

NATIONAL GEOSPATIAL POLICY (NGP)

SYLLABUS: GS PAPER-II (GOVERNMENT POLICIES & INTERVENTIONS), GS PAPER-III (SPACE TECHNOLOGY)

CONTEXT: Google launched a 360-degree interactive panorama feature for 10 Indian cities as part of its Street View Services, which is also known as **Project Gullify**.

This has been made possible by the new National Geospatial Policy 2021. The policy allows local companies to collect this type of data and license it to others, making it the first country where Street View is primarily enabled by partners.

ABOUT NATIONAL GEOSPATIAL POLICY

- NGP was launched by the **Department of Science and Technology (DST)**, Ministry of Science and Technology.
- It provides a framework for the DST as well as its state and central partnering agencies (e.g., government departments, regulatory authorities, etc.) to enable access to and promote the use of geospatial data.
- It aims to boost geospatial entrepreneurship for socio-economic development of India.
- It also aims to promote the use of geospatial products and services, generate useful insights from geospatial data and strengthen India's geospatial infrastructure as well as capabilities.

SALIENT FEATURES OF THE POLICY

Geospatial Data Promotion and Development Committee (GDPDC):

- A multi-disciplinary expert committee to shape the geospatial data ecosystem in India, GDPDC will replace the existing National Spatial Data Committee.
- It will be tasked with working with the Survey of India to create a **High Resolution National Topographic Database** and will create "**Lead Agencies**" at the central and state level.

Functions of Lead Agencies:

- The Lead Agencies will facilitate the implementation of the NGP. These Lead Agencies will also provide sector specific knowledge.
- It will assist in the compilation of data themes under the National Foundation Geospatial Data Asset and the National Thematic Geospatial Data Asset.

National Data Registry (NDR) and Geo-Platform:

- **NDR** will be operated by the GDPDC, to enable access to and harnessing of geospatial data.
- State and Central level partnering agencies can provide data through Data Nodes.
- The geospatial data, metadata, and data from the State or Central level agencies will be available through a Geo-Platform.
- The GDPDC will designate a Partnering Agency to develop and operate the NDR as well as Geo-platform under its guidance and supervision.

Skilled Workforce:

- The NGP advocates for surveyors' registration to promote the profession of surveying, with professional standards and accreditation comparable to that of medical and legal professionals.
- Furthermore, it proposes that the National Skill Development Council and the geospatial industry collaborate to develop a National Skills Qualification Framework and, a Geospatial Sector Skill Council.

SIGNIFICANCE

- Street view, because of its integration with Google maps, is expected to have a greater impact, assisting users in better understanding road conditions, and discovering local businesses.
- Google maps has announced the addition of speed limit data for Bengaluru as well as Chandigarh along with congestion data for 9 cities.
- It is also developing the environmental insights explorer tool, which will allow planners to better understand how to reduce emissions in cities by measuring emissions based on traffic patterns. In a few cities, it will also begin to display localized street-level Air Quality Index (AQI) numbers.
- This data will aid in infrastructure planning and will spark new use cases, such as the creation of base data for autonomous vehicles in India.

PARLIAMENT PASSES BILL TO BAN FUNDING OF WEAPONS OF MASS DESTRUCTION

SYLLABUS: GS PAPER-II (PARLIAMENT AND STATE LEGISLATURE, FUNCTIONING AND CONDUCT OF BUSINESS, WEAPONS OF MASS DESTRUCTION)

CONTEXT: Parliament passed a bill (**The Weapons of Mass Destruction and their Delivery Systems (Prohibition of Unlawful Activities) Amendment Bill, 2022**) which seeks to ban funding of weapons of mass destruction and empowers the Centre to freeze, seize or attach financial assets and economic resources of people engaged in such activities.

The previous act, the Weapons of Mass Destruction, and their Delivery Systems (Prohibition of Unlawful Activities) Act, passed in 2005, only banned the manufacture of weapons of mass destruction.

KEY AMENDMENTS

- **Section 12A:** The amendment bill seeks to insert a new **Section 12A in the existing law which states that “no person shall finance any activity which is prohibited under this Act, or under the United Nations (Security Council) Act, 1947** or any other relevant Act for the time being in force, or by an order issued under any such Act, in relation to weapons of mass destruction and their delivery systems.”
- **Prevent financing of such activities:** To prevent persons from financing such activities, the central government may freeze, seize, or attach funds, financial assets, or economic resources (whether owned, held, or controlled directly or indirectly).
- **Prevent finances or related services available:** It may also prohibit persons from making finances or related services available for the benefit of other persons in relation to any activity which is prohibited.

