Opening Up the Geo-Spatial Sector

Why in news?

- The Ministry of Science and Technology has released new guidelines for the Geo-spatial sector in India.
- The guidelines deregulate the existing protocol and liberalise the sector to a more competitive field.

What is geo-spatial data?

- Geospatial data is data about objects, events, or phenomena that have a location on the surface of the earth.
- The location may be static in the short-term, like the location of a road, an earthquake event, malnutrition among children, etc.
- It could also be dynamic like a moving vehicle or pedestrian, the spread of an infectious disease and the like.
- Geospatial data combines -
    i. location information
    ii. attribute information (the characteristics of the object, event, or phenomena concerned), and
    iii. often also temporal information or the time at which the location and attributes exist
- The past decade has seen an increase in the use of geo-spatial data in daily life with various apps such as for food delivery, e-commerce and even weather apps.

What is the present policy on geo-spatial data?

- There are strict restrictions on the collection, storage, use, sale, and dissemination of geo-spatial data and mapping under the current regime.
- The policy had not been renewed in decades and has been driven by internal as well as external security concerns.
- The sector so far is dominated by the Indian government as well as government-run agencies such as the Survey of India.
- Private companies need to navigate a system of permissions to be able to collect, create or disseminate geo-spatial data.
- These include permissions from different government departments (depending on the kind of data to be created) as well as the defence and

Home Ministries.

What was the need for tight regulations?

- Geo-spatial data was initially conceptualised as a matter solely concerned with security.
- So, geo-spatial data collection was the prerogative of the defence forces and the government.
- The Kargil war highlighted the dependence on foreign data and the need for indigenous sources of data.
- With this, GIS mapping was also rudimentary, and the government invested heavily in it after the war.

Why is the deregulation now?

- The system of acquiring licenses or permission, and the red tape involved, can take months.
- This delayed the projects, especially those that are in mission mode, for both Indian companies as well as government agencies.
- The deregulation would eliminate the requirement of permissions as well as scrutiny, even for security concerns.
- Indian companies can now self-attest, conforming to government guidelines without actually having to be monitored by a government agency.

- More and more sectors such as agriculture, environment protection, power, water, transportation, communication, health (tracking of diseases, patients, hospitals etc) rely heavily on geo-spatial data.
- But there is a huge lack of data in the country.
    - This impedes planning for infrastructure, development, natural calamities as well as businesses which are data-based.
- Given this, the mapping of the entire country, that too with high accuracy, by the Indian government alone could take decades.
- There is thus a need to incentivise the geo-spatial sector for Indian companies and increased investment from private players in the sector.
- There has also been a global push for open access to geo-spatial sector as it affects the lives of ordinary citizens.
- The new guidelines have thus ensured such an open access, with the exception of sensitive defence or security-related data.
- Large amounts of geo-spatial data are also available on global platforms.
    - This makes the regulation of data that is freely available in other countries, untenable.

What impact is deregulation likely to have?

- By liberalising the system, the government will ensure -
  - more players in the field
  - competitiveness of Indian companies in the global market
  - more accurate data being made available to both the government (to formulate plans and administer) and individual Indians
- Startups and businesses can now also use this data in setting up their concerns.
- This will particularly be of help in e-commerce sector or geo-spatial based apps.
- This, in turn, will increase employment in these sectors.
- Indian companies will be able to develop indigenous apps, for example an Indian version of Google maps.
- There is also likely to be an increase in public-private partnerships with the opening of the sector.
  - Data collection companies could work with the Indian government on various sectoral projects.
- The government also expects an increase in investment in the geo-spatial sector by companies.
- There is also likely to be an increase in export of data to foreign companies and countries, which in turn will boost the economy.

Source: The Indian Express