

Agenda Item – 8

Space based Disaster Management Support

Madam Chairperson and Distinguished delegates,

The Disaster Management Support (DMS) Programme of Indian Space Research Organisation continues to provide aero-space based information, communication and navigation support to the country, during different phases of the disaster cycle and also space based information support to foreign countries for disaster response. During 2020, the country faced floods in 15 States affecting 183 districts apart from 3 major cyclones and a landslide.

Madam Chairperson,

About 308 flood maps, and value added products were disseminated to the concerned departments in near real time to support relief and rescue operations during the floods in 2020. In addition, ISRO activated International Charter and Sentinel Asia, five times in 2020. ISRO supported concerned States during 'Amphan', 'Nivar' and 'Burevi' cyclone. During February to June, active forest fire location details were disseminated in near-real time mode daily 6 to 8 times for ground teams to manage forest fires. Major landslide in Kerala State was mapped and monitored during this year. Agricultural stubble burning locations were identified in 4 states and burnt area assessment was done for 2 states.

Madam Chairperson,

Flood early warning alerts were given to Andhra Pradesh State Government, during floods in the Godavari River through web-enabled flood forecast system. Similarly, flood early warnings were disseminated to Assam State Government, in the North-East India, during floods in Brahmaputra and its tributaries, under the project FLEWS (Flood Early Warning System). Towards disaster preparedness, updated Flood Hazard Atlas of Bihar State was prepared using the historic satellite data of 1998 to 2019. Aggregated state level flood maps of 7 states were also prepared. ISRO has also provided short duration training programmes on National Database for Emergency Management (NDEM) and Space-based Disaster Risk Reduction. ISRO could help state administration during the recent flash floods in Chamoli district in Uttarakhand towards deciphering the cause of events wherein a mega landslide occurred at an elevation of 5600 meters and which brought about 80,000 cubic

meters of snow, ice, water and mud causing flash floods, and also advanced alert on river inpounding.

Madam Chairperson,

ISRO has now developed a Distress Acknowledgement Message system for the fishermen's Safety of Life, using its regional navigation satellites NavIC and is ready for operationalisation across the Indian Coast.

Madam Chairperson,

The Satellite Aided Search and Rescue (SASAR) Programme has been providing operational services to the users in India and 7 neighbouring countries for the last 23 years with the aid of GEO and LEO ground segments. The programme has so far supported rescue of 2201 lives in 153 SAR incidents till date and 186 lives in 9 incidents during the last one year.

Madam Chairperson,

Under the International Charter "Space and Major Disasters" and APRSAF initiative Sentinel Asia, in 2020, ISRO has supported management of 31 disasters across 24 countries by providing around 141 sets of Indian satellite data. Through Sentinel Asia Programme, ISRO responded to 15 disaster events across 8 Asia Pacific countries and provided nearly 38 IRS satellite datasets.

Madam Chairperson,

ISRO responds very positively to the international requests and supports the global initiatives on the disaster management.

ISRO is pursuing collaboration with the space agencies in Germany and United States, so that the best practices can be adopted for improving the services in the disaster management.

Thank you Madam Chairperson.