

Tokyo Statement 2017

Tokyo, Japan

January 13, 2017

The 9th Global Earth Observation System of Systems (GEOSS) Asia-Pacific Symposium was held in Tokyo from 11th to 13th January 2017, by the Group on Earth Observations (GEO) and the Ministry of Education, Culture, Sports, Science and Technology (MEXT) of Japan with 243 participants. The Symposium addressed the theme of “Earth Observations Supporting the Implementation of the Sustainable Development Goals (SDGs) in the Asia Pacific Region”, and focused its discussion on contributions to GEO’s Societal Benefit Areas (SBAs) and partnerships for GEOSS with the SDGs which is echoed in the GEO Strategic Plan 2016-2025 endorsed by the Mexico City Ministerial Declaration in 2015, and followed by the Engagement Strategy and its priorities approved at the GEO-XIII Plenary in 2016.

In the Symposium, keynote speeches addressing SDGs were given by the two dignitaries; Dr. Sanjaasuren Oyun, Chair of the Global Water Partnership and Dr. Teruo Kishi, Science and Technology Advisor to the Minister for Foreign Affairs of Japan. GEOSS related activities were presented by 27 countries and 10 organizations and followed by the introduction of Asia-Oceania (AO) GEOSS Initiative and discussion on five of GEO’s global activities. The five parallel sessions included GEOSS Asian Water Cycle Initiative (AWCI), Asia-Pacific Biodiversity Observation Network (APBON), the GEO Carbon and GHG Initiative, Ocean and Society in the AP region under Blue Planet Initiative (BPI) and Agriculture and Food Security (GEOGLAM). Discussion in each session focused on global challenges, as well as an integrative discussion of the role of Earth observations in helping realize the SDGs.

The Participants;

1. Affirm the role of Earth observations to support the following SDGs in light of the distinctiveness of the Asia-Pacific region, and the achievements of past GEOSS Asia-Pacific Symposia; Goal 1: No Poverty, Goal 2: Zero Hunger, Goal 6: Clean Water and Sanitation, Goal 11: Sustainable Cities and Communities, Goal 13: Climate Action, Goal 14: Life Below Water and Goal 15: Life On Land, and reaffirm that the current activities of the GEOSS AP Symposium play a key role in realizing the SDGs in this region, and to further implement the AOGEOSS Initiative.
2. Reaffirm the importance toward realizing the SDGs. This can be done through interdisciplinary coordination, capacity building, long-term *in-situ* observations, and large area high-resolution observation technology in the context of an operational data sharing culture.
3. Acknowledge the role of GEO and its stakeholders to address global challenges represented by the SDGs, and reaffirm the importance of GEO’s role to convene the relevant stakeholders including UN organizations and development cooperation agencies, and maximize the value of Earth observation data for decisions and actions through its various frameworks such as the GEO Flagships, Initiatives and Community Activities. Recommend GEO Members and Participating Organizations facilitate research activities using Earth observation data and information to provide solutions toward realizing the SDGs. Furthermore, recommend GEO engage with the UN SDG implementation mechanisms such as the “UN Inter-Agency Task Team on STI for SDGs (IATT)” to both deliver and advocate the value of Earth observation data.

4. Resolve to take the following actions toward the next Symposium.

The AWCI will take advantage of existing initiatives and programs to improve understanding, strengthen governance, inform investment and support implementation for reducing water-related disaster and environmental risks. AWCI will establish and strengthen national platforms and identify milestones, resources and deliverables clearly, to reconcile the relations between disaster risk reduction, sustainable development and climate change adaptation. Inter-linkages are key to develop holistic, evidence-based, quantitative and qualitative information for addressing flood and landslide, drought and water scarcity, and water environmental degradation.

APBON will promote data sharing to increase access to biodiversity related information and the effective monitoring systems of biodiversity and ecosystems. Gaps in available information will be addressed by improving collaboration among researchers in observation sites, designing incentives for data publications and deriving solutions to relevant science questions. APBON sees the need to improve communication and collaboration among biodiversity and ecosystem observation networks, to identify more national, thematic and regional networks and to reach out to other parts of Asia and the Pacific. The future of APBON relies on the participation of young scientists and will thus endeavor to engage them in participating in deriving solutions to conservation issues and in preparing joint publications.

The GEO Carbon and GHG Initiative will facilitate cooperation to develop a coordinated system of observations and evaluate changes in the carbon cycle and in greenhouse gas emissions, as they relate to human activities and climate change, in order to provide decision makers with timely and reliable policy-relevant information. In particular, for AP region it will advocate the use of carbon cycle and GHG related observations, from both *in-situ* (including air and shipborne) and space-based observations, particularly in the frame of UNFCCC and IPCC for national greenhouse gas inventory reporting; will emphasize the importance of providing guidance to users on how to use Earth observation data by better explaining bias and uncertainties; will promote data sharing and awareness of data availability; and will identify new scientific challenges regarding climate change research to be addressed in the future.

The Ocean and Society Working Group under BPI recognizes that GEOSS is useful for sharing *in-situ* and remotely sensed Earth observation data to support SDG 14. The Group will enhance coastal and regional ocean data inventories through the inputs from institutes/agencies/universities in the AP region. In relation to ocean acidification (SDG 14.3), the Group will work closely with GOA-ON/PICES/WESTPAC to extend regional data inventories and observing capabilities. The Group also recommends GEO Members sustain and/or develop as necessary long-term monitoring of ocean acidification (pH and CO₂ system parameters), and organism's responses from coast to open ocean, and assessment of acidification impacts on fisheries/aquaculture/ecosystems in the AP Region.

GEOGLAM/AsiaRiCE will continuously improve the accuracy of rice crop production outlooks and predictions that directly or indirectly help policy makers and agricultural stakeholders to provide sufficient quality crops with sustainable agriculture practices, contributing to several SDGs, especially SDG 2. GEOGLAM/AsiaRiCE needs to upgrade prediction models by integrating multiple time series satellite data with *in-situ* observations for reducing model output uncertainty. We will also accelerate collaboration with other Working Groups that share the same problems such as water resources, GHG emissions and biodiversity which are often constraints for crop production.

5. Resolve to reconvene at the 10th GEOSS Asia-Pacific Symposium to be held in Vietnam in 2017.