

ISRO's new SSLV programme

January 27, 2022

In news –Recently, ISRO chairman has mentioned the launch of indigenous new launch rockets, called the Small Satellite Launch Vehicle (SSLV)-D1 Micro SAT in April 2022.

About SSLV programme-

- The SSLV is intended **to cater to a market for the launch of small satellites into low earth orbits.**
- Need for the SSLV emerged as the launch of small satellites has until now been dependent on **'piggy-back' rides** with big satellite launches on ISRO's Polar Satellite Launch Vehicle.(PSLV)
- **SSLV can carry satellites weighing up to 500 kg to a low earth orbit** while the tried and tested PSLV can launch satellites weighing in the range of 1000 kg.
- **It is perfectly suited for launching multiple microsattellites at a time and supports multiple orbital drop-offs.**
- SSLV is a **three-stage all solid vehicle**, which will have the option of multiple satellite mounting options for nano, micro and small satellites.
- The SSLV is the **smallest vehicle at 110-ton mass at ISRO.**
- It will take only 72 hours to integrate, unlike the 70 days taken now for a launch vehicle. Only six people will be required to do the job, instead of 60 people.
- The entire job will be done in a very short time and the cost will be only around Rs 30 crore.
- It will be an on-demand vehicle.
- The SSLV received a commercial booking in 2019 itself from the US space launch services intermediary Spaceflight Inc.
- The launch of the maiden flight of the SSLV was scheduled for July 2019 but has been delayed due to

setbacks from the Covid 19 crisis and other issues.

- The government has sanctioned Rs 169 crores for the development of the project, which covers the development & qualification of the vehicle systems and the flight demonstration through three development flights (SSLV-D1, SSLV-D2 & SSLV-D3).