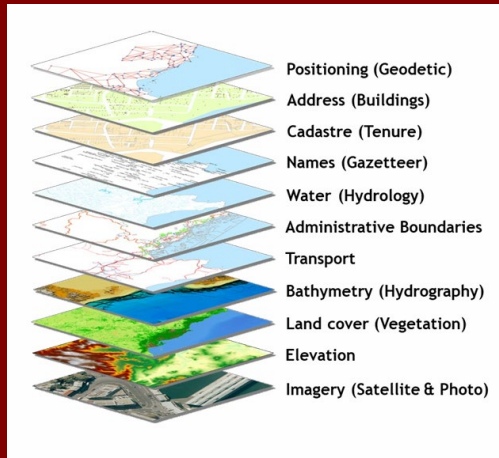
FIG Spotlight:

- Commission spatial Information Mgt
- Geospatial Task Force (TF)
- Informed by TF's SDG and Climate

- WG 3.1: **Geospatial data: professionalism, technology, and services**
- WG 3.2: **Urban challenges in developing countries** (joint WG with Commission 9)
- WG3.3: **GIS for sustainable (geo-)spatial planning** (joint WG with Commission 8)
- WG3.4: **LADM and 3D LA** (joint WG with Commission 7)
- WG3.5: **Geospatial next** (joint with the Young Surveyors Network)



How we Gather & Deal with our Data



We are

- **Building** Geospatial Intelligence into our Cities
- **Innovating** Geospatial Data, Modelling and Analytics
- **Combining** with Disruptive Technologies, AI, Innovation & Smart Digital Transformations
- **Linking** geospatial data with climate, land administration, and disaster risk data.
- But **Added Value**
 - Is the shift from data collection to data integration and analysis
- But,

Addressing Critical Challenges



..... These Digital Technologies and Solutions

- Seeing a Growing Digital Divide
- Around interoperability, data standards, ethics, and the evolving skillsets required.
- Regionalising the SDG measurement and impact (S.K. Annim- Dir African Centre for Statistics)



Addressing these will,

- reinforce the shared areas of the GIS and surveying disciplines, recognising that a resilient profession lies in working together.....



Digital Trending: AGI Foresight report 2025

- **Data Growth:** demand and management.
- **AI Integration :** Especially ethics, security.
- **Infrastructure:** from traditional to modern needs.
- **Earth Systems Revolution:** Innovating to meet the challenges of Earth's systems
- Skills upskilling for evolving needs
- **Collaboration among geospatial stakeholders.**



AGI FORESIGHT CONFERENCE

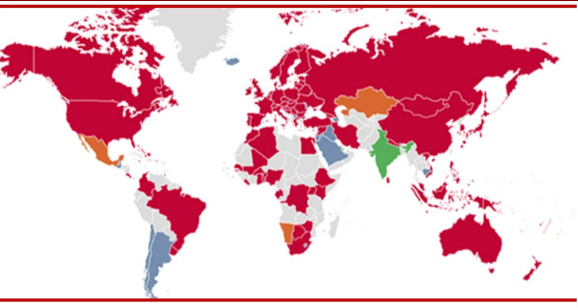




Overview

1. Community FIG
2. Connectivity
3. Collaborate – Geospatial stakeholders
4. Creating our Contribution

Collaboration: Partnerships



Sustainability is about making sure that both internal and external partnerships are working effectively and cultivating stronger engagement



Our relationships;

- Effective (All) member engagement (
- Building and working for mutual benefit with external partners, and
- Providing Institutional capacity development

UN Agencies, and UN GGIM.....

UN GGIM & FIG



UN-GGIM: Geospatial Societies



UNITED NATIONS COMMITTEE OF EXPERTS ON
GLOBAL GEOSPATIAL INFORMATION MANAGEMENT

- **Observer** status & Geospatial Societies (e.g ISPRS, ICA)
- **Subcommittees on Geodesy** (FIG Comm chair, Positioning and Measurement)
- Regional working (**Africa**, Asia Pacific & Americas)
 - **Africa: AfREF and Land Administration**
- Other Working Groups (LAM- Framework for Effective Land management (**FELA**) DM + Hydro
- Assisting **Centres of Excellence** and engagement by Heads at FIG Conference plenary
- And..... Integrated Geospatial Framework (**IGIF**)....

Geospatial sector

Professionals Value –add



Is Information to Intelligence
To Government :

- Capacity building
- Data Integration
- International collaboration
- Geo support SDG monitoring (indicators)
- Awareness and Training

And

- To meet expectations of Society (IoT etc)



Overview

1. Community FIG
2. Connectivity
3. Collaborate
4. Final Words, our Contribution

Spatially Enabled Land Governance ...



Arguably,

“As we look to the future,
it will become increasingly apparent
that the payoffs from
Geo (data/ smart) infrastructure
will be even more dependent on
the intelligence of our decision making
today.....,

Rather than on the application and technologies we deploy”

Imperative our role

Information to Intelligence

Geospatial imperative to contribute to sustainable development

It is all about People!

What does this look like? A Conscious emphasis :

- **Community** - Survey and geospatial Professional working
- **Connectivity** - Data information leading to Data intelligence
- **Collaboration** - **Purpose and reliability**, a visible approach
- Power of Partnership: Stronger together

2030 AGENDA



FOR SUSTAINABLE DEVELOPMENT

17 PARTNERSHIPS
FOR THE GOALS



Harnessing Geospatial Intelligence

Step- up to remain relevant & demonstrate our resolve.



We are trusted to navigate in a changing and challenging world:

- To be agile and brave as we steer our survey and geospatial Profession

- Evidenced by our desire for Africa to be a powerhouse by providing;

inclusive and sustainable development, unity and prosperity that benefits All.

