GOVERNMENT OF INDIA DEPARTMENT OF SPACE

RAJYA SABHA

UNSTARRED QUESTION NO. 1224

TO BE ANSWERED ON THURSDAY, JULY 29, 2021

LAUNCH OF EARTH OBSERVATION SATELLITE

1224. SHRI SAMBHAJI CHHATRAPATI:

Will the PRIME MINISTER be pleased to state:

- (a) whether Government has plans to launch an Earth Observation Satellite to have realtime images of the borders and to quickly monitor natural disasters;
- (b) the details of other important observations the satellite is capable to record;
- (c) whether Earth Observation Satellite is proposed to be followed by Small Satellite Launch Vehicle shortly, and
- (d) how far the technology of SSLV is different from PSLV and comparatively cost effective?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PG & PENSIONS AND IN THE PRIME MINISTER'S OFFICE (DR. JITENDRA SINGH):

- (a) ISRO has realized a Geo-imaging satellite; "EOS-03", for Earth Observation from Geostationary Orbit, and is scheduled for launch in third quarter (Q3) of 2021. EOS-03 is capable of imaging the whole country 4-5 times daily, and would enable near-real time monitoring of natural disasters like floods & cyclones.
- (b) In addition to natural disasters, EOS-03 would also enable monitoring of water bodies, crops, vegetation condition, forest cover changes etc.
- (c) Yes, Sir. The first developmental flight of Small Satellite Launch Vehicle or SSLV is scheduled in the fourth quarter of 2021 from Satish Dhawan Space Centre, Sriharikota.

(d) ISRO's vast experience in Solid propulsion and heritage of proven design practices has enabled SSLV to be developed as a cost-effective, three stage, all-solid launch vehicle with a payload capability of 500 kg to 500 km planar orbit or 300 kg to Sun Synchronous Polar Orbit. SSLV is ideal for on-demand, quick turn-around launch of small satellites. The major technologies developed as part of realization of SSLV are flexible nozzle control with electro-mechanical actuators for all stages, miniaturized avionics and a velocity trimming module in the upper stage for precise satellite injection.

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