

## The Fast Emerging Space Power in India: New Heights of Exploration

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### **Introduction:**

India is proud to have the maximum success ratio in the world for its flagship space launching vehicle – Polar Satellite Launch Vehicle or PSLV. Just a few weeks back, India's PSLV launched 36 satellites including for countries from both the developed and developing world. India's aspirations are reflected in its missions to the Moon and Mars. The Indian Space Research Organization is also working on Gaganyaan, the country's first human space mission scheduled for 2023. Though many have questioned these ventures on the grounds that India still faces enormous developmental challenges, there are several reasons to continue these ventures.

The philosophy of the Indian Space Programme is best summed up in the following words of Dr. Vikram Sarabhai, Founding Chairman, Indian Space Research Organisation (ISRO): "We do not have the fantasy of competing with the economically advanced nations in the exploration of the Moon or the planets or manned space flight. But we are convinced that if we are to play a meaningful role nationally, and in the community of nations, we must be second to none in the application of advanced technologies to the real problems of man and society." (Suri, R.K.; Rajaram, Kalpana 2012)

into a bottomless back-office for our IT industry augurs well for our information economy and provides further impetus for ISRO to surge ahead.

Chandrayaan-2, the second mission to the Moon, which included an orbiter, a lander and a rover. It was launched on a Geosynchronous Satellite Launch Vehicle Mark III (GSLV-MkIII) on 22 July 2019, consisting of a lunar orbiter, the Vikram lander, and the Pragyan lunar rover, all developed in India. It was the first mission meant to explore the little-explored lunar south pole region. The objective of the Chandrayaan-2 mission was to land a robotic rover to conduct various studies on the lunar surface" (Singh, Surendra 2018)

Imagine: On 12<sup>th</sup> July 2019, as America celebrates the 50 anniversary of Neil Armstrong's 'small step for a man' and Chandrayaan-V touches down Tranquility Base. In 'a giant leap' for India, an Indian astronaut unfurls the Indian tricolour alongside America's 50-year-old flag. He then stands in attention to 'Jana-gana-mana...'. The way India is emerging as a space-power; one can almost hear him chant.

### **Conclusion:**

ISRO, the Indian Space Research Organization, is India's national space agency that is located in the city of Bengaluru. As India completes 75 years of its independence, it is time to introspect the country's space programme that has grown and evolved significantly in the last decades. The Indian government is committed to growing its nuclear power capacity as part of its massive infrastructure development programme.

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