

Agenda Item 15– “Space and Global Health”

---

Madam Chair and Distinguished Delegates,

Japan has been developing ways and means for space applications to contribute to global health.

Japan believes that the use of remote sensing is an efficient way to tackle global health issues. One example is air pollution monitoring using data from Himawari, the Japanese geostationary meteorological satellite primarily used for weather forecast. Its observation data also serves to the flow prediction of yellow dust or aerosols such as PM2.5, which affect the quality of the atmosphere.

Air pollution is closely linked to global health. According to a recent report by WHO, air pollution is regarded as the single biggest environmental risk on human health, causing 7 million premature deaths. Space observations can greatly contribute to better understanding of the emissions, trends, and impacts of air pollutants such as PM2.5 and ozone. This research area needs to be strengthened to reduce the environmental health risk, in particular in developing countries. Japan is planning to launch a new satellite, “Global Observing Satellite for Greenhouse Gases and Water Cycle (GOSAT-GW)” which aims to observe nitrogen oxides, one of major air pollutants acting as a precursor of ozone, and it is expected that this satellite will contribute to solving global health issues in collaboration with international partners.

Madam Chair,

I would like to share Japan’s research in the field of space and global health. The National Center for Global Health and Medicine has been conducting research on climate change and malaria in Lao PDR in spatial epidemiology using earth observation satellite data, in collaboration with JAXA. Since the distribution of malaria vector *Anopheles* is affected by temperature and vegetation, it is expected that malaria epidemics are triggered by climate change. This research found out that in the areas where there was forest growth, an increase in malaria patients was found, therefore it is important to take measures to understand, prevent, and manage such areas.

Earth observation using remote sensing satellites allows controlled real-time data collection from wide areas where ground investigation is politically or geographically difficult. Japan will continue to use space technology for the benefit of humankind and to contribute to the advancement of global health.