Serving People and Planet 2030 and Beyond

Tackling the Global Challenges



- Faced with the magnitude of change in our World, on our Planet:
- We can do the very best we can over the coming decades

**Our professional added value to society is
in our collective, partnership hands**

Our Journey is far reaching!



Thank You

Look forward to seeing you

FIG Congress Cape Town 24- 29th May
2026

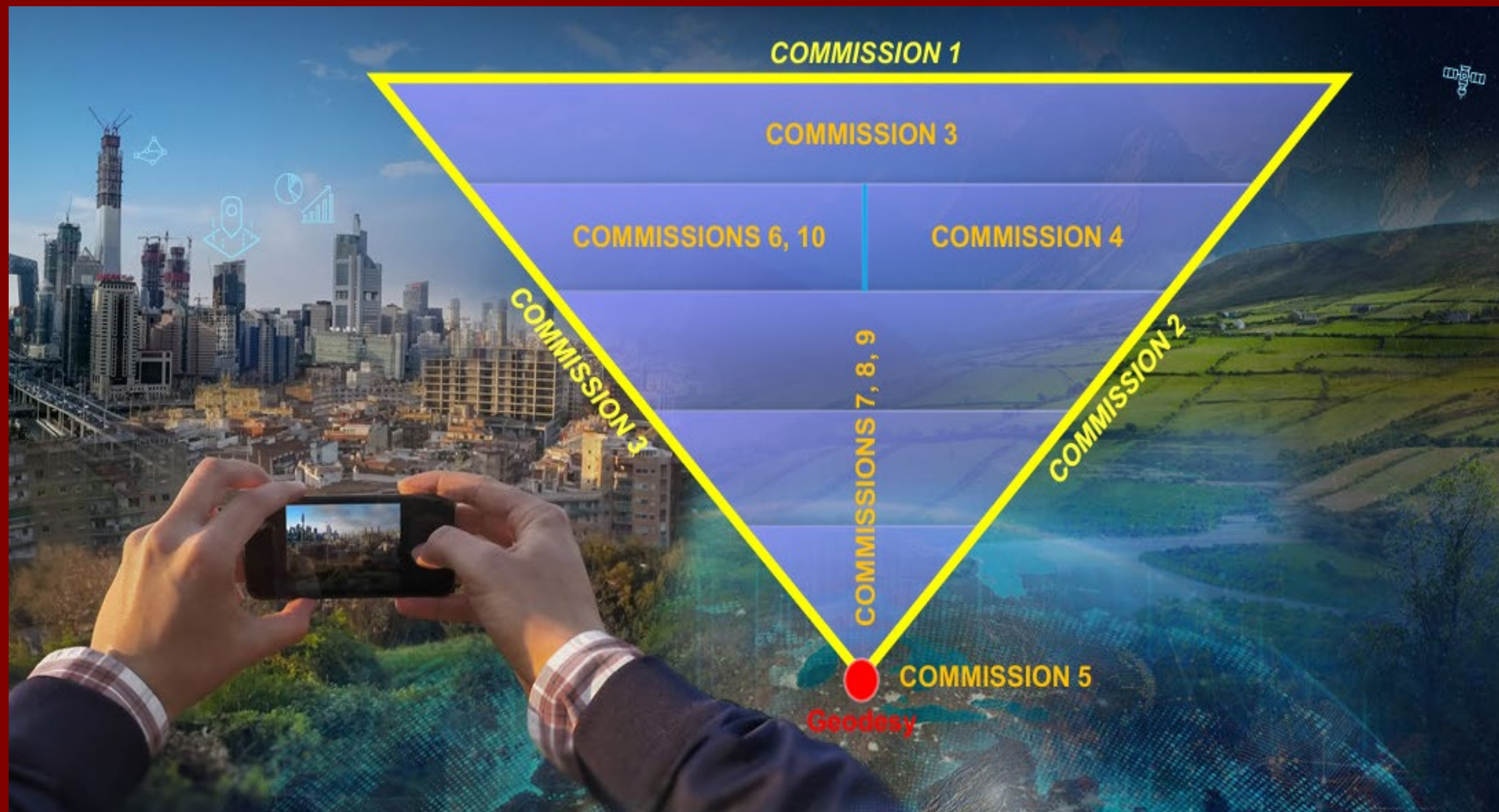
- [WWW.fig.net](http://www.fig.net)
- President
- FIG: Dr D Dumashie
- dddpresident@outlook.com



Appendices

Appendix 1. Geospatial ecosystem applied to FIG commissions

Linda Foster FIG Brisbane 2025



Appendix 2 Trending - AGI 2020- 2025



Significant impact on economy, environment and society

- Open data
- Big Data
- BIM assets, future cities -
- Technologies for consumer services- data collection iot real time data
- Policy and cultural

Transformative agenda- Our Profession: Serving People and Planet

2030 AGENDA



FOR SUSTAINABLE DEVELOPMENT

It is all about People!

- **The 2030 Agenda:** agreed and united global policy to transform the social, economic and environmental dimensions of humanity and our planet
- **Context of considerable global challenges**
 - **Why Partnerships matter**

FIG Working Weeks; Pillars & Partners until 2026.....

Build on Pillars

- 2023 Orlando – Sustainability & Climate
 - Protecting our world Conquering New Frontiers
- **2024 Accra – Planet & Resources**
 - Building resilient environment
- 2025 Brisbane – Geospatial/ People
 - Collaboration, Innovation and Resilience: Championing a Digital Generation

And.....,

- Congress - 2026 Cape Town

