Seven states among top achievers in 'ease of doing business' ranking

(GS Paper 3, Indian Economy)

Why in news?

• Recently, Finance Minister released the assessment report of the States and Union Territories under 'Business Reforms Action Plan (BRAP), 2020'.

Aim:

• The broader aim of the exercise is to **boost investor confidence**, **foster a business-friendly climate** and augment the ease of doing business across the country by introducing an element of healthy competition through a system of assessing states based on their performance in the implementation of Business Reforms Action Plan (BRAP).



Top achievers:

- Andhra Pradesh, Gujarat and Telangana are among the seven states categorised as top achievers in the ranking of states and Union Territories based on the implementation of the business reform action plan 2020.
- Haryana, Karnataka, Punjab and Tamil Nadu are the other states on the list of top achievers.

Achievers:

• Himachal Pradesh, Madhya Pradesh, Maharashtra, Odisha, Uttarakhand and Uttar Pradesh have been categorised as Achievers in the ranking.

Aspires:

- The Aspires category too includes seven states, including Assam, Kerala and Goa.
- Other states in this section are Chhattisgarh, Jharkhand, Kerala, Rajasthan and West Bengal.

Emerging business ecosystems:

- In the category of emerging business ecosystems, there are 11 states and UTs, including Delhi, Puducherry and Tripura.
- Andaman and Nicobar, Bihar, Chandigarh, Daman and Diu, Dadra and Nagar Haveli, Jammu and Kashmir, Manipur, Meghalaya, Nagaland, and Tripura are the other states and UTs in this section.

New system of ranking:

• The Commerce and Industry Ministry has this time changed the system of ranking by making it category-based - top achievers, achievers, aspires, and emerging business ecosystems - against the earlier practice of announcing ranks.

Reform points:

- The BRAP 2020 includes 301 reform points covering 15 business regulatory areas, such as access to information, single window system, labour and land administration.
- 118 new reforms were included to further augment the reform process. Sectoral reforms with 72 action points spread across nine sectors like trade license, healthcare, legal metrology, and cinema halls were introduced for the first time to expand the scope of the reform agenda.

Way Forward:

• The purpose of this BRAP exercise is to infuse a culture of learning from each other's best practices and improve upon the business climate in each State/UT with a unified objective for India to emerge as the most favoured investment destination across the globe.

Russia withdraws from Snake Island

(GS Paper 2, International Relation)

Why in news?

- Recently, Russian forces abandoned the strategic Black Sea outpost of Snake Island.
- Russian forces have withdrawn from Snake Island in the Black Sea in a move Ukraine hailed as a victory and Russia said it Moscow was not seeking to hinder the United Nations' efforts to organise a corridor for the export of Ukrainian food products



Source: Maxar via Google Earth

THE WASHINGTON POST

What it translates?

- The most significant aspect is that this could open the door to Ukrainian grain exports from Odesa, which is critical for Ukraine's economy and for the global food supply.
- Lifting the Ukraine ports blockade has been a primary goal of the West.
- But several military experts said that driving the Russians from Snake Island would not by itself be enough to unblock the ports. Russia could still intercept cargo ships at sea.

Strategic importance:

- Snake or Serpent Island, called Zmiinyi in Ukrainian, is a rocky outcrop that extends less than 700 metres from end to end, and is often described as being "X-shaped".
- It is located 35 km from the coast, to the east of the mouth of the Danube and roughly southwest of Odessa.
- It sits near the Danube Delta and close to the sea border with Romania, a NATO member.
- It has **strategic value for the control of the northwestern Black Sea, its coastal cities**, and shipping routes that form part of the world's grain supply chain.
- Russia's withdrawal from the island may ease its blockade on Ukrainian exports that feed some of the world's poorest countries.

Achilles and the Trojan War

- Stories about the island stretch back millennia to the ancient Greeks' mythological Trojan war.
- Snake Island has a long association with Achilles, the great warrior in Greek myth considered invincible but for one vulnerable spot on his heel.

Dispute with Romania:

- The International Court of Justice drew a new maritime border between Romania and Ukraine in 2009 to settle a dispute focused around Snake Island over parts of the Black Sea believed to hold significant oil and gas reserves.
- At the time, Ukraine said Snake Island was inhabited and economically active, home to around 100 people including military personnel, lighthouse keepers, scientists and their families.

PSLV-C53 Mission

(GS Paper 3, Science and Tech)

Why in news?

