

**GOVERNMENT OF INDIA**

**DEPARTMENT OF SPACE**

**LOK SABHA**

**UNSTARRED QUESTION NO. 5386**

**TO BE ANSWERED ON WEDNESDAY, APRIL 05, 2023**

**STATUS OF GAGANYAAN PROGRAMME**

**5386. SHRI JAGANNATH SARKAR:**

**Will the PRIME MINISTER be pleased to state:**

- (a) the current status of the Indian Gaganyaan Human Space Flight Programme;**
- (b) whether the Government has the details of the major space programmes and flights to be launched with indigenously developed technologies in the near future; and**
- (c) if so, the details thereof, if not, the reasons therefor?**

**ANSWER**

**MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PUBLIC  
GRIEVANCES & PENSIONS AND IN THE PRIME MINISTER'S OFFICE**

**(DR. JITENDRA SINGH):**

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- (a) The current status of the Indian Gaganyaan Human Space Flight Programme is as follows:**

- i. All the subsystems pertaining to Test Vehicle TV-D1 mission viz., stage hardware, pyros, auxiliary systems, launch complex systems etc. have been realized. The Crew Module for TV-D1 mission is delivered.**
- ii. Static tests of all Crew Escape System motors have been completed. Batch testing is in progress.**
- iii. First semester of Astronaut training has been completed. Corresponding crew evaluation and assessment activities have also been completed. Second semester is underway.**
- iv. Orbital module configuration for uncrewed G1 mission is finalised and realization of hardware commenced. The qualification of Deceleration System Parachutes and pyros via Ground and Air drop tests are underway.**
- v. Recovery trials commenced at Water Survival Test Facility (WSTF), Indian Navy.**
- vi. The MoU and contracts related activities with national and international agencies are progressing well.**

**(b) & (c)**

**Yes, Sir. Several missions on the indigenously developed launch vehicles viz. PSLV, GSLV, LVM3 and SSLV are planned in near future. A total of 12 launch vehicles missions i.e. 7 flights of PSLV, 3 flights of GSLV and 1 flight each of SSLV & LVM3 are planned in the upcoming months of 2023 and/or early 2024, in addition to the test flights for Gaganyaan program.**

**A brief description of major space programs and flights to be launched with indigenously developed technologies in the near future:**

- **7 flights of PSLV are planned to be held with following spacecrafts:**
  - **Launch of Technology Demonstration Satellite – TDS 01, comprised of indigenous TWTA, Electric Propulsion system and a host of other technologies.**
  - **3 dedicated commercial missions of NSIL carrying TeLEOS-2, DS-SAR and ANWESHA, respectively.**
  - **Aaditya-L1 – the first Indian Space mission to study the Sun.**
  - **XPoSAT– The X-Ray Polarimeter Satellite, India’s first dedicated polarimetry mission to study the dynamics of bright astronomical X-ray sources in extreme conditions.**
  - **Radar Imaging Satellite – RISAT 1B.**
- **The Reusable Launch Vehicle Landing Experiment [RLV-LEX] is also scheduled during early 2023.**
- **3 flights of GSLV are planned to be held, carrying NVS-01, INSAT-3DS and NISAR spacecrafts respectively.**
- **The configuration and design of various systems related to Gaganyaan is completed and the programme has entered the realization and testing phase. The first test vehicle mission, TV-D1, is planned in mid-2023.**
- **The launch of SSLV D3 is also planned in 2023.**

- **Chandrayaan-3 - the follow-up mission to Chandrayaan-2, intended to demonstrate soft landing on the lunar surface, to be launched aboard the LVM3.**
- **Besides, a host of private sector activities, including launch vehicles and satellite launches, are also expected to happen in 2023.**

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