

**GOVERNMENT OF INDIA
SPACE
LOK SABHA**

UNSTARRED QUESTION NO:4092

ANSWERED ON:18.08.2010

ACHIEVEMENTS UNDER SPACE PROGRAMME

Mahtab Shri Bhartruhari

Will the Minister of SPACE be pleased to state:

- (a) the broad achievements of the country under the Space Programme during the current Five Year Plan;and
- (b) the specific details of India's efforts so far to send satellite again to Moon?

Answer

MINISTER OF THE STATE IN THE PRIME MINISTER'S OFFICE, MINISTER OF THE STATE IN THE MINISTRY OF PERSONNEL,PUBLIC GRIEVANCES & PENSIONS, MINISTRY OF THE STATE IN THE PARLIAMENTARY AFFAIRS, MINISTRY OF THE STATE IN THE MINISTRY OF SCIENCE & TECHNOLOGY AND MINISTRY OF THE STATE IN THE MINISTRY OF EARTH SCIENCES (SHRI PRITHVIRAJ CHAVAN):

(a) Following are the broad achievements of India during the current (11th) Five Year Plan:

- (i) The successful launch of Chandrayaan-1 and historic feat of placing on Moon's surface the Indian tri-colour on November 14, 2008. The analysis of scientific data from Chandrayaan-1 has led to the most significant scientific outcome of detection of water molecules on lunar surface and rocks. This is a major discovery in planetary science and has tremendous implications in planning future term lunar and planetary explorations.
 - (ii) Launching TEN satellites including Cartosat-2A and IMS-1 in a single launch of PSLV-C9 on April 28, 2009.This launch has demonstrated the versatility and reliability of India's PSLV launch vehicle
 - (iii) Augmenting the remote sensing capability in the country with the launching of four remote sensing satellites (Cartosat-2A, Cartosat-2B, Oceansat-2 and RISAT-2). Remote sensing data is vitally used for national natural resource management and disaster management support applications in the country.
 - (iv) Augmenting the communication infrastructure with the launching of high power satellite INSAT-4CR onboard GSLV F04 for DTH applications.
 - (v) Launching of three Mini/ Micro satellites viz., IMS-1, ANUSAT (built by Anna University) and STUDSAT (built by Engineering College students). This has provided opportunities to enthuse the Indian student community in space technology.
 - (vi) Conducting qualification test of indigenously developed cryogenic stage. The indigenous cryogenic stage is used in upper stage of GSLV launch vehicle.
 - (vii) Progress in Space Commerce - Launching of 19 commercial small/ micro/ nano satellites for international customers and building a state-of-the-art communication satellite (W2M) for an European customer.
 - (viii) Successful commissioning of a world-class Solid Propellant Plant at SDSC-SHAR, Sriharikota for manufacturing large solid stage booster segments (S-200) required for GSLV Mk-III launch vehicle under development.
 - (ix) Setting up of Indian Institute of Space Science and Technology (UST), an important Human Resource Development initiative.
- (b) India has successfully sent Chandrayaan-1 satellite to Moon In October 2008. The work on design and development of India's next satellite to Moon Chandrayaan-2 has also been taken up.