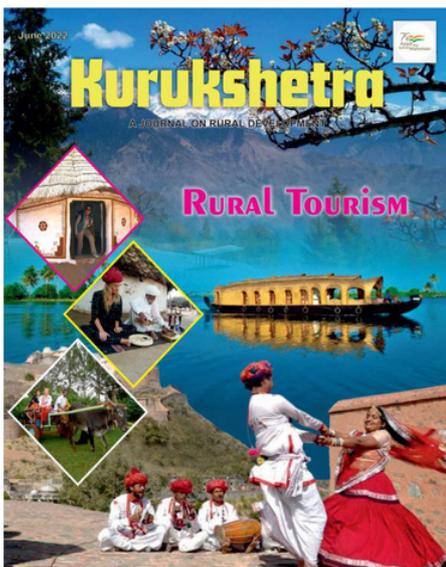


OFFICERS' Pulse

JUNE 2022 - AT A GLANCE



DownToEarth Business Standard



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Schemes

1) Agnipath Scheme

What's in the news?

- The Centre has announced the Agnipath scheme for **recruitment of soldiers in the three branches of the armed forces, on a short-term basis.**
- Under the scheme, **youth (both men and women) between 17.5 to 21 years of age** will be enrolled as soldiers for four years.
- These recruits, who will be known as 'Agniveers', will form a **distinct rank bearing a distinct insignia** in the respective forces.

What are the features of the new scheme?

- Aimed at reducing salaries and pensions to **divert resources for military modernisation**, the idea of a **short-term recruitment model or 'Tour of Duty' (ToD)** was first mooted around two years back for the selection of officers and jawans, for a limited number of vacancies.
- As part of the Agnipath scheme, selected candidates will be enrolled under the respective Service Acts for **four years.**
- The **required educational qualification will be Class 10-12**, depending on the service and assigned role.
- Agniveers will contribute 30% of their salaries to a package called '**Seva Nidhi**', and this amount will be matched by the government. This fund will accrue interest, and at the end of the four years, each soldier will get ₹11.71 lakh as a lump sum tax-free amount.
- The Agniveers will also be provided **non-contributory life insurance cover of ₹48 lakh** during their service in the armed forces.

- There will, however, be **no pension or gratuity benefits** for these recruits.
- In addition, Agniveers will get **skill certificates, awards of credits** so that they can study further, and a financial package to support future endeavours after their short-term military service.
- After four years of service are completed, **Agniveers will be eligible to apply for permanent enrolment** in the armed forces. **Up to 25% of them** will be selected on an objective basis and enrolled as regular cadre.

Advantages

- The move is expected to **decrease the average age profile** of armed forces personnel from the current 32 years to **24-26 years** over a period of time.
- It is also expected to **reduce the defence pension bill**. Since 2020, the government has paid over Rs. 3.3 lakh crore in defence pension.
- Having a young military will make it **easier to train them for emerging technology.**
- Apart from career options in the army, trainees will find work in a variety of industries thanks to the skills and experience gained during their four-year service. After their four-year stay, the national government is expected to give precedence to Agniveers in regular employment.

Concerns

- Six months of intensive training may not be sufficient to trust them with the same kind of missions as present forces.
- Some cited that there is no job security in the scheme and Agniveers will not be eligible for pension benefits.

2) Pradhan Mantri Awas Yojana

About PMAY-G

- The Pradhan Mantri Awas Yojana–Gramin (PMAY-G) was launched in 2016 to address the housing gaps existing in the rural areas. It aims to provide a **pucca house with basic amenities to all rural families** who are homeless or living in kutchha or dilapidated houses by 2022.
- It was initiated with the objective of achieving **"Housing for All" by 2022**.

Features

- The houses built under the PMAYG scheme are **low-cost and disaster-resilient**.
- The minimum size of the houses built under the PMAYG scheme is **25 sq. mt.**
- The Central and State governments share the cost of assistance at a ratio of **90:10** in the hilly areas and **60:40** in the plain areas.
- Identification of beneficiaries as per the housing deprivation parameters and exclusion criteria prescribed **under Socio Economic Caste Census (SECC) 2011** after due verification by **Gram Sabha**.

