

# AFRICA.GSGF | THE AFRICAN GEOSPATIAL AND STATISTICAL FRAMEWORK



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UNITED NATIONS ECONOMIC COMMISSION FOR AFRICA  
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UNLOCKING THE HIDDEN POTENTIAL IN THE DATA IN INTEGRATING GEOSPATIAL AND STATISTICAL DATA



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United Nations Secretariat  
Global Geospatial Information Management

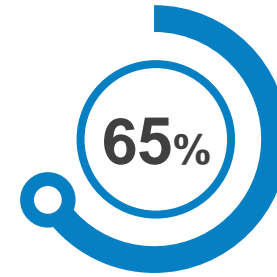
Positioning geospatial information to address global challenges

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# Africa.GSGF | Where we are....

✦ The question is no longer about the ingestion of geospatial technology, but what are some of challenges and commonalities in Africa.

✦ Survey Assessment | Adoption and application of GIS, Remote Sensing and other geospatial solutions, tools and techniques (including standard and interoperability) in the creation, analysis and presentation of statistical data



Satellite Imagery

VHR images to identify housing units.



GIS

Creation of Enumeration Area (EA) maps for a seamless collection of census data.



Aerial Photograph

Seamless mosaic coverage for census cartography .



GPS

Tabulations and spatial aggregations to be referenced to any small geographic population grids



# Africa.GSGF | Where we want to be....

- Geospatial is important
  - Because you cannot count what you cannot locate...
- Geospatial is more than maps and data
  - Can be utilized in virtually all situations and human activities that are spatially distributed
  - Enabling capabilities in representation, analysis, data modeling and decision making
- Geospatial (integration) is about :
  - Mainstreaming the enabling capabilities of geospatial technology into National Statistics Offices activities
  - Value Proposition to the production, management, dissemination of statistics.
  - Impacting the improvements of statistical processes

## Policy and governance

Spatially-enabling NSDS  
GSGF | Linking GIS & Stats



## Partnership

Ensuring linkages and cooperation with various initiatives



## Data & Innovation

Data Themes  
Common standards  
Common specifications



## Capacities | Capabilities

Making geospatial analysis a core competency in any Census Office



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# Africa.GSGF | What we do....



## Dialogue

UN-GGIM: Africa:  
Regional Committee  
Executive Working Group  
Workshops on Integration  
of geospatial and Statistic



Policy & Governance  
Strategy for the integration  
Design of the AGSF  
Endorsement by UN-GGIM:  
Africa and StatCom-Africa



## Operations



GEO.4.Census  
• Technical Assistance  
to develop Geocoding  
schemes | Burundi |  
Cameroon | Gambia



## Knowledge

- A guide on using geospatial data sources to map and monitor urbanization in Africa
- Guidelines on geocoding



- Method for Integration of geospatial data in Small Area Estimation (SAE) in the health sector
- SDG Data Hubs



## Partnership

UN-GGIM Secretariat  
EG-ISGI | WG Disasters  
UNEGN

- Esri | GIS for good



## Capacities

- Assessment of countries preparedness for the 2020 Round of Census in Africa.



Technical assistance to develop a digital census cartographic framework in preparation of the Population and Housing



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# Africa.GSGF | What we will do next...

Geospatial for Good  
Meeting demand and needs : Burundi, Eritrea

Diaster.IV Forum | 28 Oct. – 1 Nov. 2024  
Improving statistical frameworks for  
disaster-related statistics

[1]

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Geocoding: A strategic pathway to  
the Modernization of Geospatial  
Information in Africa

Geographic names | Dec. 2024  
Training to foster toponymic capacity in Africa

UN-GGIM: Africa | 10<sup>th</sup> Meeting  
Reinstate the EWGs on GSGF & LMIS



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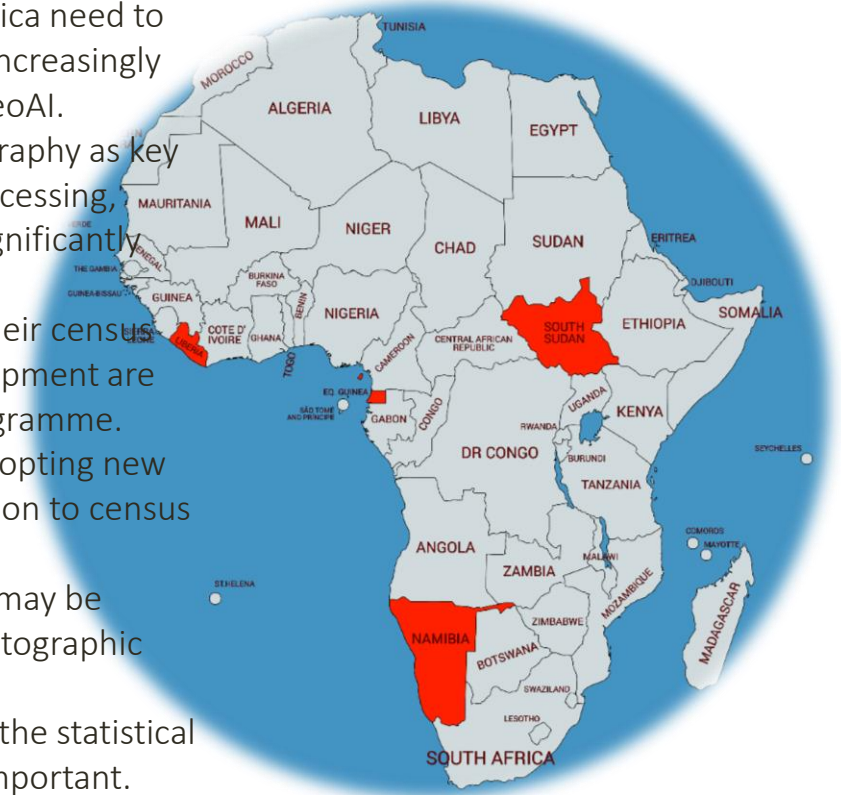
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# Africa.GSGF | Conclusion : Global Need for Spatially-Enabled Censuses

