Agenda item 8: Space and Sustainable Development

Mr. Chairman and Distinguished delegates,

The Indian delegation is glad to brief the committee on the agenda item 'Space and Sustainable Development'.

India is increasingly following the path of development to facilitate the society to meet its own needs, at the same time decreasing the human impacts, reducing environmental risks and ecological scarcity. Extensive efforts are on in India to implement sustainable development by Government, Non-Government Organizations, citizen groups and individuals with equal emphasis on its three dimensions - Social, Economic, and Environmental. However, a volatile mix of unpredictable weather, natural disasters, enormous pressures on available natural resources along with the problems of poverty continues to be of great concern for policymakers.

In this context, Space technology plays an important role in assessing the impact of unsustainable exploitation of land including host of other natural resources.

Mr. Chairman,

Satellite data with high temporal and spatial coverage is useful for inventory of natural resources. The information helps in conserving biodiversity, promoting sustainable agriculture, managing water resources, mitigating natural and anthropogenic disasters and responding to climate change impacts. With improved data from current sensors and analysis methodology, a number of projects have been taken up which clearly demonstrated the usefulness of sustainable planning at local scales, bringing participation of stakeholders and evaluating the impacts of various projects.

Indian Earth Observation satellites in the orbits are providing valuable data in the domains of land, water, weather and ocean.

Mr. Chairman,

India is regularly carrying out biennial forest mapping using satellite data. The forest map of the year 2019 revealed that there is significant increase in forest cover over the year 2017. Towards increasing the use of renewable energy, selection of hydroelectric site using satellite data and GIS have been found to be effective especially in the remote mountainous areas. India increasingly emphasize on e-mobility to reduce dependency on fossil fuels. Thus, India is continuously making efforts to enhance CO_2 removal through increasing forest and tree cover and to improve energy efficiency measures without compromising on the developmental priorities of the country.

Space-based observations have provided critical inputs in planning, execution and monitoring of major national initiatives for sustainable development. Besides it has also helped to create an extensive database for better governance and development. In this regard, ISRO has established national Geo-portal called 'Bhuvan' which supports many applications that addresses Governance and other geo spatial applications that are being used by the government agencies, industries and academia.

Mr. Chairman,

Satellite based mapping and monitoring of cultivable and non-cultivable wastelands have significantly helped Rural Development Departments to address wasteland development activities for enhancing agricultural productivity, poverty alleviation and environmental protection. These efforts have also helped in diversification and intensification of agricultural activities especially in the rainfed areas.

In last two decades, India has carried out desertification and land degradation status mapping and change analysis using satellite data following the United Nations Convention on Combating Desertification (UNCCD) guidelines. The information has been published in the form of atlases and used in generating the action plans for combating the desertification and checking the process of land degradations.

ISRO is providing geospatial support for Soil Health Card scheme of Government of India. Geospatially enabled techniques are being developed to support the National Programme on Crop Insurance, including optimal planning of crop cutting experiment and crop damage assessment.

Towards sustainable development of urban areas, Master Plans under sub-scheme of Atal Mission for Rejuvenation and Urban Transformation (AMRUT) have been formulated. Information generated in this project is being utilized for providing adequate shelter and promoting environmental infrastructure through equitable distribution of water, drainage and solid waste management.

Mr. Chairman,

In conclusion, while underlining the usefulness of space technology in sustainable development, the Indian delegation reiterates its willingness to share Indian experience in this important area.

Thank you Mr. Chairman and distinguished delegates.