GOVERNMENT OF INDIA
DEPARTMENT OF SPACE

LOK SABHA
UNSTARRED QUESTION NO.632

TO BE ANSWERED ON WEDNESDAY, JULY 19, 2017

ACHIEVEMENTS OF ISRO PROGRAMME

632. SHRI RAJU SHETTY:

Will the PRIME MINISTER be pleased to state:

(a) whether the country's space programme is moving in positive direction;

(b) if so, the details of this recent achievements of the programmes in brief;

(c) whether any activities are proposed to be taken up shortly based on the experience gained in recent achievements; and

(d) if so, the details thereof and if not, the reasons therefor?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PG & PENSIONS AND IN THE PRIME MINISTER'S OFFICE

(DR. JITENDRA SINGH):

(a) & (b)

Yes, Madam. Indian space programme is striving to provide increased space based capability and witnessed significant achievements in recent times. Some of the notable achievements include-

(i) **Operationalisation of GSLV-MkII with home-grown Cryogenic Upper Stage (CUS) with indigenous capability for launching 2-tonne class satellites.**

(ii) **Successful launch of first developmental flight of GSLV-MkIII, which validated new version of Indigenous Cryogenic Engine. With this capability, it will be possible to launch up to 4-tonne class of communication satellites into Geosynchronous Transfer Orbits (GTO).**

(iii) **Realisation of South Asia Satellite to enable South Asian countries to establish SATCOM based services such as Television/DTH, VSAT, e-governance, banking, tele-medicine & tele-education etc., with coverage over South Asia.**

(iv) **Launch of 104 Satellites in a single PSLV (PSLV-C37) mission– Maximum satellites launched in a single launch mission till date.**

(v) **Realisation of 7-satellite NavIC (Navigation – Indian Constellation) to provide Position, Navigation and Timing Services.**

(vi) **Augmentation of Satellite Communication with high-throughput communication satellites.**

(vii) **Successful flight testing of Technology Demonstrators of Re-usable Launch Vehicle (RLV-TD) and Scramjet Air-breathing Engine.**

(viii) INSAT-3D & 3DR together are providing meteorological data every 15 minutes for enabling weather forecasting. Ocean surface wind vector data from SCATSAT-1 are being used operationally by global user community.

(ix) Augmentation of earth observation capability with High Resolution Cartographic and Resource monitoring satellites.

(x) Placing a unique multi-wavelength observatory placed in orbit, carrying instruments realised through Indian academic institutes to enhance understanding of universe and astronomical phenomena.

(xi) Enabling host of applications using synergy of earth observation, communication and navigation satellites in governance and development.

(c) & (d)

Based on the experience gained, various activities are planned in the near future, which include:

(i) Second Developmental flight of GSLV-Mk III with indigenously developed high thrust cryogenic engine and stage in first half of 2018.

(ii) Realisation of High throughput Communication 'GSAT-11', carrying Ku & Ka Band communication payloads with multiple spot beams, capable of providing up to 10 Gbps throughput.

(iii) **Launch of Chandrayaan-2 Mission India's second Lunar mission, Chandrayaan-2 with indigenous Lander, Rover and Orbiter Modules during first half of 2018.**

(iv) **Augmentation of Indigenous navigation services.**

(v) **Launch of high resolution cartographic satellite for large scale mapping applications, which include infrastructure planning, urban & rural development, utility management, natural resources inventory & management, disaster management.**

*****