

Map Africa — A Continental Approach to Strengthening Africa’s Geospatial Foundations for Land Administration, Infrastructure, and Sustainable Development

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SUMMARY

Africa’s rapid urbanization, expanding infrastructure needs, and growing focus on land governance have increased the demand for accurate, authoritative, and accessible geospatial data. Yet many African countries continue to face significant gaps in foundational base map coverage, hindering effective land administration, cadastral modernization, infrastructure planning, climate resilience, and investment readiness. The Map Africa Initiative addresses this challenge through a coordinated continental program that produces high-resolution, multi-layer base maps for all African countries using Earth observation, GeoAI, and a structured collaboration framework with National Mapping Agencies (NMAs).

The initiative’s design aligns directly with FIG priorities: strengthening national geospatial infrastructures, enabling modern land management systems, supporting cadastral reform, and building long-term institutional and professional capacity. Map Africa combines a continental production pipeline—responsible for approximately 75 percent of baseline data generation—with a country-level refinement and custodianship model led by NMAs, ensuring data sovereignty, local accuracy, and sustainable update cycles. The approach also supports the establishment of a continent-wide NSDI, enhanced by thematic layers that address food security, hydrology, disaster risk, climate adaptation, biodiversity, and carbon monitoring.

For Africa’s land and surveying community, the program creates an unprecedented foundation for digitizing land records, improving tenure security, strengthening valuation and property taxation systems, and unlocking revenue streams essential for national development. It also provides the spatial backbone required for infrastructure corridors, utilities management, regional integration, and evidence-based planning. These developments are coupled with large-scale capacity building, regional data hubs, and technology transfer mechanisms that collectively empower African

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professionals and institutions to maintain, govern, and expand their national geospatial ecosystems.

This presentation will highlight how Map Africa's technical architecture, governance model, and partnership framework create a scalable and sustainable pathway for modernizing Africa's geospatial capabilities. It will also examine the initiative's relevance to FIG's mission, demonstrating how robust base maps and strengthened NMAs serve as catalysts for improved land governance, professional advancement, and socioeconomic development across the continent.

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