

**GOVERNMENT OF INDIA
DEPARTMENT OF SPACE**

**LOK SABHA
UNSTARRED QUESTION NO.1076**

TO BE ANSWERED ON WEDNESDAY, FEBRUARY 8, 2017

ROCKETS LAUNCHED BY ISRO

1076. SHRI KAPIL MORESHWAR PATIL:

PROF. PREM SINGH CHANDUMAJRA:

SHRI GAURAV GOGOI:

Will the PRIME MINISTER be pleased to state:

- (a) the number of rocket launches undertaken by ISRO during the last three years;**
- (b) the number of foreign satellites launched, expenditure incurred thereon and revenue raised therefrom;**
- (c) the number of rocket launches and satellite launches proposed during the ensuing three years; and**
- (d) the funds provided and the R&D activities undertaken by ISRO during the said period along with the new technologies developed?**

ANSWER

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

(DR. JITENDRA SINGH):

- (a) During the last three years i.e. January 2014 to December 2016, ISRO has undertaken seventeen (17) rocket launches,**

which includes thirteen (13) launches of PSLV, three (03) launches of GSLV and one (01) experimental flight of GSLV-MkIII.

- (b) During the last three years i.e. January 2014 to December 2016, 44 satellites from 8 countries have been successfully launched by ISRO on-board Polar Satellite Launch Vehicles (PSLVs). These satellites were launched under a commercial arrangement between Antrix Corporation Limited (Antrix), the commercial arm of ISRO and the foreign customers. Antrix has earned a total revenue of about 98 Million Euros through launching of these 44 foreign satellites.
- (c) About Twenty-Four (24) satellites are proposed to be realised during the ensuing three years i.e. January 2017 to December 2019. Out of these, twenty-two (22) satellites will be launched using twenty Indian launch vehicles and two (2) satellites will be launched through procured launch services.
- (d) During the last three years i.e. 2013-14, 2014-15 and 2015-16, the funds allocated to Department of Space are given below:

Financial Year	Amount Allocated (RE) (₹ in Crore)
2013-14	5172.04
2014-15	5826.00
2015-16	6959.44

During the above said period, various R&D activities undertaken by the Department towards development of

technologies include (i) development of Air Breathing Propulsion, (ii) Re-usable Launch Vehicle-Technology Demonstrator, (iii) High Thrust Cryogenic Engine (iv) re-entry technologies Crew Module, (v) Multi-object Tracking Radar (vi) Lithium ion Batteries, (vii) 75mN Stationery Plasma Thrusters, (viii) Pressure Transducer (ix) Search and Rescue Beacon, (x) 6m S-Band unfurlable Antenna, (xi) NavIC constellation for navigational Services (xii) Geo-stationary atmospheric sounder, (xiii) Critical Technologies for Human Spaceflight, (xiv) Indigenization of Space Materials & Components.