Financial Assistance

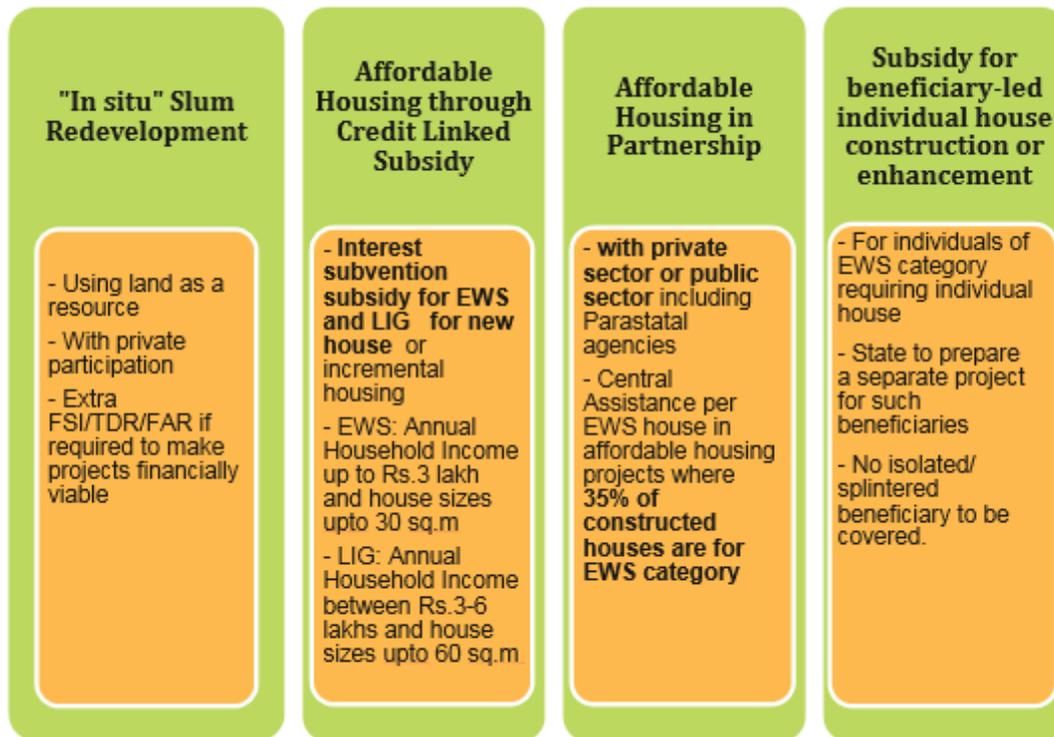
- Under PMAY-G, each beneficiary is given **100% grant of Rs.1.20 lakh** (in plain areas) and **Rs.1.30 lakh** (in Hilly States/North Eastern States/Difficult areas/UT of J&K and Ladakh/Left Wing Extremism (LWE) districts).
- The beneficiaries of PMAY-G, in addition to the unit assistance, are also provided support of unskilled labour wages under Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) and assistance of Rs. 12,000 for construction of toilets through Swachh Bharat Mission-Gramin

(SBM-G), MGNREGS or any other dedicated source of funding.

- The scheme has provisions for convergence with other schemes of Government of India and State/UTs for providing LPG connection under Pradhan Mantri Ujjwala Scheme, electricity connection, access to safe drinking water under Jal Jeevan Mission, etc.

Pradhan Mantri Awas Yojana (Urban)

- The Pradhan Mantri Awas Yojana (Urban) Programme envisions **Housing for All by 2022**, when the Nation completes 75 years of its Independence. It is under the **Ministry of Housing and Urban Affairs**.
- It was launched in 2015 to provide central assistance to implementing agencies through States and UTs for providing houses to all eligible families/beneficiaries.
- PMAY(U) adopts a **demand driven approach** wherein the Housing shortage is decided based on demand assessment by States/Union Territories.
- The Mission seeks to address the housing requirement of urban poor including slum dwellers through following programme verticals:
 - Slum rehabilitation of Slum Dwellers with participation of private developers using land as a resource
 - Promotion of Affordable Housing for weaker section through credit linked subsidy
 - Affordable Housing in Partnership with Public & Private sectors
 - Subsidy for beneficiary-led individual house construction /enhancement



Beneficiaries

- Beneficiaries include **economically weaker sections (EWS), low-income groups (LIGs) and Middle Income Groups (MIGs)**.
- The EWS/LIG/MIG categories are defined as follows:
 - EWS households with an annual income upto Rs. 3.00 lakhs.
 - LIG households with an annual income between Rs. 3.00 lakhs to Rs. 6.00 lakhs.
 - MIG households with an annual income between Rs. 6.00 lakhs to Rs. 18.00 lakhs.
- EWS category of beneficiaries is eligible for assistance in all four verticals of the Missions whereas LIG and MIG categories are eligible under only Credit linked subsidy scheme (CLSS) component of the Mission.
- The beneficiary family **should not own a pucca house and the beneficiary family should not have availed of central**

assistance under any housing scheme from Government of India.

Implementation

- Mission is implemented as a **Centrally Sponsored Scheme (CSS)** except for the component of **credit linked subsidy** which will be implemented as a **Central Sector Scheme**.
- **All statutory towns** as per Census 2011 and towns notified subsequently would be eligible for coverage under the Mission.
- The Mission also promotes **women empowerment** by providing the ownership of houses in the name of female member or in joint name.
- Preference is also given to differently abled persons, senior citizens, SCs, STs, OBCs, Minority, single women, transgender and other weaker & vulnerable sections of the society.

Why in News?

- The Pradhan Mantri Awas Yojana-Gramin (PMAY-G), aimed at constructing houses in rural areas, at the end of six years since it began

in 2016, has a **completion rate of 67.72%**, in contrast with the urban version of the scheme that started a year ahead but is lagging behind with a **50% completion rate**.

