

India's recent journey in the field of space science is commendable.

At one time, due to a lack of resources with the Indian Space Research
Organization (ISRO), rockets were taken to the launch site by bullock
carts, but due to scientists, India is touching new dimensions today.

A look at India's wondrous achievements in space science-





ISRO was founded by Dr. Sarabhai on August 15, 1969. Prior to the installation, in 1963, India launched the first rocket, which was carried on a bicycle to the launch site in Thumba village of Kerala.











Aryabhatta, 1975

100 mm

The Aryabhatta spacecraft was named after the famous Indian astronomer. It was the country's first satellite. It proved to be a milestone in India's space programme. It was completely indigenous and was launched in 1975 with the help of the Soviet Union.





Indian rocket launches satelli

35 kg 'Rohini' goes into 90 minute orbit

The state of the s

GREAT LEAP FOR

SLV-3, 1980

SLV-3, 1980: Indian scientists prepared the first indigenous launching vehicle SLV-3. From this, on July 18, 1980, the Rohini satellite was launched as a launch.







India National Satellite System, 1983



India National Satellite System, 1983. This series of satellite systems popularly known as INSAT provides communication and broadcasting facilities in the South Asian region. The first satellite of this series was put into orbit in 1983, marking the beginning of a revolution in television, radio broadcasting, telecommunication and meteorological sectors in India. Of the 24 satellites sent into space during the INSAT programme, 11 are still active.





Polar Satellite Launch Vehicle, 1993

Polar Satellite Launch Vehicle, 1993: Its construction started in 1990. PSLV completed its first mission in 1993. For the next 20 years, it launched various satellites for historic missions such as Chandrayaan and Mangalyaan. PSLV is a favorite among various organizations as a launch service provider and has launched more than 40 satellites for 19 countries.





→ Chandrayaan-1, 2008 ←

Chandrayaan-1, 2008: It was the first Indian spacecraft to be sent to the Moon. This unmanned spacecraft was launched on October 22, 2008. On November 8, 2008, this vehicle reached the Moon. It spent 312 days in the Moon's orbit. It also hoisted the flag of India on the Moon. In September 2009, NASA announced that data from Chandrayaan-1 found evidence of ice on the Moon. This mission was of two years, but due to a fault in it, the mission ended within a year. The estimated cost for this project was Rs 386 crore.









→ Mangalyaan, 2014 <

Mangalyaan, 2014: India launched Mangalyaan on 5 November 2013. On September 24, 2014, this vehicle created history by reaching the orbit of Mars. India became the first Asian country to reach Mars orbit and the first country in the world to do so in the first attempt. ISRO named this unmanned satellite as Mars Orbiter Mission. It was built by Indian scientists. Rs 450 crore was spent on this mission.



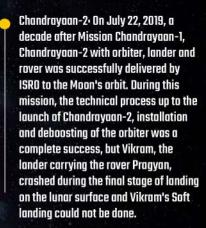


Send 104 satellites together

Send 104 satellites together:
On February 15, 2017, ISRO created
a new history by launching 104
satellites simultaneously. Earlier,
the world record for sending the most
satellites in a single compaign was in
the name of Russia, which in 2014 had
done the work of sending 37 satellites
in a single campaign.







Chandrayaan-2





Chandrayaan-3: ISRO successfully landed on the south pole of the Moon on August 23, 2023, after one month and nine days.

With this historic success, Chandrayaan-3's lander Vikram will take out its rover Pragyan in a few hours. This rover will study the surface, minerals, soil, history, water and possibilities of life for 14 days on the Earth (one day on the moon).









Upcoming Missions

- Aditya L-1, 2023
- First Indian Solar Mission to study the Sun
- ₹378 crore cost
- Nisar 2024
 - Joint Earth observation mission of NASA and ISRO
 - ₹12,296 crore cost





Spadex - 2024

- Twin spacecraft mission for use in human spaceflight
- ₹124 crore cost

🌳 Mangalyaan - 2, 2024

- Mars Orbiter Mission-2 India's second space mission in human space flight
- Cost yet to be determined







Gaganyaan-2024

India's first manned space mission

₹9,023 crore cost

Venus-1, 2031

ISRO's Venus Mission

• ₹500-1,000 crore cost







- Lunar Mission Before Chandrayaan-3
 - Chandrayaan-2 (2019)₹978 crore cost
- ♦ Chandrayaan-1 (2008)₹365 crore cost