GOVERNMENT OF INDIA DEPARTMENT OF SPACE

LOK SABHA

UNSTARRED QUESTION NO. 514 TO BE ANSWERED ON WEDNESDAY, DECEMBER 06, 2023

INDIA'S FUTURE SPACE MISSIONS

514. DR. UMESH G. JADHAV:

DR. MANOJ RAJORIA:

SHRI L.S. TEJASVI SURYA:

SHRI NALIN KUMAR KATEEL:

SHRI PRATHAP SIMHA:

SHRI PARVESH SAHIB SINGH VERMA:

Will the PRIME MINISTER be pleased to state:

- (a) the details of India's space programmes and missions to be planned and launched in the year 2024 and 2025;
- (b) the number of such missions to be spearheaded by ISRO and the organisations that are to lead the other space projects;
- (c) the details of the number of Indian Space startups and companies which are working for the development of the space sector and the incentives provided by the Government to assist them; and
- (d) the details of the developments and the impact made by the same?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES & PENSIONS AND IN THE PRIME MINISTER'S OFFICE (DR. JITENDRA SINGH):

- (a) Space missions planned to be launched during the year 2024 and 2025 include INSAT-3DS, NISAR, RISAT-1B, Resourcesat-3, TDS-01, SPADEX, Oceansat-3A, IDRSS, GSAT-20, NVS-02. Further, test flights under the Gaganyaan Programme and Reusable Launch Vehicle (RLV) are also planned in upcoming years.
- (b) All the missions listed above except NISAR are spearheaded by ISRO. NASA-ISRO Synthetic Aperture Radar (NISAR) is jointly being developed by NASA & ISRO.
- (c) The total number of startups and companies who have provided their capabilities on IN-SPACe digital platform for space sector as on November 2023 is 523. Out of which 297 have submitted application to IN-SPACe seeking support from ISRO for R&D and testing. With the unlocking of the Space Sector for the private sector by the Government, following support activities are provided to the private sector:
 - 1. Providing mentorship as well as ISRO facility utilization support.
 - 2. Technology Transfer to NGEs.
 - IN-SPACe Seed fund support to startups to transform novel idea into a prototype development.

- 4. IN-SPACe Price support for NGEs for utilization of ISRO's facility.
- 5. Creation of IN-SPACe digital platform to connect all the stake holders of space eco system.
- Established IN-SPACe Design Lab, where startups can use high end simulation software for design and analysis of critical space systems/subsystems.
- 7. Skill development in emerging space technology area.
- (d) The government has announced the Indian Space Policy 2023, which enables end to end participation of NGEs in all domain of space activities. Due to incentives and reform in the space sector, following are the developments and impact:
 - 1. The number of Space Start-Ups have gone up, from just 1 in 2014 to more than 200 in 2023.
 - 2. The investment in Indian Space Start-Ups has increased to \$ 124.7 Million.
 - 3. M/s. Dhruva Space, M/s. Pixxel, M/s. Space Kidz launched their own satellites. Many other Space Industries and Start-Ups are also building their own Satellites & constellations. These satellites shall contribute to applications in agriculture, disaster management, environmental monitoring, etc.
 - 4. M/s. Skyroot Aerospace Pvt. Ltd. launched their sub-orbital launch vehicle.

- 5. A private launchpad and mission control center established within the ISRO campus for the first time by M/s. Agnikul Cosmos Pvt. Ltd. Sub-orbital launch by Agnikul scheduled shortly.
- 6. Companies like OneWeb, SPACE-X, SES, AWS and others have been exploring satellite-based communication solutions. Private players are increasingly participating in space-based applications and services.
- 7. Satellite integration and testing facilities are coming up in private sector.
- 8. The local manufacturing of the satellite subsystems and Ground systems are being taken up by private sector.
- Indian private space companies are increasingly entering into collaborations and partnerships with international space organizations and companies.