- PMAY-G was initiated in 2016 with a target of completing 2.7 crore houses. So far, 1.8 crore houses have been constructed, which is 67.72% of the target.
- The Pradhan Mantri Awas Yojana-Urban (PMAY-U) was initiated in 2015 with a target of constructing 1.2 crore homes. According to the latest numbers, only 60 lakh units have been completed to date.

3) SHRESHTA

What's in the news?

- The **Union Ministry of Social Justice and Empowerment** has launched the Scheme for Residential Education For Students in High schools in Targeted Areas (SHRESTHA) to provide **residential education to**

Scheduled Caste students in High School in targeted areas.

About the Scheme

- SHRESHTA has been conceived to provide access to high quality residential education to the meritorious **poor students from Scheduled Caste communities**, whose parental annual income is up to Rs. 2.5 Lakh per annum, at free of cost from class 9th to class 12th.
- Under this, each year a specified number of meritorious SC students in States/UTs are selected through a transparent mechanism of a **National Entrance Test for SHRESHTA (NETS)**.
- Entire cost of school fee and hostel fee including food charges shall be borne by the Government of India.
- The Students under the Scheme may select any school across the country for their academics.

Initiatives

1) ONDC

What's in the news?

- The government of India launched the pilot phase of **open network for digital commerce (ONDC)** in five cities with an aim to **democratise the country's fast growing digital e-commerce space** that is currently dominated by the two U.S.-headquartered firms — Amazon and Walmart.

What is ONDC?

- ONDC is a network based on open protocol and will **enable local commerce across segments**, such as mobility, grocery, food order and delivery, hotel booking and travel, among others, **to be discovered and engaged through a single platform**.
- The platform aims to create new opportunities, curb digital monopolies and by supporting micro, small and medium enterprises and small traders and help them get on online platforms.
- It is an initiative of the **Department for Promotion of Industry and Internal Trade (DPIIT)** under the **Ministry of Commerce and Industry**.
- It is **neither an aggregator application nor a hosting platform**, and all existing digital commerce applications and platforms can voluntarily choose to adopt and be a part of the ONDC network.
- The ONDC aims to **enable buying of products from all participating e-commerce platforms by consumers through a single platform**.
- Currently, a buyer needs to go to Amazon website/app, for example, to buy a product from a seller on Amazon. Under ONDC, it is

envisaged that a buyer registered on one participating e-commerce site (for example, Amazon) may purchase goods from a seller on another participating e-commerce site (for example, Flipkart).

- The ONDC model is trying to **replicate the success of the Unified Payments Interface (UPI)** in the field of digital payments.
 - **UPI allows people to send or receive money irrespective of the payment platforms they are registered on.**
- The open network concept also extends beyond the retail sector, to any digital commerce domains including wholesale, mobility, food delivery, logistics, travel, urban services, etc.

What led to formation of ONDC?

- During the outbreak of the COVID-19 pandemic, the government tried to understand its impact on small sellers and hyperlocal supply chain functioning. Post which, it found that there is a **huge disconnect between the scale of online demand and the ability of the local retail ecosystem to participate**.
- ONDC has been envisaged as an entity which should be **able to work without the need for day-to-day guidance and advisory from the shareholders/members**.
- The independence of the management is linked to the financial independence of the entity, and therefore, the entity will be required to get funding independently and have a **self-sustaining financial model**.

Significance

- The government believes that ONDC will put an **end to the domination of the e-commerce market by a few large platforms**. Amazon and Flipkart, for instance, have been accused of discriminating among sellers on their platforms and promoting certain seller entities in which they hold indirect stakes.
- With an open network like ONDC that connects buyers and sellers across platforms, the government hopes to **level the playing field and make platforms redundant**.
- It is said that buyers will also be able to access sellers across platforms without having to switch between multiple platforms.
- Over the next five years, the ONDC expects to bring on board 90 crore users and 12 lakh sellers on the network.
- The ONDC will **standardise operations** like cataloguing, inventory management, order management and order fulfilment, **hence making it simpler and easier for small businesses to be discoverable over network and conduct business**.
- To **fill the critical gaps in public health infrastructure**, especially in critical care facilities and primary care in both the urban and rural areas.
- There are 3 major aspects:
 - The first aspect is to **strengthen grassroots public health institutions** to deliver universal comprehensive primary health care and critical care services related to the creation of elaborate facilities for diagnostics and treatment.
 - The second aspect of the scheme is to **expand and build an IT enabled disease surveillance system** by developing a network of surveillance laboratories at block, district, regional and national levels for effectively detecting, investigating, preventing and combating Public Health Emergencies and Disease Outbreaks.
 - The third aspect is the **expansion of research on COVID-19 and other infectious diseases** and to develop the core capacity to deliver the **One Health Approach** to prevent, detect, and respond to infectious disease outbreaks in animals and humans. (*One Health is an integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals and ecosystems*)

2) Ayushman Bharat Health Infrastructure Mission

About the Mission

- The Ayushman Bharat Health Infrastructure Mission is aimed at **ensuring a robust public health infrastructure in both urban and rural areas, capable of responding to public health emergencies or disease outbreaks**.
- It was launched in 2021 to accomplish the vision of comprehensive healthcare across the country.

