## Satellite to monitor sea water levels

3360. SHRI A. ELAVARASAN: Will the PRIME MINISTER be pleased to state:

- (a) whether India has decided to launch a satellite to monitor sea water levels in collaboration with the French National Space Agency (FNSA); and
  - (b) if so, the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF PARLIAMENTARY AFFAIRS (SHRI V. NARAYANASAMY): (a) Yes Sir.

(b) India plans to launch SARAL (Satellite with ARGOS and ALTIKA) satellite in collaboration with the French National Space Agency (Centre National D'etudes Spatiales - CNES) to monitor the sea water levels.

The SARAL satellite will carry an Altimeter (ALTIKA) for studying the sea surface heights; and ARGOS payload, which is a satellite based data collection platform. The satellite is planned to be launched in 2011.

## Space exploration by ISRO

3361. SHRI SHADI LAL BATRA: Will the PRIME MINISTER be pleased to state:

- (a) the whether ISRO has any plans for space exploration in the coming years in collaboration with other foreign country;
  - (b) if so, the details thereof; and
  - (c) by when such exploration would be carried out?

THE MINISTER OF STATE IN THE MINISTRY OF PARLIAMENTARY AFFAIRS (SHRI V. NARAYANASAMY): (a) Yes Sir.

- (b) Chandrayaan-II, the second mission to the Moon, is a joint effort between India and Russia. ISRO will have the prime responsibility for the Orbiter and Rover; and Russian Space Agency (ROSCOSMOS), will be responsible to provide the Lander module. The spacecraft will be launched using India's Geosynchronous Satellite Launch Vehicle (GSLV) from Sriharikota, India.
  - (c) The Chandrayaan-II mission is expected to be realized during 2013.

## Indigenous technology for Chandrayaan-II

3362. SHRI VIJAY JAWAHARLAL DARDA: Will the PRIME MINISTER be pleased to state:

(a) whether indigenous space technology so far developed by ISRO experts has been utilized in Chandrayaan-II, which is scheduled to be launched in 2013 from Sriharikota;