WEAPONS OF MASS DESTRUCTION

- These are weapons with the capacity to **inflict death and destruction on such a massive scale and so indiscriminately that its very presence in the hands of a hostile power can be considered a grievous threat.**
- Modern weapons of mass destruction are either **nuclear, biological, or chemical weapons—frequently referred to collectively as NBC weapons.**
- The term weapons of mass destruction have been in currency since at least 1937, when it was used to describe massed formations of bomber aircraft.
- For example, nuclear bombs used in **Hiroshima and Nagasaki attack in Japan.**
- Efforts to control the spread of WMD are enshrined in international agreements such as:
 1. **Nuclear Non-Proliferation Treaty of 1968**
 2. **Biological Weapons Convention of 1972**
 3. **Chemical Weapons Convention of 1993**

PRELIMS FACTS

UDYAM PORTAL

- The registrations on Udyam Portal of the **Ministry of Micro, Small and Medium Enterprises** reached the landmark of 1 crore.
- It was launched in 2020 for the voluntary registration of MSMEs to avail benefits of the Ministry of MSME schemes and for Priority Sector Lending.
- This new portal assists the government in **aggregating the data on the number of MSMEs in the country.**
- The MSMEs are identified on the **composite criteria of investment and annual turnover.**
- It is fully digitalized and the registered MSME is issued an **Udyam Registration Certificate.**

FINANCIAL INCLUSION INDEX

- The Reserve Bank of India has released the **Composite Financial Inclusion Index (FI-Index) for the year ended 31st March 2022.**
- It is a comprehensive index incorporating details of **banking, investments, insurance, postal as well as the pension sector** in consultation with the government and respective sectoral regulators.
- It was developed by the RBI in 2021, without any 'base year', and is published in July every year.
- India's Financial Inclusion Index has improved to **56.4 from 53.9 in the previous year 2021.**
- The improvement has been seen across all its sub-indices (Access, Usage and Equality).

HELLFIRE R9X MISSILE

- The US military used its '**secret weapon**' — the **Hellfire R9X missile ('Ninja missile')**— to kill **Al Qaeda chief Ayman al-Zawahiri** on the balcony of a safe house in Kabul.
- Better known in military circles as the **AGM-114 R9X, the Hellfire R9X is a US origin missile known to cause minimum collateral damage while engaging individual targets.**

- It **weighs about 45 kg** and the missile can also be **launched from helicopters, aircraft and Humvees**.
- The range of these missiles varies from **500 meters to 11 km**.
- Hellfire means **Heliborne, Laser, Fire and Forget Missile Al-Zawahiri**, an Egyptian surgeon who had a \$25 million bounty on his head, had helped coordinate September 11, 2001, attacks that had killed 3,000 people.

ASTROBEE

- Astrobee is NASA's new **free-flying robotic system**.
- Astrobee also consists of a system that serves as a research platform that can be outfitted and programmed to conduct microgravity experiments. Thus, it will help to learn more about how robotics can benefit astronauts in space.
- The three free-flying robots are named **Honey, Queen, and Bumble**. The robots are shaped like cubes 12.5 inches wide.
- The Astrobee system consists of **three cube-shaped robots, some software and a docking charging station used for recharging**. They are about 32 centimeters wide.
- The three robots propel themselves using electric fans that allow them to fly through the microgravity environment of the International Space Station.
- The Astrobee robots are built on the **knowledge acquired from operating SPHERES (Synchronized Position Hold, Engage, Reorient, Experimental Satellite)** robots which have been operating on the International Space Station for over a decade.

PINGALI VENKAYYA

- Nation paid homage to **Pingali Venkayya, the architect of India's National Flag**.
- Born in **Krishna district of Andhra Pradesh**, he was a freedom fighter and a Gandhian who went on to become synonymous with the spirit of free and Independent India.
- He designed the new flag for **the National Congress Meeting in 1921**. It was officially adopted by the Indian National Congress in 1931.
- It **served as a template** on which the present national flag evolved.