Objectives

Key Features

- In a bid to **increase accessibility**, the Ayushman Bharat Health Infrastructure Mission will provide **support to around 18000 rural**

Health and Wellness Centres and establish more than 10000 urban Health and Wellness Centres across the country. These centres will deliver Comprehensive Primary Health Care that is universal and free to users, with a focus on wellness and the delivery of an expanded range of services closer to the community.

- The mission will also ensure access to critical care services in all districts of the country with over five lakh population through '**Exclusive Critical Care Hospital Blocks**'. The remaining districts will be covered through referral services.
- **Integrated public health labs** will also be set up in all districts, giving people access to a full range of diagnostic services through a network of laboratories across the country.

Increased focus on diagnosis, surveillance of disease

- The Ayushman Bharat Health Infrastructure Mission also aims to establish an **IT-enabled disease surveillance system** through a network of surveillance laboratories at block, district, regional and national levels.
- All the public health labs will be connected through the **Integrated Health Information Portal**, which will be expanded to all states and UTs.
- The mission aims at ensuring a robust system for **detecting, investigating, preventing, and combating public health emergencies and disease outbreaks**. For this, 17 new public health units will be set up, while the 33 existing public health units will be strengthened. It will also train frontline and healthcare

workers to respond to public health emergencies effectively.

- Apart from this, the mission will set up **other infrastructure**, including a national institution for one health, four national institutes for virology, a regional research platform for WHO's South East Asia region, nine biosafety level-III laboratories, and five regional centres for disease control.

Why in News?

- The Central Government has allocated more than Rs 404 crore for medical infrastructure advancement under the Pradhan Mantri Ayushman Bharat Health Infrastructure Mission.

3) One Nation One Ration Card PDS in India

- Under the **National Food Security Act, 2013**, about 81 crore persons are entitled to buy subsidized foodgrain — rice at Rs 3/kg, wheat at Rs 2/kg, and coarse grains at Re 1/kg — from their designated Fair Price Shops (FPS) of the **Targeted Public Distribution System (TPDS)**.
- PDS is operated under the **joint responsibility** of the Central and the State Governments.
- The Central Government, through **Food Corporation of India (FCI)**, has assumed the responsibility for procurement, storage, transportation and bulk allocation of food grains to the State Governments.
- The **operational responsibilities** including allocation within the State, identification of eligible families, issue of Ration Cards and supervision of the functioning of Fair Price Shops (FPSs) etc., rests with the State Governments.

What is the one 'One Nation, One Ration Card' system?

- Earlier, a ration cardholder can buy food grains only from an FPS that has been assigned to her in the locality in which she lives.
- However, under the 'One Nation, One Ration Card' system, the beneficiary will be able to buy subsidised foodgrains from **any FPS across the country**.
- The biggest beneficiaries will be **migrant workers** who move to other states to seek better job opportunities.

How will the system of ration card portability work?

- Ration card portability is aimed at providing **intra-state as well as inter-state portability** of ration cards.
- The new system, based on a technological solution, will identify a beneficiary through **biometric authentication** on electronic Point of Sale (ePoS) devices installed at the FPSs, and enable that person to purchase the quantity of foodgrains to which she is entitled under the NFSA.
- Once the 'one nation one ration card' system takes effect in a given state, the beneficiary family **can purchase food grains from different locations**. For example, a migrant worker staying in a different state can buy his or her share of the subsidized food grains from any FPS in the state where they work while the remaining family members will be able to buy their quota of the supplies back at home.

Why in News?

- Assam has become the 36th State/UT to implement One Nation One Ration Card (ONORC). With this, the ONORC plan is successfully implemented in all the 36 states/UTs, making food security portable throughout the country.

4) Pradhan Mantri National Apprenticeship Mela

What's in the news?

- With an aim to connect the youth with more opportunities of on-ground training within corporates and further a chance to get employment, the **Ministry of Skill Development and Entrepreneurship** has decided to organise the Pradhan Mantri National Apprenticeship Mela every month.
- The PM National Apprenticeship Mela will take place across 200+ locations in India. More than 1000 companies from across 36+ sectors will be participating in the Mela providing opportunities of being **hired as an apprentice within companies**.
- Individuals having a 5th-12th grade pass certificate, a skill training certificate, an ITI Diploma, or a graduate degree can apply for an interview across these trades/opportunities.
- The candidates will be given a choice of 500+ trades, including welders, electricians, housekeepers, beauticians, mechanics, and others.
- The primary goal of this programme is to **encourage the hiring of apprentices from these cities, as well as to assist employers in identifying and developing their potential through training and practical skill sets bringing value to their workplace**.
- Candidates will also receive **Apprenticeship certificates** recognised by the **National Council for Vocational Education and Training (NCVET)** at the end of their training period, which will give them industry recognition.

5) NATGRID

What is NATGRID?

