

GOVERNMENT OF INDIA
DEPARTMENT OF SPACE
RAJYA SABHA
UNSTARRED QUESTION NO. 1088

TO BE ANSWERED ON THURSDAY, FEBRUARY 10, 2022

PERFORMANCE OF SATELLITE PROGRAMMES

1088. SHRI IRANNA KADADI:

Will the PRIME MINISTER be pleased to state:

- (a) the details of total number of satellites launched by the country till date;
- (b) whether Government has set any target to launch satellites for the benefit of various sectors of the country;
- (c) if so, the details thereof;
- (d) whether the targeted objectives have been achieved till date and if so, the details thereof, and if not, the reasons therefor; and
- (e) whether Government is taking any effective measures to ensure better performance of the satellite programmes in the country and if so, the details thereof?

ANSWER

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

(DR. JITENDRA SINGH):

- (a) Beginning in the year 1975 and till date ISRO has launched a total of 129 satellites of Indian Origin and 342 foreign satellites belonging to 36 countries of which nearly 39 satellites are commercial satellites and rest are nano-satellites. Today, India has a total of 53 operational satellites in space providing various identified services to the nation. 21 of these are communication satellites, 8 are Navigation satellites, 21 are Earth Observation Satellites and 3 are Science Satellites.

(b) & (c)

The satellite enabled data and services are being used for the benefit of various sectors of the country. These include Television broadcasting, Direct-to-Home, ATM, Mobile communication, tele-education, tele-medicine and advisories on weather, pest infestation, agro-meteorology and potential fishing zones. Satellite data is also used for

crop production estimation, crop intensification, and agricultural drought assessment, wasteland inventory, identifying ground water prospect zones, inland aquaculture suitability and disaster risk reduction. ISRO has plans to launch more number of satellites to further enhance operational applications and cater the needs of emerging applications and user ministerial requirements in the country.

- (d) Many of the applications have been effectively adopted by stakeholder departments for operational use. A few of such applications include: Potential Fishing Zone Forecast & Ocean State Forecast by Indian National Centre for Ocean Information Services, (MoES), Crop Acreage and Production Forecasting & National Agricultural Drought Assessment and Monitoring System by Mahalanobis National Crop Forecast Centre, (MoA&FW), Biennial Forest Cover Assessment by Forest Survey of India (MoEF&CC), Irrigation Infrastructure Assessment by Central Water Commission (Ministry of Jal Shakti), Weather forecasting by India Meteorological Department (MoES), Ground Water Prospect and Suitable Recharge Locations' mapping (Ministry of Jal Shakti), Integrated Watershed Management Programme & MGNREGA by MoRD.

As of now, 17 communication satellites are operational providing 293 transponders in different bands and 25 Gbps High Throughput Satellite (HTS) capacity. These satellites are supporting Television Broadcast, DTH TV, VSAT connectivity for banks, commercial enterprises, strategic & societal communications. HTS capacity support broadband connectivity to Gram Panchayats under BharatNet programme.

- (e) To promote utilisation of space technology in State Government departments, State level workshops have also been conducted in 17 States. Other measures include (i) conduct of user interaction meets and utilization programmes; (ii) capacity building for space applications; (iii) creation of an outreach facility; (iv) development of geospatial tools and information systems; (v) Proof of Concept demonstration; (vi) Institutionalisation of space applications; and (vii) setup of PC-SAMS i.e., Planning Committee-Space Application Management System under the chairmanship of Principal Scientific Adviser to PM with members from different central ministry secretaries.

Further, Government has also announced reforms in June, 2020, in the space sector towards enabling the private players to provide end to end services. Subsequently a national level autonomous Nodal Agency namely Indian National Space Promotion and Authorization Centre (IN-SPACe) has been established under DOS for promoting, handholding, authorising and licensing private players to carry out Space Activities
