

Leveraging Big Earth Data for the Sustainable Development Goals in Small Island Developing States

Maldives Bureau of Statistics

Efforts, Challenges, technical gaps, and opportunities

Ongoing Efforts & Opportunities in the Maldives

- National Strategy for the Development of Statistics (NSDS 2021–2030) prioritizes modernization through Big Data and innovative data sources.
- Roadmap for Environmental-Economic Statistics is being implemented jointly with Ministry of Tourism and Environment that specifies broad areas to be focused.
- Launched the National Big Data Research Agenda for SDGs, seeking technical partnerships with CBAS, SIDS, and other global organizations.
 - *A pilot project was conducted on the use of earth observation data to develop land cover changes and land accounts for some of the islands in Maldives*
 - *Ongoing project with ADB on 'Small estimation of poverty mapping using satellite imagery'*
- Capacity building and technical training remain a key priority for MBS and related agencies under the Maldives Statistical System.

Efforts, Challenges, technical gaps, and opportunities

Challenges

- Limited technical and institutional capacity to fully utilize Big Earth Data and AI for National and SDG monitoring.
- Lack of integration between existing surveys and Earth-observation data.
- Small island size requires high-resolution satellite data, which is costly and not always available.
- Previous pilot project on land cover and vegetation change were useful but inconclusive due to data limitations.
- Need for stronger collaboration with CBAS and other SIDS partners to apply Big Earth Data in key research areas such as tourism, labour, and poverty, and to strengthen the use of geospatial insights in national SDG monitoring.

Key Questions for the Expert Panel

- How can CBAS support MBS in integrating Big Earth Data into the Bureau's research agenda areas (tourism, labour, and poverty)?
- What training or partnership models can help MBS build sustainable capacity for geospatial and AI-based analysis?
- Can Big Earth Data be tailored to monitor island-specific issues such as community tourism and coastal erosion?
- How can SIDS work together and with CBAS to monitor coastal erosion and land consumption and share expertise in using Earth Observation data for SDG monitoring?