

# India

## Agenda item - 7 Remote Sensing

### **Mr. Chairman and Distinguished delegates,**

During the past few decades, ISRO has put in place comprehensive earth observation systems and associated ground segments. Various applications of land, water, ocean and atmosphere are being carried out regularly using the data of ISRO's Indian Remote Sensing (IRS) series and INSAT series of satellites. The instruments on-board IRS satellites provide data in varied spatial, spectral and temporal resolutions.

### **Mr. Chairman,**

Currently, 20 remote sensing satellites in low earth orbit and 2 meteorological satellites in Geostationary orbit are providing data operationally for various applications. IRS satellites data is acquired at the ground stations of Hyderabad and Antarctica, and data downlinks are enabled at seven ground stations across the globe.

### **Mr. Chairman,**

The new interface mechanism between users and ISRO/DOS, called Space Applications Management Systems (SAMS), established in lieu of erstwhile National Natural Resources Management System (NNRMS), started working actively with enhanced objectives.

### **Mr. Chairman,**

The major application projects include periodic mapping of Land use/ Land cover and land degradation under Natural Resources Census, space based Information support for Decentralised Planning, Indian forest cover change alert system, watershed development planning and monitoring activities, crop production forecast, horticulture development, Irrigation infrastructure assessment, snow and glaciers dynamics, inventory and monitoring of Glacial Lakes/ Water Bodies and identification of suitable sites for social forestry. India has formulated the National Information System for Climate and Environment Studies (NICES) for supporting climate studies.

### **Mr. Chairman,**

Space technology applications in governance is supported by ISRO's Geoportal the "Bhuvan", MOSDAC (Meteorological and Oceanographic Satellite Data Archival Centre) and VEDAS (Visualisation of Earth observation Data & Archival System). The geoportal "Bhuvan" has rendered a significant service during the Covid-19 pandemic

for Indian state governments and citizens towards mapping the hotspots for identifying containment zones, vaccination Centres location and enabling services for mobile vegetable market & navigation tools for distribution of free food etc.

**Mr. Chairman,**

India actively participates in the Committee on Earth Observation Satellites (CEOS), Group on Earth Observations (GEO) initiatives and is also supporting the G20 initiative, including the initiatives on Agricultural Monitoring, Space for Climate Observatory (SCO), APRSAF initiative on Space Application For Environment (SAFE), Forest Observation, Water strategy and Data sharing. India has committed to share its remote sensing satellite data with ASEAN countries for resource assessment and disaster management support. ISRO, along with other BRICS Space Agencies signed an agreement for sharing remote sensing satellite data from constellation of satellites to address global climate change, major disasters and environmental protection.

India actively supports capacity building in Remote Sensing through hosting United Nations affiliated Centre for Space Science and Technology Education for Asia and the Pacific (CSSTEAP), since 1995. A large number of participants from many countries have been benefited from RS&GIS courses of Post Graduate Diploma, short term courses and Mass Open Online Course (MOOC).

**Mr. Chairman,**

In order to unlock India's potential in space sector, Government of India has announced Space Sector reforms, to enable greater participation of private sector in space activities. A National Level nodal agency, namely, Indian National Space Promotion and Authorization Centre (IN-SPACe) has been created to promote, hand-hold, permit and supervise the space activities of the private sector. The existing policies are also suitably modified to make them more open, inclusive & forward-looking.

**Mr. Chairman,**

In conclusion, the Indian delegation would like to convey this august gathering that India has developed the necessary expertise to take the benefits of space technology to the grass root level and is committed to share her experience with all the member nations.

**Thank you Mr. Chairman and Distinguished delegates.**