

Agenda Item 8: Space based Disaster Management Support

Mr. Chair and Distinguished delegates,

Indian Space Programme pursues the use of space and aerial based inputs, as well as communication and navigation support, for supporting disaster management in the country. India is prone to many disasters, such as floods, cyclones, landslides, earthquakes, and forest fires. Through the Disaster Management Support Programme, ISRO works in close coordination with the nodal Departments responsible for the management of various disasters and ensures effective utilisation of space and allied technologies for disaster risk reduction and developing disaster resilience.

Mr. Chair,

In 2022, 14 states in India were affected by floods. All the major flood events were monitored and mapped in near-real time using multi-mission satellite data. About 250 flood inundation maps and value-added products were disseminated to the concerned disaster management departments to support the relief and rehabilitation efforts.

Using historical information on floods derived using satellite data, flood hazard atlases were prepared and published for the states of West Bengal, Andhra Pradesh, and Uttar Pradesh. Spatial flood forecast models are developed for Godawari and Tapi river basins, and flood alerts were provided for the concerned State Disaster Management organisations.

India developed a multi-scale National Database on Emergency Management (NDEM), for the benefit of stakeholders involved in Disaster Management activities. It has been updated with enhanced features and disaster forecast services from nodal agencies. Multi-lingual support and decision support tools are also added to NDEM.

Mr. Chair,

ISRO supports the global initiatives on the use of Space technology for Disaster Management. As signatory to International Charter “Space and Major Disasters” and the APRSAF initiative; Sentinel Asia, ISRO contributes to the disaster management activities of global disaster events, by planning acquisition and dissemination of data from various Indian Remote Sensing Satellites.

During 2022, ISRO provided Indian satellite datasets addressing 17 disasters in 8 countries, through the Sentinel Asia programme. IRS datasets were provided to 5 requests for supporting the disaster management efforts of International Charter.

India is supporting the International Charter that has now been activated in Turkiye and Syria following the last weeks devastating earthquakes by providing data sets from Indian remote sensing satellites.

The Satellite Aided Search and Rescue (SASAR) Programme has been providing operational services to the users in India and seven neighbouring countries. During

2022, a total of 601 alerts were received and search & rescue (SAR) supports were provided to 12 distress incidents in Indian service area which contributed in saving 56 human lives.

Mr. Chair,

ISRO is continuously striving to improve the use of space-based inputs for disaster management support in the country, by developing necessary space infrastructure, database and associated decision support systems and tools.

India is ready to support and cooperate on the use of Space Technology for Disaster Management support.

Thank you, Mr. Chair and distinguished delegates.