

**GOVERNMENT OF INDIA
DEPARTMENT OF SPACE**

Sub: Monthly Summary of Department of space for the month of July 2022

PART- I (Unclassified)

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

A. Satellite Missions:

I. 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 and AzaadiSAT on 7th August, 2022.

II. LVM3-M2/OneWeb India-1 Commercial Mission

The first dedicated commercial mission of GSLV MkIII (LVM3-M2) is scheduled in the third quarter of 2022. The mission will launch multiple communication satellites in a single launch for OneWeb.

III. PSLV-C54/EOS-06 Mission:

PSLV-C54 is scheduled to launch EOS-06, an earth observation satellite in the 3rd quarter of 2022. Various activities pertaining to spacecraft integration and tests are in advanced stages of progress for the scheduled launch.

IV. RLV-LEX Mission

First runway landing experiment [RLV-LEX] of Reusable Launch Vehicle – Technology Demonstrator is scheduled in the 3rd quarter of 2022 from Aeronautical Test Range, Chitradurga, Karnataka.

B. Earth Observations:

- **Agriculture Technology Project (for Govt. of Maharashtra):** Potential kharif sown area for current kharif season in Maharashtra is mapped and is validated by the user.
- **Crop Insurance Support (for AICIL):** Maps and statistics for Bodo paddy growing area are finalized for Rabi season 2021-22, for 21 districts of West Bengal and Crop health factor (CHF) was generated for the current and historical years.
- **National Hydrology Project (NHP, for M/o Jal Shakti):** Validation of Actual Evapotranspiration products is in progress using ground-based observations Methodology development initiated for generation of Actual Evapotranspiration on operational basis.
- **Biodiversity characterization at community level (for DBT):** community level vegetation map for Shettihalli wildlife sanctuary is generated using multi-sensor data and machine learning algorithms
- **GeoMGNREGA (for MoRD):** Ruleset based planning tool component implemented as beta version on Yuktdhara planning portal

- **Utilization of EO Data for Hydrocarbon Exploration (for ONGC):** Satellite data analysis is in progress for identifying geomorphological and structural controls of hydrocarbon prospects.
- **Bhuvan Geoportal:**
 - (i) Bhuvan-Housing for All (Urban) mobile application is modified for beneficiary geo-tagging with OTP based registration, improvised work flow, updated web service and auto-sync construction status.
 - (ii) IRS AWIFS Ortho-data (June 2022) generated and published for Visualization on Bhuvan
- **Disaster Management Support Programme (for MHA, NDMA, SDMAs):**
 - **National Database on Emergency Management (NDEM):** Spatial Flood forecast data for Godavari River is integrated on NDEM portal. Design of NDEM Lite version is complete
 - **Near Real Time Flood Mapping & Monitoring:**
 - Using satellite data, floods were mapped in Assam, Andhra Pradesh, Telangana, Karnataka, Maharashtra and Kerala, 39 flood inundation / value added products were generated and disseminated to NDMA, and respective State Disaster Management Authorities. Flood damages were assessed in Andhra Pradesh & Telangana.
 - Very High resolution multi-sensor and multi-resolution satellite datasets were acquired through activation of International Charter and Sentinel Asia to assess the damages due to floods in Andhra Pradesh and Telangana.
 - **Forest Fire:** Multiple-daily detections of active forest fire have been done and disseminated to FSI and concerned States
- **Satellite Data Acquisition and Dissemination:** 2,482 satellite passes were acquired and archived. About 21,600 satellite data products were downloaded through Bhuvan portal and 5228 products were disseminated through data supply chain.

