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Using geospatial data for producing statistics and SDG indicators

FAO has leveraged geospatial data to:

- ✓ to improve master frame construction for census & surveys;
- ✓ for sampling design optimization;
- ✓ for direct estimation of crop areas and yields;
- ✓ for early warning and real time monitoring systems.

FAO has also used geospatial data for direct estimation of a number of SDG indicators, particularly those related to Forest cover; Mountain Green Cover; Land degradation; Agricultural Sustainability.

FAO's work on measuring and monitoring SDG indicator 15.4.2 – GEO SDGs Award

- ✓ In 2021 FAO received the GEO (Group on Earth Observations) Sustainable Development Goals (SDGs) Award for the Sectoral category, SDG Custodian Agency.
- ✓ The GEO SDG Awards, led by the EO4SDG initiative, recognize the productivity, ingenuity, proficiency, novelty, and exemplary communications of results and experiences in the use of Earth observations to support sustainable development, as indicated by progress toward a SDG Target and/or progress toward, and reporting on, a SDG Indicator.
- ✓ FAO was given the award for its remarkable efforts in developing a new method to measure and monitor SDG indicator 15.4.2, [Mountain Green Cover Index](#), through analysis of standardized land cover maps and DEM data. The awards were announced in a virtual ceremony held during the [GEO Week 2021](#) that was celebrated virtually from 23 to 26 November 2021.



Using geospatial data for producing statistics and SDG indicators : key challenges

- Using geospatial data for producing statistics requires purposeful investments in skills, technology and infrastructure
- As any other new/alternative data source, geospatial should comply with relevant quality assurance frameworks
- Many countries lack the capacity and/or infrastructure for integrating geospatial and traditional data sources



Using geospatial data for producing statistics and SDG indicators : two recommendations

1. Greater standardization of Earth Observation-based solutions

- Lack of standardization leads to a duplication of efforts
 - It also hampers the prospects for Earth Observation-based solutions to comply with relevant quality assurance frameworks and therefore be able to generate official statistics
 - FAO has implemented a standardized system of land cover maps in Lesotho and is now scaling it up to other countries, in collaboration with Digital Earth Africa
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Using geospatial data for producing statistics and SDG indicators : two recommendations

2. Invest in meaningful partnerships

- Partnerships are a key means for catalysing standardization and ensuring that efforts are not duplicated and resources wasted
 - Instead of working in siloes, invest in partnerships, deepening collaboration and sharing tools and methods
 - FAO has partnered with the European Space Agency, is co-chairing the UN Task Team on Earth Observations for Agricultural Statistics, and is contributing actively to the UN Global Platform.
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Thank you

For more detailed information on FAO's work on SDG indicators

<http://www.fao.org/sustainable-development-goals/indicators>