

United Nations

E/ECA/GGIM/22/1



Economic and Social Council

Distr.: General
20 June 2022

Original: English

**Economic Commission for Africa
Committee of Experts on Global
Geospatial Information Management
Eleventh session**

New York, 1-5 August 2022

Item 5 of the provisional agenda*

**Contribution of regional committees and thematic
groups to the global geospatial information agenda**

United Nations Global Geospatial Information Management

Report on regional activities in Africa

I. Introduction

1. The Regional Committee of the United Nations Global Geospatial Information Management for Africa (UN-GGIM: Africa) was created following the establishment of the United Nations Committee of Experts on Global Geospatial Information Management, which was designed to create a formal geospatial information coordination mechanism involving member States as the key stakeholders.
2. Such initiatives have recognized the significance of geospatial information in virtually every aspect of human life (e.g. government, commerce, academia and societal development). Geospatial information is a means to track, monitor and analyse any occurrence that has a location or temporal element. More importantly, it is designed to look forward by creating models and analysing the potential consequences of policy and events.
3. The implementation of the work programme of the Regional Committee has to a great extent focused on promoting and facilitating the realization of the major aspects of the issues recommended during the tenth session of the Committee of Experts:
 - (a) Issues in advancing policy, institutional arrangements and legal frameworks.
 - (b) Technical issues in developing information and knowledge resources, applications and services that improve the availability and use of spatially-enabled information for development at the national, regional and subregional levels.
 - (c) Capacity-building issues in contributing to collective knowledge as a community with shared interests and concerns.
 - (d) International cooperation and partnership issues in collaborating and coordinating its activities with United Nations system entities, international and regional networks and programmes, and other development partners, as an important vehicle for mobilizing financial resources and technical know-how in support of African geospatial information development.
4. The Economic Commission for Africa (ECA), as the secretariat of the Regional Committee, is pleased to submit the present report on the activities carried out by the Regional Committee since the eleventh session of the Committee of Experts on Global Geospatial Information Management. The report includes actions taken in follow-up to resolutions adopted at the eleventh session, as well as other activities considered to be of interest to member States and partners.

II. Objectives

5. The main objective of the Regional Committee is to coordinate African geospatial development through consolidating previous efforts, building upon the achievements of existing initiatives, and striving to establish synergies and linkages with other networks and initiatives at the regional and global levels. This will be mainly achieved through:
 - (a) Promoting and supporting technical activities in the development of standards, interoperability and streamlined electronic services delivery in such a way that they anticipate the future potential use of geospatial information resources on the continent;
 - (b) Strengthening and aligning the specific needs and interests of Africa with international mechanisms;
 - (c) Encouraging and facilitating the integration of statistics with geospatial information efforts to attain viable and meaningful outcomes,

analysis and visualization of data in supporting and tracking progress towards the Sustainable Development Goals.

6. The work of the Regional Committee is built around the following key pillars:

(a) African regional spatial data infrastructure, which serves as a framework for policies and structures to facilitate the availability of and access to spatial data through data-sharing among data producers and users;

(b) The African Geodetic Reference Frame project, to develop a regional geodetic reference frame, aligned with the Global Geodetic Reference Frame to enable direct and seamless applications of all geospatial information on the continent;

(c) The Second Administrative Level Boundaries project, to build authoritative and accurate second administrative-level boundary databases with validated data sets from member States that will be used in a plethora of applications, including census data analysis and disaster management;

(d) The GeoNyms project, to create an African gazetteer populated with member State data and input through the United Nations Group of Experts on Geographical Names;

(e) Fundamental geospatial data sets, to develop a well-structured and comprehensive data foundation that will be consistent, comparable and compatible at the local, national, regional and global levels;

(f) The integration of geospatial information and statistics, to mainstream the application of geospatial information in the various sectors and subnational constituents of statistics;

(g) The 2030 Agenda for Sustainable Development, to develop common tools and data for applications of geospatial technologies that are used to monitor and track progress towards the Sustainable Development Goals.

III. Integrated Geospatial Information Framework

7. In its decision 10/103, the Committee of Experts acknowledged the Implementation Guide of the Integrated Geospatial Information Framework (IGIF) as a means of strengthening national geospatial information management arrangements. The guidelines require that each country develop a Country-Level Action Plan (CAP) which *is the process of establishing and developing an IGIF for a nation, beginning with specific plans that align with a nation's priorities and circumstances.*

8. Africa Region is actively involved in the moulting of the IGIF Country-Level Action Plan (IGIF-CAP) into the SDG Data Alliance Project. This Project is geared towards providing the geospatial data required to support the SDGs, with a SDG Data Hub established in each participating country while developing the IGIF-CAP for the country. The understanding is that the geospatial data required will only be sustained if the IGIF-CAP is developed and the country can provide the required geospatial datasets. The Project is currently working with 18 developing countries including ten African nations: Burkina Faso, Cameroon, Eswatini, Ethiopia, Morocco, Mozambique, Rwanda, Senegal, South Africa and Tunisia.

