

 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



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## 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

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

FIG President Dr Diane Dumashie, Accra November 2025 

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## Akwaaba

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



FIG President Dr Diane Dumashie, Accra November 2025



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## 2030 Road Map... and beyond

### 2063 - The Africa We Want



Graphic: UN HABITAT

**UN Habitat Agenda 2030: Sustainable and holistic development:**

- People
- Partnership
- Peace
- Planet
- Prosperity

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# Transforming Our World



## 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

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# SDG's Sustainability To Resilience Professionals Imperative



Picture: Jack Dangermond ESRI President ESRI UC, July 2023

## 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**

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# 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...

\*6 = Food systems, energy access, digital transformation, education, jobs and social protection, and climate and biodiversity

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## Overview

1. Community

2. Connect

3. Collaborate

4. Creating our Contribution

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# Overview

## 1. Community FIG: Who What and How

## 2. Connectivity

## 3. Collaborate

## 4. Creating our Contribution

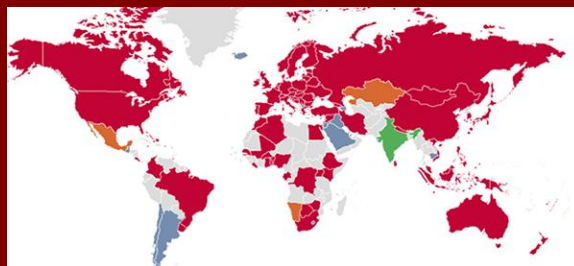
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## Who and What: International Federation of Surveyors



**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.....

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## How: Depth of experience



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



### Strength in Africa

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

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## 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**



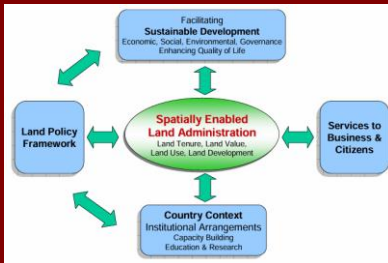
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## Spatially Enabled Land Management (LM) activities....



.. 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.

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## LM: Applied in Geospatial Ecosystem



Linda Foster, President NSPS, ESRI.- Conference Paper delivered at FIG Brisbane 2025 Appendix 1

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# Geo is our professional community



Linda Foster, President NSPS, ESRI.- Conference Paper delivered at FIG Brisbane 2025

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## The Future We want to shape



Graphic UN HABITAT

**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)**

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# Overview

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

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## UN – Critical Call for Effort Digital Transformation



Environment and Planet  
Accelerating Change



Sustainable Development



Sustainable Development GOALS



Global Geodetic Reference Frame



Addresses



Buildings and Settlements



Elevation and Depth



Functional Areas



Geographical Names



Geology and Soils



Land Cover and Use



Land Parcels



Orthoimagery



Physical Infrastructure



Population Distribution



Transport Networks



Water



Technology and Innovation  
Accelerating Change

Image courtesy Linda Foster/ ESRI + Gregg Scott/ SDG Alliance

FIG President Dr Diane Dumashie, Accra November 2025

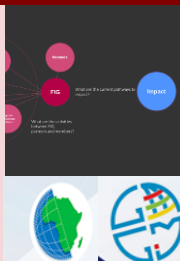


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# Innovating in the Geospatial Sector to meet today's Sustainability Challenges



- 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)



Collaborative Joint  
AfricaGis 2025 & UN  
GGIMAfrica

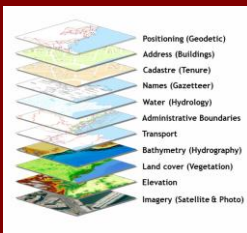
## FIG Spotlight:

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

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# How we Gather & Deal with our Data



Gregg Scott ED SDG Alliance  
PVBLC Foundation. April 2025  
Melbourne

## We are

- **Building** Geospatial Intelligence into our Cities
- **Innovating** Geospatial Data, Modelling and Analytics
- **Combining** with Disruptive & Transformations Technologies, (Innovation Geo Ai & Smart Digital)
- **Linking** geospatial data with e.g climate, land administration, and disaster risk data.
- But our **Added Value is**
  - The shift from data collection to data integration and analysis
- But, .....

