INDIA'S ISRO - PIONEERING SPACE EXPLORATION

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FROM THE DESK OF CHAIRMAN

Last month, we as Indians had a very moment to be proud. Our country's space research, ISRO had a historic launch of Chandrayaan 3. The recent Chandrayaan mission was followed by a partly successful launch of Chandrayaan-2, on July 22, 2019 exactly 4 years back.

Let me take this opportunity to give some information about the ISRO.

ISRO was previously the Indian National Committee for Space Research (INCOSPAR), set up by the Government of India in 1962 under the leadership of then Prime Minister Mr. Jawaharlal Nehru and Dr. Vikram Sarabhai. Formally, the Indian Space Research Organisation (ISRO) was established in the year 1969.

Dr. Sarabhai envisioned the peaceful use of space technology to harness the role of space research in agriculture, telecommunications, weather forecasting, and disaster management.

Over the years, ISRO has evolved into one of the world's leading space agencies, achieving numerous milestones in space exploration, satellite development, and scientific research. Its journey has been marked by determination, innovation, and a vision to utilize space technology for the betterment of humanity.

Major Achievements of ISRO:

Aryabhata: in 1975, ISRO launched its very first satellite, Aryabhata, marking India's entry into the space age. Way back in 1975, this marvellous achievement put India among a select group of countries capable of launching satellites into orbit.

Mars Orbiter Mission (Mangalyaan): In 2014, ISRO successfully launched the Mars Orbiter Mission, also known as Mangalyaan. With this India became the first Asian country to reach Mars orbit and the fourth space agency globally to do so. This mission demonstrated ISRO's cost-effectiveness and technical capabilities. To give a proper perspective, the Mangalyaan mission cost just 11% of NASA's MAVEN orbiter, less than the Hollywood film Gravity. I remember, our Honourable prime minister mentioning at an international forum that "A one-km auto rickshaw ride in Ahmedabad takes Rs 10 and India reached Mars at Rs 7 per km".

With this achievement, the world started taking note of the activities of ISRO. The cost-effective solution provided by the ISRO gave an option to developing nations to collaborate with ISRO.

Navigation with Indian Constellation (NavIC): In order to end our reliance on GPS of the Western countries, ISRO developed its own NavIC, an independent regional navigation satellite system, providing accurate position information to users in India and the surrounding region. NavIC enhances various applications, such as disaster management and location-based services. The Government of India has mandated to use NavIC compulsory on all mobile phones. Presently, NavIC is being used in public transport such as buses and trains, for providing emergency warnings to fishermen and for tracking and providing information related to natural disasters.

Chandrayaan Missions: ISRO has in all launched 3 Moon missions viz Chandrayaan I-II and III. ISRO's Chandrayaan-1 (2008) and Chandrayaan-2 (2019) missions made India's mark on space research. Chandrayaan-1 made significant discoveries, including the detection of water molecules on the Moon's surface, while Chandrayaan-2's Vikram lander came within a few kilometres of the lunar surface during its landing attempt.

Chandrayaan-3 is the most recent lunar exploration mission launched under the Chandrayaan program. Chandrayaan-3 was launched on 14 July 2023, at 2:35 pm IST as scheduled, from Satish Dhawan Space Centre in Sriharikota. The spacecraft has been effectively placed in the trajectory it will take to reach the moon. It is anticipated that the Chandrayaan-3 mission will achieve a soft landing on the lunar South Pole region on 23 or 24 August.

The mission is expected to cost India around 615 crore only, of which is said to be one of the most cost-effective space missions as compared to such missions by other countries. Again just to give a perspective, the launch has cost India less than Hollywood movies like Avengers and Avatar.

This latest moon mission will put India in the elite club of nations that have successfully accomplished landing on the lunar surface and explored the moon surface with a lunar.

Future Endeavours:

ISRO continues to work on ambitious space missions, including the Gaganyaan program, aimed at sending Indian astronauts to space. ISRO is also focusing on developing advanced satellite technology, space exploration missions, and strengthening its space applications for societal benefits.

ISRO's remarkable journey from a fledgling space agency to a prominent player in the global space community is a testament to India's dedication to space exploration and technology development. Through its missions, ISRO has improved communication, weather forecasting, agriculture, and disaster management capabilities, contributing significantly to the socio-economic development of India and the world. With its vision for the future and the dedication of its scientists and engineers, ISRO is set to achieve even greater milestones and make significant contributions to humanity's understanding of space.

At this juncture, we must acknowledge the vision and faith our leader have shown in our scientists. It would have been easy to ignore or outsource the operations to Western countries, but we chose a different and difficult path. The entire nation should stand by our scientists irrespective of their successes and failures.

Thank you all..... Always in Gratitude

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