9. During the reporting period, technical and financial support was provided to Burkina Faso and Ethiopia to organize national stakeholder engagement to prepare and validate their national action plan on IGIF.

IV. Integration of geospatial and statistical information

10. The Region has administered a survey to capture national and regional case studies of how the GSGF has been adopted and implemented at the national and

regional level. The document consolidates responses and highlights prevailing good practices arising from the implementation of the GSGF, particularly on how it relates to the response of both the statistical and geospatial communities to COVID-19, global development agendas and national priorities.

V. Policy and legal frameworks

11. Finalization of the guidelines on national spatial data infrastructure (NSDI) implementation in Africa: the NSDI guidelines intended to provide a framework for the step-by-step implementation of national spatial data infrastructure based on the current and specific condition of African countries. The document was published with the financial support of the 2030 Agenda for Sustainable Development Sub-Fund of the United Nations Trust Fund for Peace and Development (UN-PDF)
12. **Development of the Africa Geospatial Development Index (AGDI) | UN-GGIM:** Africa has started a nascent work to develop a conceptual index of multi-composite indicators that will measure African countries progress in managing their geospatial information policies and resources. A key deliverable of the Africa Geospatial Development Index manual is to provide a guide that Member States can reference when measuring, modernizing and strengthening their geospatial information management arrangements nationally, including its systems and infrastructures, tailored to their own national circumstances. The approach to be used is based on the Composite Indicators and Scoreboards (COIN) developed by Joint Research Centre (JRC) to calculate the indicators. The approach provides information on the framework of AGDI, on its methodology and on the variables used for their calculation.
13. **Development of a financial appropriation framework** and assessing the economic benefit of geospatial information management in Africa. The economic benefits will be represented as tangible and relatable factors for investors **and** government budget authorities in order to increase their buy-in and interest in geospatial information.

VI. Knowledge Generation | Outreach | Capacity

14. **Fundamental Geospatial Datasets |** Support was continued in updating and validating national Second administrative level boundaries (SALB) databases from the following countries: Benin, Burkina Faso, Burundi, Eswatini, Mozambique, Niger, Togo. SALB is a key instrument for linking geography and statistics among other advantages. Additionally, UN-GGIM: Africa in collaboration with the SALB Programme has organized a regional Workshop on Geospatial Value and Integration. The purpose of the workshop was to increase member States' usage of geospatial information technology and services in order to address more effectively developmental issues by adding value to geospatial processes and data while also emphasizing the critical role of geospatial data integration. The workshop was held from 22-23 November 2021, in Abidjan, Côte d'Ivoire.
15. **Availability of Geospatial Datasets:** Production of a progress report on the availability of geospatial datasets for the SDGs. The report assesses the efforts made at national, regional and global level to make available fundamental geospatial datasets that are relevant for reporting and monitoring the sustainable development goals.
16. **Geospatial Services and Products |** Development of an online application for further use by member States to produce and disseminate comparable spatial data. The platform can be accessed here: <https://ecageoinfo.maps.arcgis.com/apps/MapSeries/index.html?appid=0378b9179c164726897f448cd3e431ae>

17. **Response to COVID-19:** Mapping of community mobility patterns in Africa | A study research was initiated to develop an innovative approach to reveal the geospatial insights into changes in population movements as a response to COVID-19 policies. The method assesses the mobility of communities amidst the restrictive measures being implemented by governments. Geospatial tools were used to create a space-time cube allowing for the visualizing and analyzes of the spatiotemporal data, in the form of time-series analysis, integrated spatial and temporal pattern analysis of population movements.
18. **Capacity Building** | Organization of online e-Learning courses on geospatial governance and policy development. The course has been designed to help develop governance and policy arrangements for geospatial enablement. Delivered as both e-Learning and supporting webinar, it gave insight on what institutional infrastructure is needed to drive successful use of geospatial information and systems. The Webinar provided participants with tools and means for the Socio-economic Impact Assessment (SEIA) that justify the investment in geospatial projects.

VII. Partnership | Regional and international collaboration

19. During the reporting period, the Regional Committee provided advisory services in the context of the Global Monitoring for Environment and Security and Africa initiative,¹ and to the African Space Agency and the African chapter of the Group on Earth Observations.
20. The Africa region also took part in the following events and activities:
- (a) Participation and contribution to the eleventh session of the Committee of Experts and its side events, held online on 23, 24 and 27 August 2021. During the session, Morocco was elected on behalf of the Africa region as the rapporteur for the UN Committee of Experts;
 - (b) Participation in and contribution to the work and meetings of the various Expert and Working Groups (EG-ISGI, WG Disaster-related Statistics).
 - (c) Participation and contribution to the HLG-IGIF group in-person meeting in April 2022. UN-GGIM: Africa was represented by Morocco, Ethiopia and South Africa which ensured to distribute themselves among the three Working Groups of the Priority Goals.
 - (d) Participation and contribution to the meeting of the expanded Bureau of the Committee of Experts.