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## Addressing Critical Challenges



..... these Digital Technologies and Solutions

- Seeing a Growing Digital Divide
- Challenges: interoperability, data standards (ISO& OGC), ethics, and the evolving skillsets.
- Need to contextually regionalise measurement and impact of SDGs (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.....

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## Digital Trending: AGI\* Foresight report 2025

Top Trends for next 5 years:

- **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



\*The Association for Geographic Information, App 1.

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# Overview

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

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# Collaboration: Partnerships



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





FIG relationships;

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

UN Agencies, and UN GGIM.....

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- **Observer** status & Geospatial Societies (e.g ISPRS, ICA)
- **Subcommittees** on **Geodesy** (FIG Chair, commission for 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 The Professionals 'Value –add'...



Image courtesy Gregg Scott SDG Alliance

...Is Information TO Intelligence

Assist 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

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## Spatially Enabled Land Governance ...



Image courtesy Gregg Scott SDG Alliance

Quote: R Talwar CEO, Fast Futures London  
RICS Sept 2018 Modus

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*

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## 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 with a visible approach
- **Power of Partnership**: Stronger together

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## Harnessing Geospatial Intelligence And, 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;

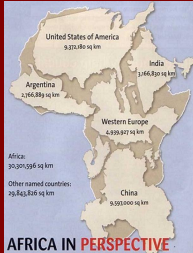
*Inclusive and sustainable development in unity, that benefits the prosperity of All.*

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# 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**

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## Our Journey is far reaching!



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# Thank You

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



Look forward to seeing you  
FIG Congress Cape Town 24/ 29<sup>th</sup> May 2026



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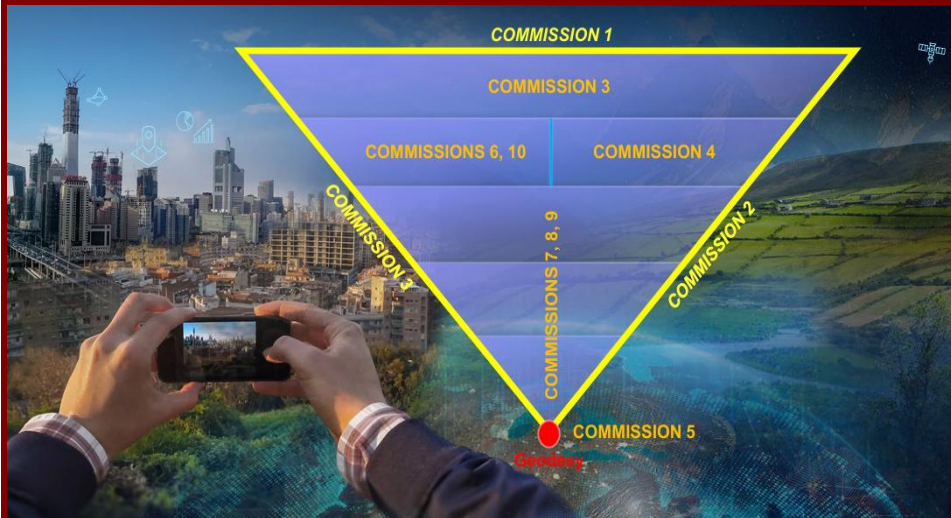
## Appendices 1 & 2

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## Appendix 1. Geospatial ecosystem applied to FIG commissions

Linda Foster FIG Brisbane 2025



Linda Foster, President NSPS, ESRI.- Conference Paper delivered at FIG Brisbane 2025 Appendix 1

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## Appendix 2 Foresight Trending AGI 2020- 2025



2020 – five year Foresight Trends  
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
- The Association for Geographical  
Information – <https://www.agi.org.uk>

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END

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