C. Capacity Building:

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| 1. | Course on “Satellite R.S. of Atmosphere” (11-15 July, 2022) | 3289 participants from 399 institutions |
| 2. | Course on “RS&GIS Applications in agriculture” (25-29 July, 2022) | 1577 participants from 322 institutions |
| 3. | Course on “Machine Learning to Deep Learning: A Journey for Remote Sensing Data Classification” (04-08 July, 2022) | 10164 participants from 810 institutions |

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| 4. | Demonstration of the mobile application "Silk Samagra" at "State Level Workshop on Implementation of Silk Samagra 2" (11-15 July, 2022) | At Manipur. For the states of Meghalaya and Manipur |
| 5. | Two-weeks customised training programme-" Basic course on RS, GIS & GNSS" | 25 Officials from CAPFs (BSF, CRPF, ITPB, SSB) & IB Officials |
| 6. | A web portal for Space Quiz and painting competition for school students | 38620 registrations, 22294 Quiz attempts & 9844 certificates were issued |

D. International Cooperation:

- Specific Cooperative Agreement between ISRO and Mexico Space Agency (AEM) for Crop Monitoring, Drought Assessment and Capacity Building was signed on June 29, 2022.
- ISRO organised an event to celebrate first International Moon Day (IMD) on July 20 at the Jawaharlal Nehru planetarium, Bengaluru and ISRO centres, with invited talks by prominent speakers on the Moon exploration and student specific activities.
- H.E. Ms. Daniela-Mariana Sezonov Tane, Ambassador of Romania to India visited ISRO HQ on July 28 and had a meeting with Secretary, DOS/Chairman, ISRO/.
- ISRO, IN-SPACe & NSIL officials participated in the first meeting of the US-India exchange on space regulatory frameworks on July 21, 2022.
- Letter of Intent between ISRO and CNES, France for discussing the feasibility of establishing an ISRO ground station in French Guyana was signed by ISRO on June 27, 2022 and by CNES on July 13, 2022.

2. No of Cases of 'Sanction of Prosecution" pending for more than three months : NIL

3. Particulars of cases in which there has been a departure from the Transaction of Business Rules or established policy of the Government: NIL

4. Status of ongoing Swachhta Abhiyan (progress under Special Campaign):
The Department has formulated the Swachhta Abhiyan Plan for the year 2022 and under this Swachhta Pakhwada was celebrated from 01.02.2022 to 15.02.2022 across DOS/ISRO Centres/Units Autonomous Bodies. The evaluation for the best maintained Centre/Unit/Autonomous Body is under process.

5. Status of Rationalisation of Autonomous Bodies:

A committee vide Office Order dated 04/10/2016 was constituted for the review of Autonomous Bodies under the Department. Based on the recommendations of the committee, it is proposed to continue the 3 Autonomous Bodies namely PRL,

NESAC& IIST under the Department. SCL has been brought under the administrative control of MeitY, New Delhi. NARL shall be reviewed afresh which is underway. A report on this vide D.O. letter No.DS_8C-19011/16/2022-Sec.Viii dated 11.08.2022 has been sent to Department of Expenditure(DOE), New Delhi and the confirmation is awaited. Treasury Single Account(TSA) has been implemented in PRL. Action is being taken to bring NARL, IIST & NE-SAC under TSA.

6. Information on specific steps taken for utilisation of the Space Technology based tools and applications in Governance and Development:

- 1. M/o Rural Development:** Under the Integrated Watershed Management Programme (IWMP/ WDC-PMKSY) for monitoring Watersheds using Geospatial Technologies, 5,000 locations of watershed development interventions have been geotagged (cumulative 16.56 lakh geotags) and 140 summary reports were generated.
- 2. MoH&UA:** Final version of urban geospatial database for 8 AMRUT cities have been delivered (cumulative completion: 205 / 238).

7. Vacancy position of senior level appointments in the Ministry/Department, including Autonomous Bodies/PSUs:

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 31.07.2022 is as follows:

- Total number of posts required to be entered on AVMS: - 24
- Number of posts filled as on date: - 18
- Number of posts totally vacant as on date: - 06
- Number of posts under premature repatriation - 00
- Number of posts under additional charge arrangement: - 05
- Number of posts that would fall vacant during the next 06 months: -00

8. List of cases in which ACC directions have not been complied with: NIL

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