

**GOVERNMENT OF INDIA
SPACE
LOK SABHA**

UNSTARRED QUESTION NO:4706
ANSWERED ON:25.08.2010
LAUNCH OF SATELLITE
Ganeshamurthi Shri A.

Will the Minister of SPACE be pleased to state:

- (a) whether the Government has any future programme to launch any satellite into space/ orbit for research purposes;
- (b) if so, the details thereof alongwith the time fixed for the said purpose;
- (c) whether the Government has signed any agreements with any foreign countries in this regard; and
- (d) the budget allocated/earmarked for this purpose?

Answer

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

(a) Yes, Sir.

(b) The following satellites planned to be launched in future by Indian Space Research Organisation will contribute to the research activities in the fields of Ocean, Atmosphere, Weather & Climate, Astronomy and Astrophysics, Planetary Science and Exploration, Solar Terrestrial physics including Space weather, Space Meteorology and Microgravity science/ applications.

- i. YOUTHSAT will provide input to study solar flare X-rays, gamma rays and charged particles, and Earth's upper atmosphere and Ionosphere. YOUTHSAT is planned to be launched by December 2010.
- ii. Megha Tropiques will contribute to the studies related to convective systems that influence the tropical weather and climate. Megha Tropiques is planned to be launched in the first half of 2011.
- iii. SARAL will provide information on sea surface heights and also act as a satellite based data collection platform. SARAL satellite is planned to be launched in the second half of 2011.
- iv. ASTROSAT is the first dedicated Indian space astronomy mission for simultaneous multi-wavelength observations of stellar and galactic sources. It will provide an opportunity for the Indian astronomers to carry out research in the frontier areas of X-ray astronomy and ultraviolet astronomy and would address some of the outstanding problems in the high energy astrophysics. ASTROSAT is scheduled to be launched during 2011.
- v. Chandrayaan-2, a logical extension of Chandrayaan-1 mission to carry out in-situ analysis of lunar samples and study lunar surface properties using instruments onboard Orbiter and Rover. Chandrayaan-2 will be launched during 2013.
- vi. ADITYA-1, the first Indian space based solar coronagraph will study the coronal magnetic field structures and evolution of the coronal magnetic field, and consequently the crucial physical parameters for space weather. ADITYA-1 is planned for launch during the solar maximum in 2012-2013 timeframe.

(c) Yes, Sir.

YOUTHSAT is a joint mission with GLAVKOSMOS/ Moscow University.

Megha Tropiques and SARAL satellites are collaborative missions with CNES (Centre National D'etudes Spatiales) the French National Space Agency.

In ASTROSAT project, ISRO has signed an agreement with Canadian Space Agency (CSA) for procuring detectors for the payload, Ultra Violet Imaging Telescope.

Chandrayaan-2 is a joint lunar mission between Indian Space Research Organisation (ISRO) and Russia's Federal Space Agency (ROSCOSMOS).

(d) The Budget allocated for the above projects are as follows:

Satellite Budget (in crores)

i YOUTHSAT 24.45
ii Megha Tropiques 81.60
iii SARAL 73.75
iv ASTROSAT 177.85
v Chandrayaan-2 425.00
vi ADITYA-1 127.75