- Recently, the Indian Space Research Organisation (ISRO) launched three satellites for Singapore from its Satish Dhawan Space Centre, Sriharikota.
- The PSLV-C53 mission deployed the three satellites in Low Earth Orbit (LEO).

Three satellites:

- The spacecraft carried **DS-EO satellite**, **NeuSAR**, a 155 kg satellite, and **Scoob-1 of Nanyang Technological University (NTU)**, Singapore.
- The DS-EO satellite carried an Electro-Optic, multi-spectral payload with 0.5 m resolution imaging capability.
- The **SCOOB-I** is the first satellite in the Student Satellite Series (S3-I), a hands-on student training program from the Satellite Research Centre (SaRC) at Singapore's NTU School of Electrical and Electronic Engineering.

Two small satellites:

• The mission also placed two small satellites, a student satellite INSPIREsat-1, and a technology demonstrator satellite, INS-2TD, a precursor to India-Bhutan Joint Satellite INS-2B.

PSLV Orbital Experimental Module (POEM):

- ISRO is attempting a new experiment with the four-stage rocket and use the fourth stage (PS4) to perform **PSLV Orbital Experimental Module (POEM) activity**.
- Under this, the team will perform in-orbit scientific experiments using the spent PS4 stage as an orbital platform.

• POEM carries **six payloads**, including **two from Indian Space Start-ups** M/s Digantara and M/s Dhruva Aerospace, enabled through IN-SPACe and NSIL.



PSLV:

- The PSLV is ISRO's workhorse and has been its most successful launch vehicle developed indigenously.
- It has been **launched 54 times in the past** and was also responsible for launching India's highly successful **Chandrayaan-1 mission in 2008** and the **Mars Orbiter Spacecraft in 2013** that later traveled to Mars.
- The launch vehicle is capable of taking up to 1,750 kg of payload to Sun-Synchronous Polar Orbits of 600 km altitude
- It has also been used to launch various satellites into Geosynchronous and Geostationary orbits, like satellites from the IRNSS constellation.
- PSLV is 44 meters in length and has a diameter of 2.8 meters with a lift off mass of 320 tons. The second launch pad has so far conducted 29 other launches.

Second mission of 2022:

 This was the second PSLV mission of the year after ISRO successfully launched the PSLV-C52 mission in February 2022 by injecting the Earth Observation Satellite (EOS-04), into an intended sun-synchronous polar orbit of 529 km altitude.

Curiosity studies ingredients of life from 3.5-billion-year-old rock on Mars

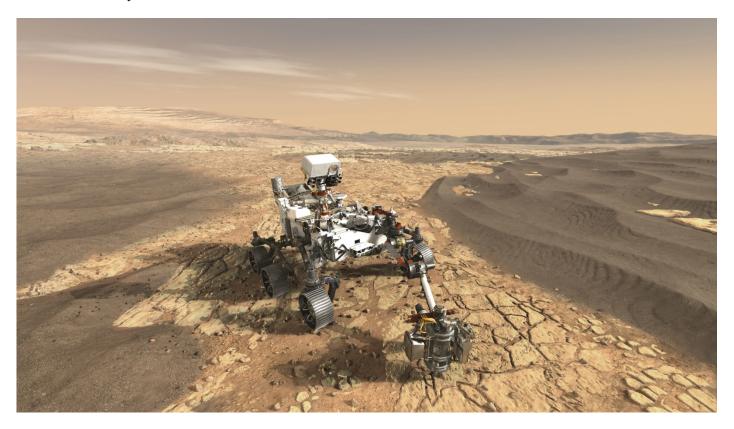
(GS Paper 3, Science and Tech)

Context:

- One of the biggest aims of several missions currently active on Mars is to identify the first signs of life. NASA's Perseverance, Curiosity, and China's Zhurong rover are delivering key science updates from the Red Planet, which is set to be humanity's first planetary destination outside Earth.
- In this regard, the Curiosity rover has taken a **stock of the organic makeup of the region** in which it has been trundling for the last few years.

Organic carbon:

- Scientists have **measured the total organic carbon** a key component in the molecules of life in Martian rocks for the first time by analysing the data from the curiosity rover.
- Organic carbon is **carbon bound to a hydrogen atom**. It is the basis for organic molecules, which are created and used by all known forms of life.



