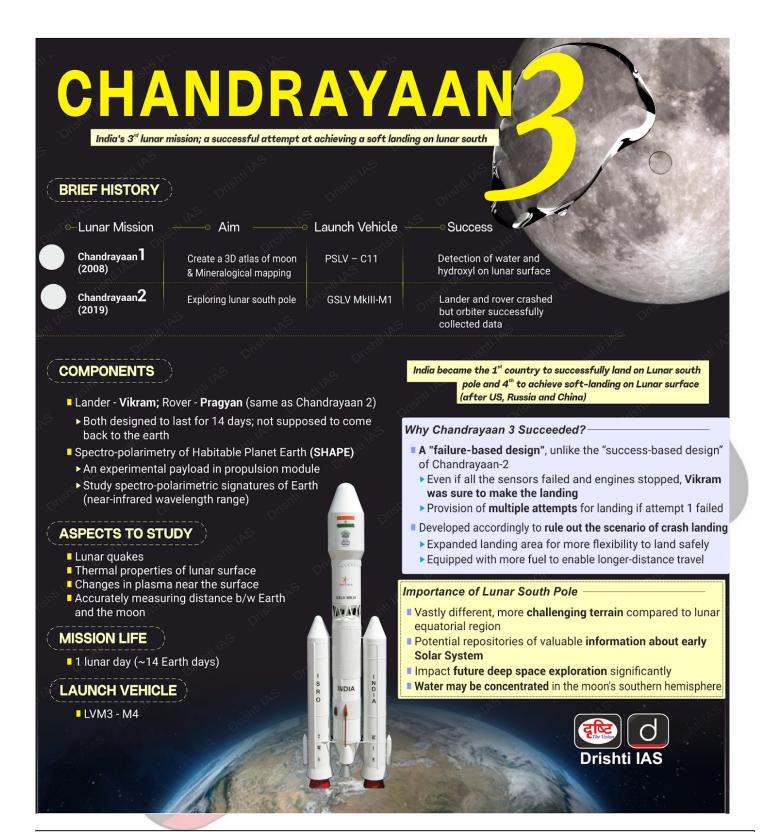


Chandrayaan-5 (LUPEX)

Source: IE

Following the successful soft landing of Chandrayaan-3 and the proposed lunar sample return by ISRO's Chandrayaan-4 mission, India and Japan have jointly planned the upcoming Chandrayaan-5 (LUPEX) mission to study the Moon's surface and the subsurface for locating lunar water and ice deposits.

- Chandrayaan-5 also known as <u>LUPEX (Lunar Polar Exploration)</u> is a joint lunar mission by <u>ISRO (India)</u> and JAXA (Japan's space agency), scheduled for 2027-28 launch on Japan's H3 rocket.
 - Rover will be developed by JAXA and lander by ISRO.
 - It will carry 7 scientific instruments, including a mass spectrometer by ESA and neutron spectrometers by NASA.
- Mission Objectives:
 - Mapping lunar water presence.
 - Drilling lunar regolith to analyze water content, quality, and composition.
 - Performing in-situ scientific observations using spectrometers and sensors.
- It is a proposed 100 days (3.5 months) with possible extension to a year and an attempt to explore the Moon's far side.
- Chandrayaan-4 will be a lunar return sample mission, scheduled before Chandrayaan-5.
- Chandrayaan-3 made India the first country to soft-land on the Moon's south pole in 2023.



Read More: Evolution of India's Space Program