- NATGRID (or **National Intelligence Grid**) is an attached office under the **Ministry of Home Affairs** which aims to create an online database for collating scattered pieces of information of core security agencies and putting them on one platform.
- The 26/11 attacks on Mumbai (2008) led to the exposure of several weaknesses in India's intelligence gathering and action networks.
- The project was initially started in **2009**. The NATGRID **links intelligence and investigation agencies**. At least 10 Central government agencies, such as the Intelligence Bureau, Research and Analysis Wing and others will have access to the data on the secured platform.
- The 10 user agencies will be linked independently with certain databases which will be procured from 21 providing organisations including telecom, tax records, bank, immigration etc. to generate intelligence inputs.
- NATGRID's headquarters is nearing completion in Delhi.

Why in News?

- Union Home Minister Amit Shah inaugurated NATGRID campus in Bengaluru.

6) Swachh Bharat Mission

About SBM

- The Swachh Bharat Mission (SBM) was launched in 2014 to fulfil the vision of a **cleaner India by 2 October 2019**, as a tribute to Mahatma Gandhi on his 150th birth anniversary.
- The campaign is one of the biggest-ever drives to accelerate efforts towards achieving **universal**

sanitation coverage, improving cleanliness and eliminating open defecation in India. The Mission comprises components such as the construction of individual household toilets, community and public toilets, and solid and liquid waste management, etc.

- It has 2 components - urban and rural.
 1. **SBM Urban** aims for the elimination of open defecation, conversion of unsanitary toilets to pour flush toilets, eradication of manual scavenging, municipal solid waste management and bringing about a behavioural change in people regarding healthy sanitation practices.
 2. **SBM Rural** aims to make India an open defecation free country. It seeks to improve the levels of cleanliness in rural areas through Solid and Liquid Waste Management activities and making Gram Panchayats Open Defecation Free (ODF), clean and sanitised.
- The urban component of the mission is implemented by the **Ministry of Housing and Urban Affairs**, and the rural component by the **Department of Drinking Water and Sanitation, Ministry of Jal Shakti**.

Phase II of SBM Rural

- In 2020, the Union Cabinet approved the **Phase II of the Swachh Bharat Mission (Grameen)** till 2024-25.
- It will focus on Open Defecation Free Plus (ODF Plus), which includes ODF sustainability and Solid and Liquid Waste Management (SLWM).

- The program will also work towards ensuring that no one is left behind and everyone uses a toilet.

Phase II of SBM Urban

- The government launched Urban Swachh Bharat Mission 2.0 in 2021. It will stress on further strengthening of the 'swachhata' (cleanliness) campaign of urban India.
- The government intends to focus on complete faecal sludge management and wastewater treatment, source segregation of garbage, reduction in single-use plastic, reduction in air pollution, especially waste from construction and demolition, and bio-remediation of dumpsites.

Why in News?

- The Ministry of Housing and Urban Affairs has launched the **Revised Swachh Certification Protocols for ODF, ODF+, ODF++, and Water+ certifications** for Swachh Bharat Mission-Urban 2.0.
- The revamped revised protocol is aligned with SBM-2.0 objectives and is designed to ensure:
 - **No untreated used water or faecal sludge is discharged** into the environment and **all used water** (including sewerage and septage, grey water and black water) is **safely contained, transported, and treated**, along with **maximum reuse of treated**

used water, in all cities with less than 1 lakh population.

- To **sustain open defecation free status** in all statutory towns.
- It contains provisions to encourage cities to have robust infrastructure with reliable Operation & Maintenance (O&M) mechanisms to achieve the goal of clean urban India.
- Key interventions against each certification are:
 - **ODF** - Robust monitoring mechanism ensured by increasing the number of survey sample size and location types.
 - **ODF+** - Focus on functionality of Community & Public Toilets (CT & PT) and innovative O&M business model for their sustainability in the long run.
 - **ODF++** - Emphasis on mechanized cleaning of septic tanks and sewers. Safe collection & treatment of used water as well as safe management of faecal sludge.
 - **Water+** - The focus is on collection, transportation, treatment, and reuse of both used water and faecal sludge to prevent environmental pollution.

Environment

1) Four new Corals found from Indian waters

Coral reefs

- Coral reefs are large underwater structures composed of the skeletons of colonial **marine invertebrates called coral**.
- Corals are **animals**, even though they may exhibit some of the characteristics of plants and are often mistaken for rocks. In scientific classification, corals fall under the **phylum Cnidaria** and the **class Anthozoa**.

Types of Corals

- **Hard corals** produce a **rigid skeleton** made of **calcium carbonate (CaCO₃)** in crystal form called **aragonite**. Hard corals are the **primary reef-building corals**. Colonial hard corals, consisting of hundreds to hundreds of thousands of individual polyps, are cemented together by the calcium carbonate 'skeletons' they secrete. Hard corals that form reefs are called **hermatypic corals**.
- **Soft coral**, also known as **Alcyonacea** and **ahermatypic coral**, **do not produce a rigid calcium carbonate skeleton and do not form reefs**, though they are present in a reef ecosystems. Soft corals are also mostly colonial; what appears to be a single large organism is actually a colony of individual polyps combined to form a larger structure. Visually, soft coral colonies tend to resemble trees, bushes, fans, whips, and grasses.

