

GOVERNMENT OF INDIA

DEPARTMENT OF SPACE

LOK SABHA

UNSTARRED QUESTION NO. 1750

TO BE ANSWERED ON WEDNESDAY, DECEMBER 08, 2021

SPACE WASTE

1750. SHRI PARVESH SAHIB SINGH VERMA:

Will the PRIME MINISTER be pleased to state:

- (a) the details of the amount of Space waste that India produced on a yearly basis during the last three years;**
- (b) whether India follows any procedure to extract the Space waste from the orbit of the earth and if so, the details thereof; and**
- (c) if not, the reasons therefor?**

ANSWER

**MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PG &
PENSIONS AND IN THE PRIME MINISTER'S OFFICE**

(DR. JITENDRA SINGH):

- (a) ISRO strives towards long term sustainability of the space environment by following all the UN guidelines for space debris mitigation as well as the guidelines of the Inter-Agency Space Debris Coordination Committee (IADC), an international governmental forum for the worldwide coordination of activities related to the issues of man-made and natural debris in space. The guidelines include post-mission disposal of satellites and rocket bodies efficiently**

so that the space debris (space waste) produced by India does not stay in orbit. At the end of each mission, the space debris or the satellite/rocket at the end of its operational life is de-orbited quickly with a series of carefully planned maneuvers.

- (b) Yes Sir. Due to the post-mission disposal activities carried out by ISRO, the only space debris (space waste) left after any mission is the final-stage rocket-body which is deorbited to a lower orbit to aid natural orbital decay due to atmospheric drag. The space debris later re-enters the Earth's atmosphere naturally within 20 years and burns due to aerodynamic heating caused by air friction. ISRO has also initiated research and development activities on active debris removal to extract space debris from space.**

- (c) Does not arise.**
