

Agenda Item 6 – “Space technology for sustainable socioeconomic development”

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Space technology is an important tool for solving global issues and supporting the sustainability of life on Earth. Ensuring good quality education is one of the challenges that we face today especially in many developing countries.

In recent years we have seen dramatic changes in Science, Technology and Innovation, also known as STI. In order to stay at the forefront of innovation, and contribute to the advancement of STI, STEM education is crucial. To reach SDG Goal 4 “Quality Education”, it is imperative to ensure future generations with high quality STEM education. STI and space technology are deeply related to each other, and space technology can be an effective tool in improving STEM education. Today, I would like to offer some examples of how space technology could contribute to SDG Goal 4.

JAXA has been actively supporting capacity building for emerging countries through our educational programs aboard the Japanese Experiment Module “Kibo” of the International Space Station. One of these programs is called “Asian Try Zero-G,” where Japanese Astronauts conduct various scientific experiments proposed by students from the Asian pacific region. During Astronaut Norishige Kanai’s long-term stay aboard the ISS in 2018, he conducted 8 experiments including testing the effects of the center of gravity by using an airplane model, an idea that was originally proposed by students from Singapore.

In 2019, JAXA and NASA introduced a new educational program called “Kibo Robot Programming Challenge” for the educational outreach to Asian pacific region countries. It is an educational programming competition using JAXA and NASA’s free-flying robots in the ISS. This program is linked to the indicators under SDGs Goal 4, which measures essential ICT skills that youth and adults are equipped with.

Furthermore, Japan has been cooperating with UNOOSA to offer educational or research institutions from developing countries the opportunity to deploy CubeSats from the Japanese Experiment Module “Kibo” of the International Space Station (ISS), under the KiboCUBE program. A team from the Universidad del Valle de Guatemala was selected for the second round of KiboCUBE currently in progress. Their CubeSat was successfully developed, and is scheduled to be launched to the ISS next month and deployed from Kibo in the spring. This will be Guatemala’s first satellite, and their mission is to test a multispectral sensor prototype, which will be their first step towards remote sensing. Japan,

Guatemala, and UNOOSA will host a side event during the lunchtime today highlighting the development of Guatemala's first satellite through the KiboCUBE programme. We welcome your attendance.

In November of last year, JAXA and JICA announced the establishment of "JJ Network for Utilization of Space Technology (JJ-NeST)." This program aims to enhance space-related capacity building in Asian countries by offering young professionals the opportunity to participate in space-related program at Japanese universities. The program includes scholarships and short-term trainings.

This contributes to expanding higher education scholarships for developing countries, which is one of the targets under SDGs Goal 4.

JAXA has also been promoting educational support for youth in cooperation with educators. JAXA provides teachers with training in core concepts of space education and offers them ideas on how to incorporate space-related materials in their future classes.

JAXA also assists in hosting educational events such as the water rocket competition and poster contests for young participants of Asian countries.

These activities contribute to increasing the supply of qualified teachers, which is another target under SDGs Goal 4.

Japan firmly believes that space technology has a high potential to support sustainable socioeconomic development and will continue to contribute to this important issue.

Thank you for your attention.