Japan

Committee on the Peaceful Uses of Outer Space
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Japan Item 12 : Space and global health.

Chair, Distinguished Delegates,

Japan continues to develop innovative approaches to utilizing space applications for the advancement of global health. Last year, the successful launch of H3 rocket, Flight No.3, deployed the Advanced Land Observing Satellite, ALOS-4, which will soon provide advanced meteorological observation data to enhance our capabilities in the near future.

Japan is leveraging remote sensing technology to address global health issues. For example, the National Center for Global Health and Medicine (NCGM) conducted research in Lao PDR using Earth observation satellite (EOS) data and epidemiological data on schistosomiasis. Specifically, precipitation and land surface temperature (LST) data observed from JAXA's Public-health Monitor and Analysis Platform (JPMAP) revealed a significant link between changes in precipitation and the risk of schistosomiasis infection. An increase in annual precipitation was associated with fewer cases, while an increase in dry-season precipitation increase infection rates. If we want to understand, prevent, and manage the outbreaks of diseases, it is crucial to carefully monitor possible factors that enhance the vectorial capacity of the snails in Mekong river. Remote sensing technology offers a valuable tool to identify and mitigate these risk factors.

Japan also uses remote sensing to monitor air pollution, including data from Japan's *Himawari* meteorological satellites. These satellites help predict aerosols such as yellow dust PM 2.5, which significantly impacts the quality of the atmosphere. According to a recent report by WHO, air pollution is regarded as the single largest environmental risk to human health, causing 7 million premature deaths annually. Space observation can greatly contribute to a better understanding of the emissions, trends, and impacts of air pollutants, such as PM 2.5 and ozone. It's an area that needs to be strengthened to reduce this environmental health risk, particularly in developing countries.

In the coming months, Japan will launch a new satellite called GOSAT-GW to monitor nitrogen oxides, a major air pollutant acting as a precursor of ozone, together with carbon dioxide and methane, two potent greenhouse gases. This satellite is expected to help solve global health issues in collaboration with our international partners.

Chair,
Earth observation through remote sensing satellites enables real-time data collection over vast areas where ground investigations are challenging. Japan remains committed to harnessing space technology for the benefit of humanity and to advance global health.

Thank you for your kind attention.