

# **Tapping the Space potential**

## What is the issue?

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- India is being watched for its space feat especially with the recent launch of a record-breaking 104 nano-satellites into orbit from a single rocket.  $\n$
- Experts however feel that India can do a lot more, given its potential.  $\n$

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## What are India's strengths?

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• Scientists attribute much of ISRO's success and prolific output to the way the **organization** is run.

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• Tight cost-control driven by the **organization's ability to do everything in-house** – including building rockets, satellites, propulsion systems, and sensors – has helped.

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- Cheaper Indian labour scientists, engineers, technicians, support staff as compared to those in the U.S. or Europe is another plus.  $\n$
- ISRO is now recognized as a reliable source by many countries to outsource their launches to.
- Apart from commercial space activities and for agricultural purposes, India is also augmenting its capacity to pursue diplomatic and security objectives.  $\n$

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#### What are the opportunities at present?

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- The recent achievements have helped strengthen India's place in the burgeoning private space market.
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- With surging demand for **telecommunication services** India's primacy in the field of space exploration and space-based services will skyrocket further.
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- Demand for **small, inexpensive satellites**, like the ones ISRO fired off, is especially expected to boom.  $\n$
- ISRO now has its eyes set on **interstellar missions** (travelling between stars or planetary systems) which is expected to set the template for future interstellar missions.
- There are a **range of other missions** under way such as Aditya-1 (first Indian space mission to study the sun), Chandrayaan-2 mission, an orbiter to Venus, etc.

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#### Where to focus now?

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• Indian government has been augmenting ISRO's **budget** year on year. Even so, the organization's current annual budget of \$1 billion is just 5 percent of NASA's.

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• ISRO's average annual **revenue** over the last three years is approximately \$200 billion which is very low in comparison with the global launch services market.

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- ISRO has to fully leverage its capacities and talents to earn more profits, which can help expand its operations.
- Despite its successes, India needs to claim a larger share of the global space economy pie. It should fully tap the potential and earn substantial **profits** for its commercial launch services.

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- Indian government should formulate policies to optimally use its scientific and technological expertise to **nurture home-grown enterprises**.  $\n$
- This can help expand a range of products and services for the domestic

market as well as increase the participation in the global space industry.

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## **Source: The Diplomat**