Symbiotic relationship

- Most reef-building corals contain photosynthetic algae, called **zooxanthellae**, that live in their tissues. The corals and algae have a **symbiotic relationship**.

- The coral provides the algae with a protected environment and compounds they need for photosynthesis. In return, the algae produce oxygen and help the coral to remove wastes. The presence of the zooxanthellae also provides colored pigments to help protect the coral's white skeleton from sunlight.

Significance of Coral reefs

- Coral reefs only **occupy 0.1% of the area of the ocean but they support 25% of all marine species** on the planet.
- Because of the diversity of life found in the habitats created by corals, reefs are often called the **"rainforests of the sea."**

Geographical distribution

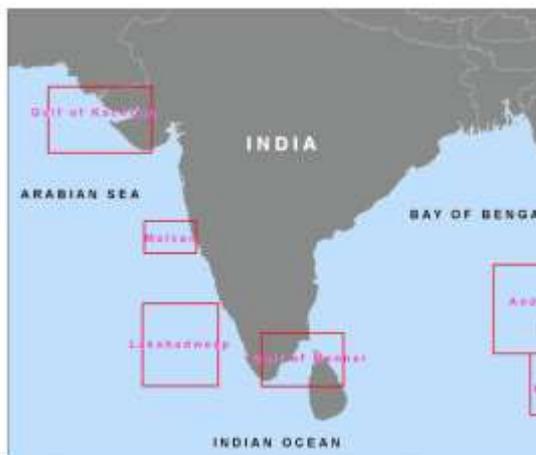
- The reef-building corals prefer to grow at
 - **depths shallower than 30 m (100 ft)**, or
 - where the **temperature range is between 16-32°C**, and
 - **light levels are high**
- The majority of reef building corals are found within tropical and subtropical waters. These typically occur between **30°N and 30°S of the equator**.
- The largest of these coral reef systems, the **Great Barrier Reef** in Australia.



Coral reefs in India

- Coral reefs are present in the areas of **Gulf of Kutch, Gulf of Mannar, Andaman & Nicobar**,

Lakshadweep Islands and Malvan coast of Maharashtra.



Main threats to coral reefs

- **Climate change:** Warmer water temperatures can result in **coral bleaching**. When water is too warm, corals expel the algae (zooxanthellae) living in their tissues causing the coral to turn completely white. This is called **coral bleaching**. When a coral bleaches, it is not dead. Corals can survive a bleaching event, but they are under more stress and are subject to mortality.
- **Ocean acidification:** Ocean acidification is caused by rising levels of CO₂ in the atmosphere. Oceans absorb some of the CO₂. As CO₂ enters the ocean, it reacts with water increasing hydrogen ion concentration (thus decreasing ocean pH) and decreasing the carbonate ion concentration. A reduction in carbonate ions affects the **Calcification process** of Corals.
 - *Calcification is the process by which corals form their skeletons by combining calcium ions and carbonate ions to create calcium carbonate.*
- **Pollution:** Urban and industrial waste, plastics, sewage, agrochemicals, and oil pollution are poisoning reefs. Some pollutants, such as sewage and runoff from

farming, increase the level of nitrogen in seawater, causing an overgrowth of algae.

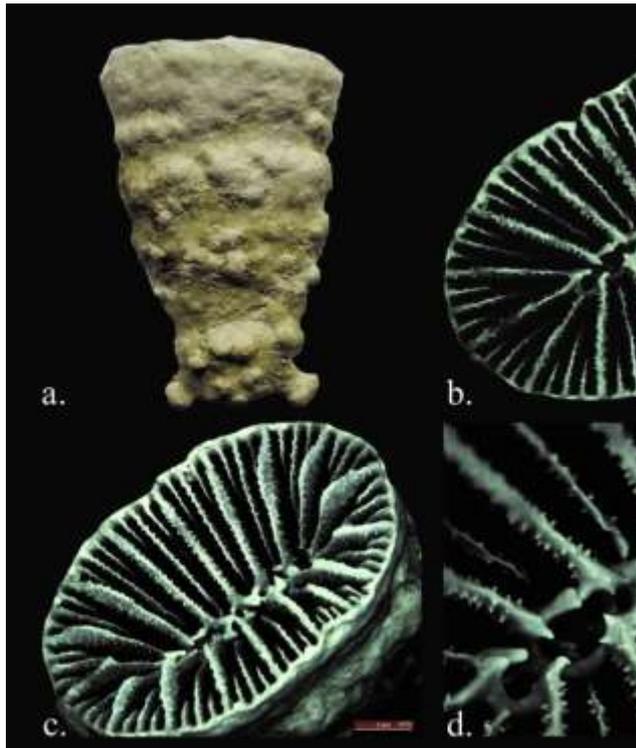
- **Sedimentation:** Erosion caused by construction, mining, logging, and farming is leading to increased sediment in rivers. This ends up in the ocean, where it can smother corals by depriving them of the light needed to survive.
- **Destructive fishing practices:** These include cyanide fishing, blast or dynamite fishing, bottom trawling, and muro-ami (banging on the reef with sticks). **Bottom-trawling** is one of the greatest threats to cold-water coral reefs.