Yellowknife Bay:

- The rover drilled samples from 3.5-billion-year-old mudstone rocks in the Yellowknife Bay formation of Gale crater, the site of an ancient lake on Mars.
- Scientists have found at **least 200 to 273 parts per million of organic carbon**. This is comparable to or even more than the amount found in rocks in very low-life places on Earth, such as parts of the Atacama Desert in South America, and more than has been detected in Mars meteorites.

How samples were collected?

- These samples were delivered to its **Sample Analysis at Mars (SAM)** instrument, where an oven heated the powdered rock to progressively higher temperatures.
- The rover used oxygen and heat to convert the organic carbon to carbon dioxide (CO2), the amount of which is measured to get the amount of organic carbon in the rocks. Adding oxygen and heat allows the carbon molecules to break apart and react carbon with oxygen to make CO2.
- NASA said that some carbon is locked up in minerals, so the oven heats the sample to very high temperatures to decompose those minerals and release the carbon to convert it to CO2.
- While the experiment was performed in 2014 it took years of analysis to understand the data and put the results in the context of the mission's other discoveries at Gale Crater.

Gale Crater:

- The gale crater, apart from being the site of an ancient lake also has organic carbon that was part of this material and got incorporated into the mudstone.
- Besides liquid water and organic carbon, Gale crater had other conditions conducive to life, such as chemical energy sources, low acidity, and other elements essential for biology, such as oxygen, nitrogen, and sulfur.

'Udyami Bharat' programme

(GS Paper 3, Indian Economy)

Why in news?

- Recently, the Prime Minister participated in the 'Udyami Bharat' programme at Vigyan Bhawan in New Delhi.
- He also launched the 'Raising and Accelerating MSME Performance' (RAMP) scheme, 'Capacity Building
 of First-Time MSME Exporters' (CBFTE) scheme and new features of the 'Prime Minister's Employment
 Generation Programme' (PMEGP).
- He also digitally transferred assistance to beneficiaries of PMEGP for 2022-23; announce results of **MSME Idea Hackathon, 2022**; distribute National MSME Awards, 2022; and issue Digital Equity Certificates to 75 MSMEs in Self Reliant India (SRI) Fund.

Udyami Bharat:

- 'Udyami Bharat' is reflective of the continuous commitment of the government, right from day one, to work towards the empowerment of MSMEs.
- The government has launched several initiatives from time to time like MUDRA Yojana, Emergency Credit Line Guarantee Scheme, and Scheme of Fund for Regeneration of Traditional Industries (SFURTI) to provide necessary and timely support to the MSME sector, which has helped benefit crores of people across the country.

RAMP Scheme:

- Prime Minister launched the 'Raising and Accelerating MSME Performance' (RAMP) scheme, with an outlay of around Rs 6,000 crore.
- It aims to scale up the implementation capacity and coverage of MSMEs in the states, with impact enhancement of existing MSME schemes.
- It will **complement the Aatmanirbhar Bharat Abhiyan** by fostering innovation, encouraging ideation, incubating new business and entrepreneurship by developing quality standards, improving practices and processes, enhancing market access, deploying technological tools and Industry 4.0 to make MSMEs competitive and self-reliant.



CBFTE Scheme:

• Prime Minister launched the 'Capacity Building of First-Time MSME Exporters' (CBFTE) scheme, which aims to encourage MSMEs to offer products and services of international standards for the global market.

• This will enhance the participation of Indian MSMEs in the global value chain and help them realise their export potential.

PMEGP:

- He also launched new features of the 'Prime Minister's Employment Generation Programme' (PMEGP).
- These include an increase in the maximum project cost to Rs 50 lakh (from Rs 25 lakh) for the manufacturing sector and Rs 20 lakh (from Rs 10 lakh) in the service sector and the inclusion of applicants from aspirational districts and transgenders in the Special Category applicants for availing higher subsidies.
- Also, handholding support is being provided to applicants/entrepreneurs through the engagement of banking, technical and marketing experts.

MSME Idea Hackathon, 2022:

- He also announced the results of the MSME Idea Hackathon, 2022.
- Launched on March 10, 2022 this Hackathon is aimed at promoting and supporting the untapped creativity of individuals, promoting adoption of latest technologies and innovation among MSMEs.
- The selected incubatee ideas will be provided funding support of up to Rs 15 lakhs per approved idea.

National MSME Awards 2022:

- Prime Minister will also distribute the National MSME Awards 2022.
- The award is a recognition of the contributions of MSMEs, States/UTs, aspirational districts and banks for their outstanding performance in the growth and development of India's dynamic MSME sector.