Commercialisation of ISRO

What is the issue?

- The Indian Space Research Organisation (ISRO) has successfully launched Cartosat-3, along with 13 other small U.S. satellites recently.
- This marks a major technological milestone for ISRO which gives a good reason why it should go commercial.

What is the significance of Cartosat-3?

- **Resolution** - Cartosat-3 is capable of exceptional image resolution of nearly 25 cm on the ground.
- The best global military-grade satellite images are of 10 cm resolution.
- The best satellite images commercially available are of 25-30 cm resolution.
- **Applications** - As a commercial satellite, it creates a wealth of applications. Military surveillance is the lowest hanging fruit.
- The surveillance by the earlier Cartosat-2 satellite series (resolution of 65 cm) was used to plan and execute military operations such as surgical strikes across the Line of Control in 2016, etc.
- For the government, such resolution can help monitor progress of road construction, coastal land-erosion, forest conservation, oceanic changes and infrastructure development.

Which is more important?

- Image resolution is good to have, but is secondary to **image processing technology** that is used to analyse the generated images.
- While satellite launches make for a good spectacle, they are meaningful only in so far as they aid commerce and generate revenue and jobs.
- Indian regulations restrict access to satellite images sharper than 1 m to the government.
- Other than for transponders, there is a long way to go for Indian private companies sending innovative payloads aboard ISRO launch vehicles.

What is NSIL?

- ISRO recently launched a company called New Space India Limited (NSIL), a competitor to Antrix, but like it.

- **Antrix** is the commercial arm of ISRO.
- It promotes and commercially markets the products and services emanating from the Indian Space Programme.
- **NSIL** is a wholly owned Government of India undertaking/ Central Public Sector Enterprise (CPSE).
- It was set up to commercialise space products and satellite development deals with private entities.
- The deal for the U.S. satellites launched along with Cartosat-3 was formally inked by the NSIL.
- A good beginning, it should not be shackled by bureaucratic hindrances, in the manner of Antrix.

Why commercialising ISRO is a good idea?

- There are host of interesting electronics aboard Cartosat-3.
- This should ideally inspire ISRO to explore collaboration with the private sector in improving high-technology manufacturing.
- The ISRO's key capability still lies in developing and launching small- and medium-sized satellites.
- So, it must be able to market the technology aboard Cartosat-3 globally and induce the farming out of satellite development projects to ISRO or its subsidiaries.
- While ISRO's credentials as a poster child for India's technological abilities have been fortified, it still has a long way to go in terms of its reputation as an enabler of local business.

Source: The Hindu

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