

Communications satellite with military application

2689. SHRI A. K. SELVARAJ: Will the PRIME MINISTER be pleased to state:

- (a) whether the launch of another powerful communications satellite with military applications GSAT 11 has been postponed;
- (b) if so, the details thereof;
- (c) whether ISRO would conduct a few more tests on the satellite as a precaution to rectify glitches;
- (d) whether this is because of the loss of contact with GSAT 6A recently; and
- (e) if so, the details thereof and the present status thereof?

THE MINISTER OF STATE IN THE DEPARTMENT OF SPACE (DR. JITENDRA SINGH): (a) and (b) Yes Sir, GSAT-11 launch is postponed. Based on the experiences of GSAT-6A, Apex committee suggested a few extra tests on GSAT-11. Since this facility is not available at the launch site, the satellite was brought back to Bangalore. The spacecraft has successfully passed the test and is now ready for launch.

(c) All the necessary tests have been performed and it is confirmed that the spacecraft is healthy for launch.

(d) Yes, with GSAT-6A on-orbit-observations, it was decided to conduct this extra test (Critical pressure test).

(e) Presently the satellite completed all the tests and is planned for launch on 30th November 2018.

Launching of State-of-art satellites

2690. DR. L. HANUMANTHAIHAH: Will the PRIME MINISTER be pleased to state:

- (a) whether Government has any proposal to launch more State-of-the art satellites to further enhance operational applications and cater the needs of emerging applications;
- (b) if so, the details thereof; and
- (c) whether Government has identified the areas/sectors requiring such enhancements?

THE MINISTER OF STATE IN THE DEPARTMENT OF SPACE (DR. JITENDRA SINGH): (a) Yes, Sir. ISRO has planned to launch more number of state-of-the-

art satellites to further enhance operational applications and cater to the needs of emerging applications.

(b) The details of the State-of-the art satellites approved for launch till 2019-20 are:—

- (i) Third generation Cartosat series satellite for very high resolution mapping
- (ii) Second generation stereo imaging satellite for Digital Elevation Model
- (iii) Geostationary Imaging Satellite (GISAT) for Earth observation from Geostationary Orbit
- (iv) Third generation Ocean imaging satellite for ocean colour, sea surface temperature mapping and ocean surface wind vector mapping
- (v) Third generation ResourceSat series of satellite with improved spatial resolution and swath
- (vi) C-band microwave imaging satellite for all weather and day and night imaging
- (vii) Constellation of high resolution imaging satellites for frequent revisit
- (viii) Nanosatellite for Aerosol monitoring
- (ix) Satellite for monitoring chlorophyll fluorescence and radiation environment

(c) The areas requiring enhancement of operational applications, include monitoring of natural resources, crop acreage estimation and production forecasting, monitoring of surface water spread, potential fishing zone forecasting, near-real time monitoring of disasters, high resolution digital elevation model of the country, infrastructure planning and monitoring, and so on.

Mapping of Kharif rice area

2691. SHRI MAHESH PODDAR: Will the PRIME MINISTER be pleased to state:

(a) whether ISRO has done any mapping and inventorying of Kharif rice area in Jharkhand under the Bringing Green Revolution to Eastern India (BGREI) scheme;

(b) if so, the details of all the analysis of mapping done during the last one year; and

(c) the details of steps taken by Government to help farmers with these analysis?

THE MINISTER OF STATE IN THE DEPARTMENT OF SPACE (DR. JITENDRA SINGH): (a) Mapping and inventorying of Kharif rice area in Jharkhand is carried out