GOVERNMENT OF INDIA DEPARTMENT OF SPACE

Sub: Monthly Summary of Department of space for the month of November 2021

PART- I (Unclassified)

1. Important policy decisions taken and major achievements during the month

A. Satellite Missions:

I. PSLV-C52 / EOS-04 Mission:

PSLV-C52 is scheduled to launch EOS-04, an earth observation satellite in the 1st quarter of 2022. Launch vehicle and satellite integration and testing activities are in progress

II. PSLV-C53/ EOS-06:

PSLV-C53 is scheduled to launch EOS-06, an earth observation satellite in the 1st quarter of 2022. Launch vehicle and satellite integration and testing activities are in progress

III. Small Satellite Launch Vehicle / EOS-02:

The first developmental flight of Small Satellite Launch Vehicle, SSLV-D1 is scheduled to launch EOS-02, an earth observation satellite in the 1st quarter of 2022.

B. Earth Observations:

- National Hydrology Project (for MoJS): Inflow into 91 major reservoirs is estimated and is webhosted onto NHP-Bhuvan portal. Inflow estimation for additional 42 major reservoirs is in progress. Site preparation is completed at 10 sites for establishment of flux towers and one flux tower is made operational.
- Monitoring Watersheds Using Geospatial Technologies (IWMP, for MoRD): 2,100 High resolution data satellite scenes of 2019-20 have been shared with respective States for monitoring the impact of watershed development interventions.
- Above Ground Biomass (for MoEF&CC): Validation of the Above Ground Biomass map of India at hectare scale, generated using temporal SAR data has been completed, jointly with Forest Survey of India.
- Agriculture Technology Project (for Govt. of Maharashtra): Mapping of cropping intensity is carried out for 2018-19, 2019-20 and 2020-21. Division-wise and district-wise analysis is carried out with respect to single, double and triple crops. Potential area for zaid (summer) crop in the State is mapped and is overlaid with canal command area maps.
- Crop Insurance Decision Support (for AICIL): Aman Rice maps for current year (kharif 2021-21) were prepared for Purba Bardhaman, Malda, Darjeeling and Jalpaiguri districts using temporal C-band SAR data.

- Bhuvan Panchayat Web Portal (for M/o Panchayati Raj): Land and Water Resources Development Plan (LRDP & WRDP) generation software tool is developed and is integrated with Bhuvan panchayat portal.
- Biodiversity characterization at community level in India using Earth observation data (for DBT): Vegetative phenological metrics maps generated for Purna and Eravikulam wildlife sanctuaries
- **Geoportals- Bhoonidhi:** BhooVista Data Visualization Application software was deployed in the test environment, test plan document generated and test cases were identified
- Disaster Management Support Programme (for MHA, NDMA, SDMAs):
 - ➤ NDEM V.4: (i) Support enabled in Telugu, Tamil, Hindi & Bangla enabled for infrastructure/ urban/ hydrological features and other Points of Interest (PoI) features (ii) Forest Fire Locations Dashboard service implemented.
 - ➤ Near Real Time Flood Mapping & Monitoring: Flood inundated areas were mapped and monitored in the states of AP, Bihar, Tamil Nadu, Kerala & UP using multi-mission satellite data.
 - 19 inundation maps/ value added products were generated and disseminated to MHA, NDMA, SDMAs, etc.
 - ➤ Flood Hazard Atlas: preparation for Uttar Pradesh state is in progress. Suggestions have been incorporated in the Flood Hazard Atlases for West Bengal and Andhra Pradesh
 - ➤ Monitoring Agriculture Residue Burning: Daily report of active agriculture fires for 4 States viz., Punjab, Haryana, Rajasthan and Uttar Pradesh are disseminated to MoEFCC & CPCB.
 - Landslide Susceptibility Map for North Eastern Region: completed for Mizoram, Manipur, Nagaland and mapping is in progress for Tripura and Meghalaya.
 - ➤ Landslide Inventory: landslide inventory mapping was carried out for western Maharashtra (~5,000 landslides) and Nainital in Uttarakhand (~300 landslides).
 - International Charter (IC)/ Sentinel Asia:
 - Two emergency requests (Japan & Vietnam) under Sentinel Asia were processed and IRS satellite datasets were provided.
 - During Oct 27-28, ISRO in association with IWMI has organized a 2-day webinar on "space technology for Flood forecasting & modelling
- Satellite Data Acquisition and Dissemination: 2,474 satellite passes were acquired and archived. 1,67,356 IRS data products were disseminated, including 3,998 products through data supply chain and 1,63,358 products as free downloads through Bhuvan & MOSDAC

C. Capacity Building:

1.	Course on" RS and GIS Applications in Natural Resource Management" (08-26	556 participants from
	Nov, 2021)	4290 Institutes
2.	Course on "Basics of Geographical Information System" (Sept 27- Nov 02)	9715 participants from
		909 Institutes
3.	Course on "Basics of RS, GIS & GNSS"	8139 Participants from
	(Aug 16- Nov 26)	889 Institutes
4	Three days special course on "Geospatial	9 TCPO officers, UP Govt.
	inputs for enabling Master-plan formulation under AMRUT sub-scheme" was organised (16-18 Aug)	participated
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D. International Cooperation:

- At COP-26, Hon'ble Prime Minster announced a special data window for Small Island Developing States (SIDS) to be built by ISRO. With this, SIDS will continue to receive timely information about cyclones, coral-reef monitoring, coastline monitoring, etc. through satellite.
- Chairman, ISRO/Secretary, DOS delivered a talk on 'Accelerating Space Exploration through Global Cooperation' in the Heads of Agency Panel organised by AIAA, ASCEND (USA) on November 15.
- Chairman ISRO delivered a talk on 'Contested Space: Collaborating in the New Golden Age of Space' in the Heads of Space Agencies from QUAD countries session of the Sydney Dialogue organised by the Australian Strategic Policy Institute on Nov 18.
- The 2nd India Japan Space Dialogue meeting was held virtually on Nov 2 with participation from ISRO, MEA, NSCS from Indian side and JAXA, MFA, DOD from Japan side.
- Four ISRO officials have participated in the ISRO-CNES SSA Workshop at Toulouse during November 29 to December 03.
- 27th session of Asia Pacific Regional Space Agency Forum (APRSAF) was conducted in virtual mode during November 30 to December 03.

2. Compliance of CoS Decisions:

No of CoS decisions pending for compliance	Proposed action plan/time lines for compliance of CoS decisions	Remarks
3942/12 5205/5	Under implementation	_
4600/8 5205/1 5205/2 5205/3 5205/6 5291/1 5313/1 5313/2	Under consideration	

- 3. No of Cases of "Sanction for Prosecution" pending for more than three months :- NIL
- 4. Particulars of cases in which there has been a departure from the Transaction of Business Rules or established policy of the Government: NIL
- 5. Status of implementation of e-Governance

Total No. of files	Total No. of e-Files
1093	662

6. Status of Public Grievances:

No. of Public grievances readdressed during the month	No. of Public Grievances pending at the end of the month.
30	107

7. Status of Compliance of ACC's directions on ACC Vacancy Monitoring System.

The detailed status regarding all the posts pertaining to Department of Space has been updated on AVMS. The status of updation of vacancy as on 30.11.2021 is as follows:

- > Total number of posts required to be entered on AVMS: 26
- Number of posts filled as on date: 23
- > Number of posts totally vacant as on date: 03
- Number of posts under premature repatriation 00
- Number of posts under additional charge arrangement: 01
- Number of posts that would fall vacant during the next 06 months: -05

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