

# Expert Consultation and Meeting on Enhancing Geospatial Information Management Arrangements and Accelerating the Implementation of the Sustainable Development Goals together with the Sub-regional Workshop on United Nations Integrated Geospatial Information Framework for the Southern Africa

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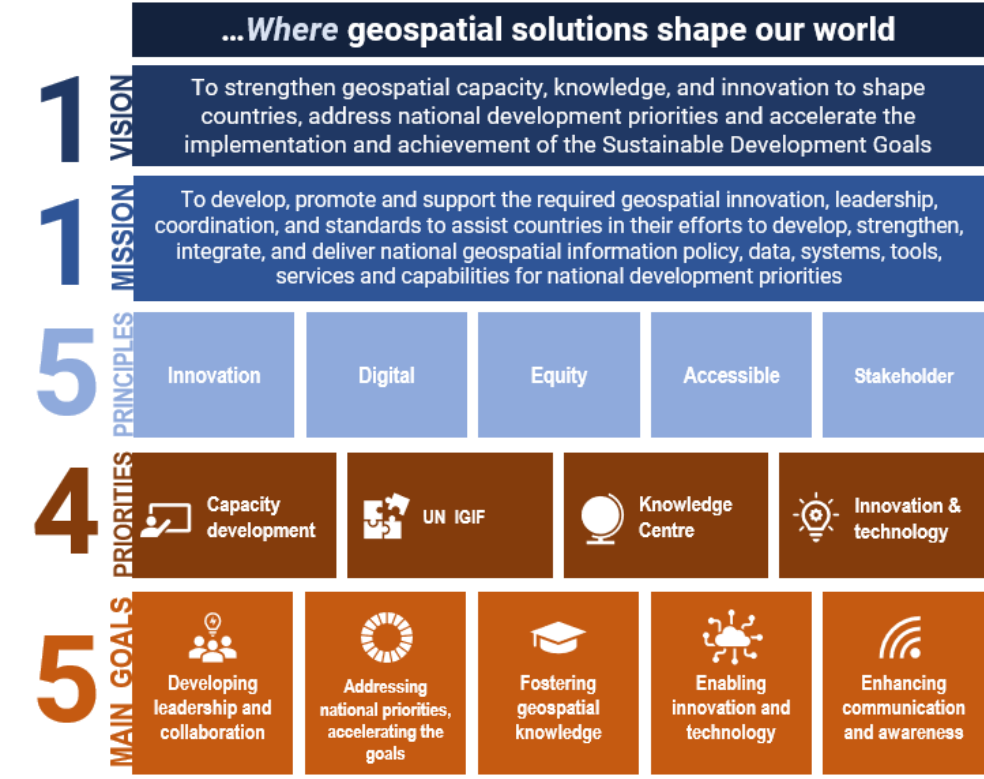


**UNITED NATIONS GLOBAL GEOSPATIAL KNOWLEDGE AND INNOVATION CENTRE (UN-GGKIC), DEQING,  
CHINA**

*(established by an agreement between the United Nations and the Government of the People's Republic of China on 20 May 2022)*

The **Overarching Goal** of the UN-GGKIC is to **work towards the ambitions of implementation of the United Nations Integrated Geospatial Information Framework** set by Member States, to develop capacity, promote and support the required innovation, leadership, coordination and standards to develop, strengthen, integrate and deliver national geospatial information policy, data, systems, tools, services and capabilities into their national government development policies, strategies and arrangements.

*This* expert consultation and meeting is part of efforts to continually **inform the work programme** and activities of the UN-GGKIC, particularly, the implementation of the UN-IGIF by Member States



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Mr. Chinguane Marcos Mabote, Secretary of State for Transport, Ministry of Transport and Logistics, Government of Mozambique



“**[Geospatial information]** plays crucial role in **understanding and addressing recent impact of cyclones** faced by Mozambique. The ability to collect, analyse and apply geospatial data is crucial to save lives, protect critical infrastructure and improve the resilience of communities. It is essential that solutions generated through geospatial data are developed in an **inclusive manner**, ensuring that local communities and governments at provincial, district and municipal levels have **access to tools** that can directly benefit their population.”



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# Objectives

- To advance the *adoption and implementation* of the United Nations Integrated Geospatial Information Framework (UN-IGIF).
- To accelerate national action plans for geospatial development.

## High-level Leadership Dialogue (March 24–25, 2025)

- to **assess** progress, challenges, and opportunities in geospatial information management.

## Interactive Workshop (March 26–28, 2025)

- Foster knowledge exchange, collaboration, and capacity-building for geospatial information management.
- Bridge **digital divides** and supporting the development of country-level action plans for advancing the Sustainable Development Goals (SDGs).
- Strengthen geospatial strategies, promote regional cooperation, and **address the specific needs** of Southern Africa, with special attention to SIDS and LLDCs.
- Explore **cross-country collaboration**, best practices, and the unique geographic and institutional constraints affecting national geospatial frameworks.