- ✦ Invariably, GIS have modified the way in which data from national statistics offices are collected and stored and are produced.
- ✦ In Africa more and more countries are integrating GIS into their census mapping processes and household listings in some regard.
- ✦ Many countries have developed a solid geo-referenced (GPS) database of dwelling locations, clearly delineated enumeration area boundaries and a complimentary set of high-resolution satellite imagery.

- innovation is key to Development Information | Africa need to adopt innovative approaches to census taking and increasingly using emerging technologies, including GIS, GPS, GeoAI.
- The SDGS are both statistical and geospatial | Geography as key to statistics, providing a structure for collecting, processing, storing, aggregating and disseminating data, and significantly improving the quality of official statistics.
- Many countries in the region are building or built their census geographic databases, recognizing that their development are fundamental for a full digital census geography programme.
- The desk review has shown countries' interest in adopting new data frontier (e.g. earth observation) and digitalization to census taking.
- NSOs are often not custodians of base maps which may be difficult to acquire, but much needed for census cartographic operations.
- Coordination and institutional integration between the statistical and geospatial agencies within a country is vitally important.
- Standardization and data interoperability are arguably one of today's central development challenges, since any progress in geospatial information management and sharing of authoritative geospatial data will depend on them.



# Africa.GSGF | Getting There...



## Engage

### Principle of integration.

- Promote synergistic approaches over the current isolated and piece-meal initiatives, projects and programmes.
- Advocacy and strengthening capacity, for Spatially-Enabled NSDS



## Collaborate

### Principle of Subsidiarity.

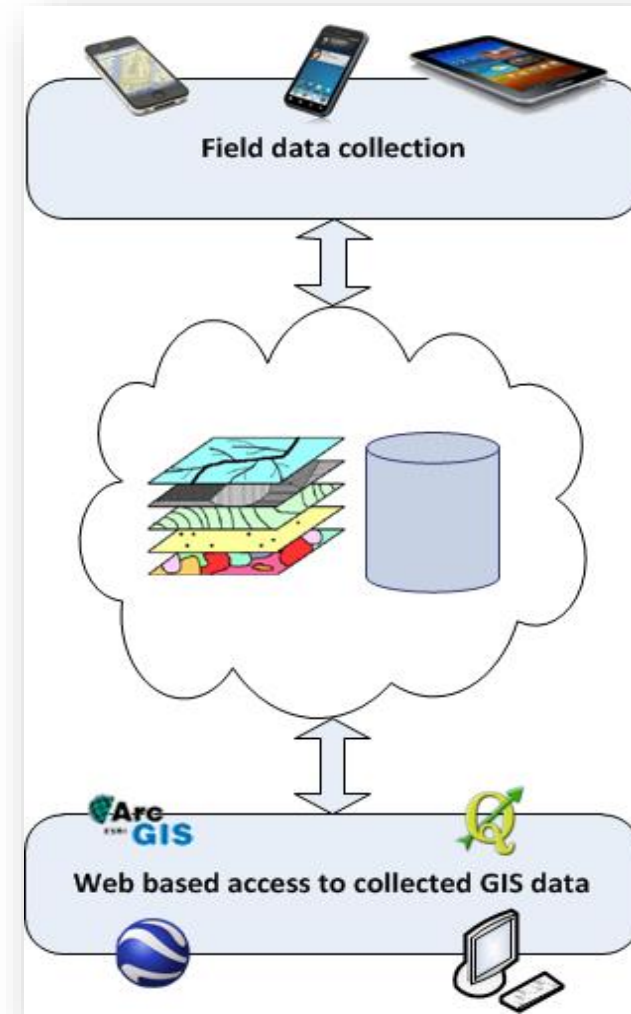
- If we know what we need to achieve, then the duty of the higher order is to provide assistance to the lower order when appropriate.
- Developing joints projects on common standards and best practices and resources mobilization.



## Sustain

### Principle of internalization and ownership.

- Responsibility and accountability for national-global compatibility (e.g. regulatory frameworks, national action plans)
- More support to member States. With more geospatial knowledge infrastructures



# KNOW MORE...

## The African Action Plan

### English |

[www.uneca.org/sites/default/files/PublicationFiles/un-ggim\\_-\\_geospatial\\_information\\_for\\_sustainable\\_development\\_in\\_africa-20171115.pdf](http://www.uneca.org/sites/default/files/PublicationFiles/un-ggim_-_geospatial_information_for_sustainable_development_in_africa-20171115.pdf)

### French |

[www.uneca.org/sites/default/files/PublicationFiles/geospatial\\_information\\_for\\_sustainable\\_development\\_in\\_africa\\_fre-20171115.pdf](http://www.uneca.org/sites/default/files/PublicationFiles/geospatial_information_for_sustainable_development_in_africa_fre-20171115.pdf)

 United Nations  
Economic Commission for Africa

## Geospatial information for sustainable development in Africa

*African Action Plan on Global Geospatial Information Management*

**2016-2030**

