

**GOVERNMENT OF INDIA  
SPACE  
LOK SABHA**

UNSTARRED QUESTION NO:2465  
ANSWERED ON:28.03.2012  
SPACE RESEARCH  
Rao Shri Konakalla Narayana

**Will the Minister of SPACE be pleased to state:**

- (a) the progress made by India in space research during the last three years;
- (b) whether India is in a position to build its own satellite indigenously for space research; and
- (c) if so, the details of such projects and the benefits accrued/likely to accrue as a result thereof?

**Answer**

MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PG & PENSIONS AND IN THE PRIME MINISTER'S OFFICE (SHRI V. NARAYANASAMY):

(a) During the last three years India has made significant progress towards space research related activities viz. development of Satellites, Launch vehicles and space technology based applications. The highlights are as given below:

# Launch of OCEANSAT-2 by PSLV-C14 and operationalisation of satellite for ocean state forecast and potential fishing zone monitoring.

# Launch of CARTOSAT-2B by PSLV-C15 and operationalisation for high resolution imaging with capability of better than 1m resolution for cartographic application.

# Launch of RESOURCESAT-2 by PSLV-C16 and operationalisation for land and water resource management applications.

# Establishment of GPS Aided and Geo Augmented Navigation (GAGAN) system for providing positional services for civil aviation and realisation of GAGAN payload on-board GSAT-8.

# Launch of GSAT-8 satellite through procured launch and GSAT-12 satellite by PSLV-C17 and operationalisation for augmenting the satellite communication infrastructure in the country.

# Launch of MEGHA-TROPIQUES satellite by PSLV-C18 for climate and weather monitoring.

# Development of Radar Imaging Satellite (RISAT-1) for all weather imaging capability.

# Successful ground testing of Indigenous Cryogenic engine and realization of flight unit of Indigenous Cryogenic Upper Stage for the GSLV launch vehicle programme.

# Development and successful testing of S200 solid strap-on motor and L110 liquid core stage for the advanced heavy lift launcher GSLV-MkIII.

# Host of space based applications for natural resource management, infrastructure planning, communication and societal applications including education, health, rural development etc.

(b) Yes, Sir. India has established the indigenous capability to build its own satellites for communication (INSAT / GSAT), Navigation, earth Observation (IRS) and Space Science research purposes.

(c) India has established two operational space systems INSAT/ GSAT for communication and IRS for earth observation purposes. Presently, there are 20 operational satellites in space which are meeting the developmental needs of the country in the areas of natural resource management, infrastructure planning, communication and societal applications including education, health and rural development.