Why in news?

- Recently, scientists have recorded four species of **azooxanthellate corals** for the first time from Indian waters. These corals were found in the waters of **Andaman and Nicobar Islands**.

What are Azooxanthellate corals?

- Azooxanthellate corals are a group of **non-reef building, solitary corals** which **do not contain zooxanthellate algae**. They are found in **usually dark habitats**, especially in caverns.
- The distribution of azooxanthellate is **not just limited to the upper layer of the ocean but is also known to be found in tropical seas as well as polar seas and from intertidal zones to over depths of 6,328 metres**. They derive nourishment **not from the sun but from capturing different forms of plankton**.
- Meanwhile, **Zooxanthellate corals are restricted to shallow waters**.



News in detail

- All the four groups of corals recorded (*Truncatoflabellum crassum*, *T. incrustatum*, *T. aculeatum* and *T. irregulare*) are from the same family **Flabellidae**.
- These groups were previously found from Japan to the Philippines and Australian waters while only *T. crassum* was reported within the range of Indo-West Pacific distribution including the Gulf of Aden and the Persian Gulf.

2) India aims to have 75 Ramsar sites

What are Wetlands?

- A wetland is a land area that is saturated with water, either permanently or seasonally, and it takes on the characteristics of a distinct ecosystem
- The **Ramsar Convention** defines wetlands as "areas of marsh, fen, peatlands or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water,

the depth of which at low tide **does not exceed six metres**".

- **Five major wetland types are generally recognized:**
 - marine (coastal wetlands including coastal lagoons, rocky shores, and coral reefs);
 - estuarine (including deltas, tidal marshes, and mangrove swamps);
 - lacustrine (wetlands associated with lakes);
 - riverine (wetlands along rivers and streams); and
 - palustrine (meaning "marshy" - marshes, swamps and bogs).
- The definition of wetlands is very broad and includes ponds, water storage areas, low-tide coastal zones and all human-made sites such as fish ponds, rice paddies, reservoirs and salt pans.

About Ramsar Convention

- The Ramsar Convention on Wetlands of International Importance signed in 1971, is an international treaty for the **conservation and sustainable use of wetlands**.
- It is named after the Iranian city of **Ramsar, on the Caspian Sea**.
- It is the only **global treaty** to focus on a single ecosystem (wetlands).
- At present, more than 170 nations are signatories (including **India**) to the Ramsar Convention. A contracting party agrees to **nominate at least one wetland** in its territory to the List of Wetlands of International Importance based on enumerated criteria.
- Contracting Parties are committed to the Convention's three pillars:
 1. Work towards the **wise use** of all their wetlands. Wise use means the maintenance of the ecological character of

the wetland and allowance of sustainable use for the benefit of people and the environment.

2. Designate suitable wetlands for the list of Wetlands International Importance and ensure their effective management.
3. Cooperate internationally on transboundary wetlands, shared wetland systems and shared species.

About Montreux record

- The Montreux Record is a register of wetland sites on the List of Ramsar wetlands of international importance where **changes in ecological character** have occurred, are occurring, or are likely to occur as a result of technological developments, pollution or other human interference.
- It is maintained as **part of the Ramsar List**.
- Currently, **Keoladeo National Park** (Rajasthan) and **Loktak Lake**

(Manipur) are being kept under the record for taking appropriate steps for ecological restoration.

- **Chilika lake** (Odisha) was placed in the record but was later removed from it.

Why in News?

- India urged the Ramsar Convention on Wetlands to fast-track designation of 26 wetlands in the country as Ramsar sites in addition to the existing 49 sites.
- If the Convention on Wetlands agrees to the proposal, India could have a total of 75 Ramsar sites in the 75th year of Independence.
- The 26 wetlands proposed to be designated as Ramsar sites comprise 13 from Tamil Nadu, four from Odisha, three from Madhya Pradesh, two from Jammu & Kashmir and one each from Maharashtra, Mizoram, Karnataka and Goa.