# Participation



- **Representatives from 9 regional countries**
  - Burundi, Cameroon, Comoros, Eswatini, Lesotho, Malawi, Mozambique, South Africa, Zimbabwe
- local partners and UN agencies (FAO, IOM, UNICEF, WFP)
- **Noticeable Guests and Speakers**
  - Mr. Chinguane Marcos Mabote, Secretary of State for Transport, Ministry of Transport and Logistics
  - Dr. Pende Li, Director, United Nations-Global Geospatial Knowledge and Innovation Centre
  - Ms. Catherine Sozi, United Nations Resident Coordinator
  - Mr. Fernand Isseri, Co-Chair, High Level Group, UN-IGIF
  - Mr. Clinton Heimann, Chair, UN-GGIM Africa
  - Dr. Greg Scott, Executive Director, SDG Data Alliance
- **Others:** UN Economic Commission for Africa, Ministry of Natural Resources -P.R.China, ESRI, Health GeoLab



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# Challenges Identified

1. Lack of (or insufficient) **governance** - legal/policy frameworks for interagency collaboration
2. Lack of qualified GIS professionals, enhancing **geospatial skillset** (#1 for BDI)
3. Lack of data **standard and infrastructure**
4. Sustaining **financial** investment either from national or private sectors in geospatial programs
5. Unconvinced **buy-in** from highest-level decision makers (cabinet)
6. Limited global and regional **coordination** and participation for policy alignment
7. Sustaining **institutional memory** – free from political changes in the country (related to #1)





# Solutions



1. **Governance:** Improve **policy integration and visibility** by embedding geospatial strategies within existing frameworks like SDG 2030 and AU 2063 (*ECA recommendation*).
2. **Human Resources:** Build professional capacity, establish knowledge-sharing networks, and promote Geo-champions (Burundi).
3. **Data & Technology:** Leverage **AI, cloud computing, and emerging tech** for advanced applications like UAVs and 3D mapping (*UN-GGKIC recommendation*).
4. **Funding:** Secure **sustainable financial resources** for geospatial programs, demonstrating economic benefits through pilot studies (*UN GGIM AFR recommendation*). **BDI cabinet budget line item**.
5. **Communication:** Strengthen stakeholder engagement and awareness through clear and compelling narratives (*SDG Data Alliance recommendation*). **Political buy-in**
6. **Partnerships:** Enhance collaboration among governments, academia, and private sector through regional coordination efforts (*UN-GGIM Secretariat recommendation*). **Regional engagement**



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## Top 10 National Priorities – SDG's

### DOMÍNIO ECONÓMICO



### DOMÍNIO SOCIAL





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Priority	Geospatial Data Needed	Data source
Agriculture	Land use and land cover maps, Soil type and fertility maps, Crop distribution, Climate and weather data	CENACARTA, IIAM, INAM
Education	School locations, Student population distribution, Socioeconomic data, School infrastructure, Literacy rates	INE, MINEC
Industry	Industrial zones, Workforce distribution, Supply chain logistics, Transport infrastructure	ME, MinTrab, MinTransLog (MTL)
Health	Hospital and clinic locations, Disease outbreak monitoring, Clean water and sanitation access, Healthcare professional distribution, Health service coverage	MISAU/INS
Tourism	Cultural and heritage site mapping, Transport and accommodation facilities, Visitor movement analysis, Land use planning, Climate and environmental data, Security and risk mapping	MiTur
Water	Watershed and hydrology maps, Groundwater and surface water availability, Water quality monitoring, Flood and drought risk maps, Irrigation and sanitation infrastructure	MOPHRH
Natural Resources and Energy	Renewable energy potential maps, Fossil fuel and mineral resource locations, Protected areas, Biodiversity assessments, Deforestation monitoring, Energy infrastructure	MIREME
Infrastructures	Road, rail, and port mapping, Smart city data, Power grid and telecom networks, Public facilities, Utility networks, Climate resilience planning	ANE, CFM, INCM, Ports, EDM, FUNAE
Transport and Logistics	Public transport networks, Freight and supply chain mapping, Road quality and maintenance, Transport hubs, Route optimization	ANE, Municipalities, MTL
Social Protection	Poverty and vulnerability mapping, Household income data, Housing assessment, Social service access, Disaster response planning, Migration data	ME

# Recommended Actions



- Conduct **self-assessments** to evaluate national geospatial readiness and identify strategic gaps (*UN-GGIM Secretariat*).
- **Share and compare Country Action Plans (CAPs)** to foster regional alignment and knowledge exchange (*UN-GGKIC and regional committees support*).
- Prioritize **resource allocation** by securing funding and exploring sustainable frameworks like SDIs (*UN-GGIM Africa*).
- Run **pilot studies** to showcase geospatial solutions in disaster preparedness and economic growth (*Mozambique and Comoros examples*).
- Maintain **flexibility** in geospatial strategies to adapt to evolving policy landscapes and technological advancements (Dr. Peng De Li, *UN-GGKIC*).



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# Observations and Recommendations

## Mr. Fernand ISSERI (Co-chair, UN-GGIM HLG)

### Observation

1. Quality presentation materials.
2. Strong **interest** from member countries and the Mozambican authorities in the IGIF process.
3. Rich **interactions** between participating countries.
4. **Sufficient time** allocated for discussions.
5. **Breakout sessions** fostering collaborative work.
6. Appropriate length of the meeting (five days)
7. **Poor preparation** of participating countries, did not refer UN-IGIF and CAP guidelines.
8. Insufficient/lack of **guiding materials** prior to workshop.
9. Most questions raised were **already answered** in the reference documents

### Recommendations for Future Workshops

#### 1. Appointment of Expert Facilitator:

- manage all available documentation, provide summaries, and lead the workshop from start to finish
- Share key documents with all member countries well in advance

#### 2. Provide specific guidance on:

- **Status report** on national geospatial systems
- **National priorities** for geospatial information management.
- **Key steps** for developing the CAP, which must be well understood before the workshop.
- **Concrete proposals** for implementing the IGIF framework.

#### 3. Focus on CAP Development

- workshop should focus on **developing CAP**
- To ensure participating country leaves with a **structured and implementable plan**.





# THANK YOU I HANK YOU



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