



Summary of Side Event

Advancing the Implementation of the 2030 Agenda Using Geographic Information, Earth Observation and GeoDesign

31 January 2023, 1:15pm-2:45pm

Background on the event (one paragraph)

The event emphasized the role of Geographical Information Systems (GIS), Earth Observation and GeoDesign technologies as enablers for data collection, planning and development using technical, socio-economic, formal, and informal sources of data collected in partnership to inform the best decisions for how communities can transform their living environment. Two Public Private Partnerships (PPPs): (1) Terran Development Operations, LLC discussed how recently declassified hardware and software requested and approved by UN authorities can be repurposed for specific humanitarian projects which are aligned to the Sustainable Development Agenda implementation (2) CTAC OFT, LLC discussed the use of Mineral Finding Technologies (MFT) for identifying and quantifying the strategic natural resources like water and minerals, in a short period of time, with minimal environmental impact and for a fraction of the traditional investment can be used to leverage domestic financing for implementation of the SDGs.

Key Issues discussed (5- 8 bullet points)

- In setting the context, the moderator shared with the participants that the **2030 Agenda for Sustainable Development** recommended that Member States address the growing demand for information on small geographic areas in order to monitor the development goals and indicators at local and community levels, and ‘calls out geospatial information and earth observations as key methods for tracking progress and informing people about these global development policies’¹.
- While socio-economic/statistical data are important (censuses, surveys, administrative data...), still new data acquisition and integration approaches are needed to implement better policies for sustainable development, and to ultimately ‘leave no one behind’. There is recognition, therefore, of the value of linking socio-economic information to location as it has become a significant way to provide new insights that would otherwise not have been possible by looking at socio-economic or geospatial data in isolation.
- Geographical location dimension has particularly been recognized as central to the SDGs since geospatial data is imperative to understanding the location of the places where people live and work, the context of these places, the people we serve, and the communities they relate to, which allows us to identify the roots, cause and effects of the problems.
- Presentations showed that geospatial data is increasingly available from various sources at lower cost, in better quality, and more easily accessible by different users. And that increasing computing power

¹ See more details in the book: “GIS and the 2020 Census – Modernizing Official Statistics”, Esri Press, 2019. Available as an e-book and in print.

has increased the availability of georeferenced information and user-friendly GIS tools for insightful spatial analysis.

- Compelling visualization tools are improving the accessibility of that georeferenced information for decision-making. With the proliferation of GPS-enabled mobile technology and an easier access to satellite imagery and use of GIS, there is, for example, a shift from traditional paper-based data collection to data collection with hand-held electronic devices and web-based tools. This was illustrated in the research pilot done in Kisumu, Kenya and presented: <https://storymaps.arcgis.com/stories/e500ffa099b347c18eaf7f85d64443cf>

Key recommendations for action (5 - 6 bullet points)

- Encourage governments to work closely and share knowledge of GIS, Earth Observation and GeoDesign technologies with NGOs, community-based organizations, members of the multi-stakeholder groups, academia. to realize the implementation of the 2030 Agenda
- Financial, Investment Opportunities and PPPs are recognized as key in the implementation of the SDG: Value of the use of geospatial information and the economic benefits, in harvesting financial and investment opportunities, including through the building of the Public-Private Partnerships (PPPs) to include the use of Mineral Finder Technology to leverage natural resources for domestic financial resource mobilization
- Geospatial information and earth observations as key methods for tracking progress and informing people about these global development policies. Countries are encouraged to use mobile technology, GPS and Satellite imagery, Unmanned Automatic Vehicles (UAV - Drones), as they are facilitating the data collection at the individual level, provided we consider the private/confidentiality issues.
- GIS as a Data Integration platform and GeoDesign as a participatory tool for citizen and community engagement, providing context and insightful spatial analysis, are more and more recognized as evidence-based decision-making tools. It is recommended to use them in the planning/design, implementation and monitoring of the SDGs!
- Information and Communication Technology (ICT), including Geospatial Information Technology and GeoDesign, is a cross-cutting technology to help achieve SDGs - It is not a short-cut or panacea to Development, but an **Enabler/Accelerator** to development.
- In this regard, national organizations are encouraged to collaborate on developing a national geospatial information capacity, as coordination and institutional cooperation between various stakeholders (**Partnerships**) like academia, civil society, community-based organizations who are the closest to communities are involved in location-based information within a country are vitally important to mobilize Geospatial Information Technology for Sustainable Development.