Sustainable Development Goals (SDGs) and Earth observations-JAXA's activities for SDGs

*Chu Ishida¹

1. Japan Space Exploration Agency

In adopting the 2030 Agenda for Sustainable Development in September 2015 at a High-level Political Forum on Sustainable Development, world leaders agreed that a global indicator framework was necessary to measure, monitor and report progress towards the 17 transformational Sustainable Development Goals (SDGs) and 169 associated Targets.

To track progress towards these Goals and Targets, the global indicator framework must capture the multi-faceted and ambitious aspirations for the continued development of nations and societies. Effective reporting of progress toward these indicators will require the use of multiple types of data, both what we have in hand - traditional national accounts, household surveys and routine administrative data –and new sources of data outside national statistical systems, notably Earth observation (EO) and geospatial information (GI), and 'Big Data' in general.

The integration of all these data can produce a quantum leap in how we monitor and track development and advance the well-being of our societies. Since Earth observation and geospatial information are often continuous in their spatial and temporal resolutions, their use in SDG monitoring can prove essential in capturing the sustainability of developments underpinning the SDG framework. Earth observation and geospatial information, which include satellite, airborne, land- and marine-based data, as well as model outputs, will expand monitoring capabilities at local, national, regional and global levels, and across sectors.

Earth observation and geospatial information can significantly reduce the costs of monitoring the aspirations reflected in the goals and targets, and make SDG monitoring and reporting viable within the limited resources available to governments. Beyond the SDG framework, these same data can provide developing countries and regions with increased capacity to acquire, analyse and utilise information for a broad range of policy-making purposes.

The Japan Space Exploration Agency (JAXA) is actively promoting use of satellite-based Earth observations for SDGs through the Comittee on Earth Observation Satellites (CEOS) and the intergovernmental Group on Earth Observations (GEO) in cooperation with national statistical office and related ministries and agencies, and UN and other interantional organizations. Current status of JAXA activities for exploring the applications of satellite based Earth observations to SDGs and their prospects will be presented.

Keywords: SDGs, Sustainable Developmetn Goals, indictor framework, Earth observation