VIII. Seventh meeting of the Regional Committee

21. To pursue a robust advocacy campaign directed at African policymakers and to bolster the effort to transform geospatial information into a true enabler of sustainable development, the Executive Board has organised the Seventh Meeting of the Regional Committee of UN-GGIM: Africa concurrently with the AfricaGIS 2021 Conference.
22. The Seventh meeting took place in Cote d'Ivoire, from 22–26 November 2021 and was attended by over 80 participants, including delegates from 27 African countries (Benin, Botswana, Burkina Faso, Cameroon, Comoros, Cote d'Ivoire, DRC, Eswatini, Ethiopia, Ghana, Kenya, Liberia, Madagascar, Mali, Mauritania, Morocco, Mozambique, Namibia, Nigeria, Rwanda, Senegal, South Africa, South Sudan, Sudan, Togo, Uganda and Zambia), as well as observers from international organizations including the Economic Commission for

¹ A joint initiative of the European Commission and the African Union Commission (see <https://africa-eu-partnership.org/en/projects/global-monitoring-environment-and-security-gmes>).

Africa (ECA), the African Union Commission (AUC), the UN-GGIM Secretariat, academia, industry organizations and the private sector.

23. The meeting finally called upon the Economic Commission for Africa (ECA) and the African Union Commission (AUC) to work together to ensure that an overarching policy for geospatial information management in Africa is adopted by the Heads of State; and raise their awareness, sensitize them to be a champion of geospatial information management and technology in the continent.
24. The conclusions of the meeting aided in consolidating agreed consensus as well as galvanizing political will for harnessing geospatial information technology to further African development goals while assisting efforts to address certain growing global concerns.

IX. Perspectives, Outlook and Future Plans

25. The activity plan for the coming year includes:
 - a) Organizing the eighth meeting of the Regional Committee of United Nations Global Geospatial Information Management for Africa: The region plans to organize the eighth meeting of the Regional Committee in conjunction with the meeting of the Statistical Commission for Africa in 2022. We expect that the eighth meeting will be held in a fully in-person format. The eighth meeting is scheduled for 24-28 October 2022 in Addis Ababa. At the meeting, participants will continue to review progress made in implementing the United Nations Initiative on Global Geospatial Information Management in Africa. The meeting will also provide an opportunity to share experiences and identify the ground-level geospatial infrastructure that will be required for post-COVID-19 recovery at the national level;
 - b) Modernizing national mapping organizations: The Regional Committee notes that, given the emergence of new trends, national mapping agencies are at a crossroads when it comes to remaining relevant in the evidence business. Capacity development continues to be a critical issue in Africa, which continues to be left behind in this regard. The region will endeavour to develop a comprehensive programme for modernizing geospatial activities in Africa that will provide ideas, insights and strategic avenues for the cooperative management of development-related information. The programme will serve as a vehicle for mobilizing resources to strengthen member State capacity and to integrate geospatial and statistical information infrastructure;
 - c) Adapting to change for sustainability and awareness: The issues of funding, sustainability and awareness are interdependent. Numerous geospatial initiatives have commenced within Africa over the years, with many of them failing to be sustainable and realize their full potential. There are many reasons for this, but ultimately it can be attributed to an inability to adapt to contemporary circumstances so as to secure necessary funding or support, which in part relies on making stakeholders aware of the potential benefits. If sufficient support is not secured, the Regional Committee is in danger of becoming yet another programme that promises a lot but ultimately fades away, thereby undermining the significant role that geospatial information could play in realizing the African development agenda. Critical for successful implementation is the review of the current action plan for setting and achieving realistic goals, with clear explanations as to how they ultimately affect life in Africa.
 - d) Tackling the challenges facing the regional committee: They are related to communication, collaboration, cooperation to harness the potential of the common framework and tools in the implementation of UN-GGIM: Africa activities.

X. Conclusion

26. The UN-GGIM: Africa initiative was established to coordinate African geospatial development and to contribute to the broader global effort. UN-GGIM: Africa has made significant strides in regaining momentum and demonstrating to the national and international communities that it is committed to contribute towards national and international agendas.
 27. The strategic guidance that has emerged from the United Nations Initiative on Global Geospatial Information Management has been essential in ensuring that the Regional Committee continues to play a leading role in determining the way forward in the use of geospatial information in national and regional policy frameworks. The Regional Committee has also made a substantive effort to provide a forum for member State representatives to meet, discuss and collaborate on important issues relating to global geospatial information management on the continent.
-