Flora & Fauna

1) Rhino reintroduction success in Assam

About Greater One-Horned Rhino

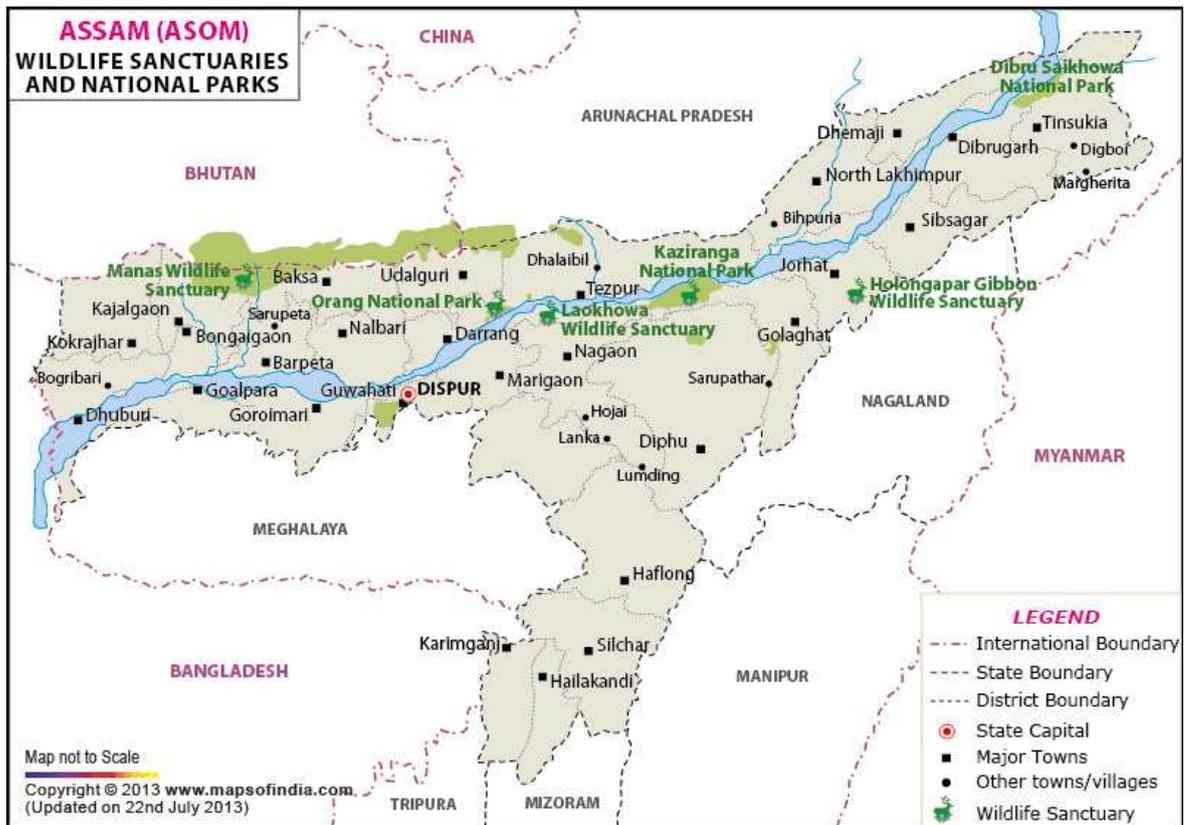
- The greater one-horned rhino (*Rhinoceros unicornis*) is the largest of the rhino species. It is also known as **Indian rhino**.
- Once widespread across the entire northern part of the Indian subcontinent, rhino populations plummeted as they were hunted for sport or killed as agricultural pests.
- This pushed the species very close to extinction and by the start of the 20th century, around 200 wild greater one-horned rhinos remained.
- The recovery of the greater one-horned rhino is among the greatest conservation success stories in Asia. Thanks to strict protection and management from Indian and Nepalese wildlife authorities, the greater one-horned rhino was brought back from the brink.
- At present, the greater one-horned rhino lives in **northern India and southern Nepal**, in riverine (floodplain) grasslands and adjacent woodland.
- **Protection Status:** IUCN Red List: **Vulnerable**; CITES: **Appendix I**; Wildlife Protection Act (1972): **Schedule I**.

Conservation Issues

- **Assam** holds nearly three-quarters of the world's greater one-horned rhinos. However, the species' stronghold, rhinos were found in only three protected areas: **Kaziranga National Park, Pobitora Wildlife Sanctuary and Orang National Park**.
- Yet the largest of these, Kaziranga National Park, was almost at capacity. Additionally, with the rhinos concentrated in just three areas, the risk of a disease or a natural disaster decimating the population was high. For the species to thrive, more habitat had to be found.

About IRV 2020

- In this context, the Indian Rhino Vision 2020 (IRV 2020) was launched in **2015** which aims at increasing the number and range of rhinos in Assam through **wild-to-wild translocations** from Kaziranga National Park and Pobitora Wildlife Sanctuary to potential Protected Areas including **Manas National Park, Burachapori Wildlife Sanctuary, Laokhowa Wildlife Sanctuary, and Dibru-Saikhowa National Park**.



- The vision was to attain a population of **3000 wild rhinos in Assam, distributed over seven of its Protected Areas by 2020.**

Why in News?

- The 14th Assam rhino estimation has revealed that the current rhino population in Assam's **Manas National Park** is 40, denoting a significant growth in the population.
- Manas had about 100 resident rhinos prior to 1990, but a prolonged ethno-political conflict thereafter took a heavy toll with extremist groups known to have traded the horns of the herbivores for weapons.
- The latest census marks the success of the Rhino reintroduction

programme under the Indian Rhino Vision 2020.

About Manas National Park

- Manas is a national park, Tiger reserve, an elephant reserve and a Biosphere reserve situated in Assam. It is also recognized as a **UNESCO World Heritage Site.**
- The park is known for its rare and endangered endemic wildlife species such as the Assam roofed turtle, Hispid hare, Golden langur, Pygmy hog, Red panda, one horned rhino, clouded leopards, Black and Wild water buffalo.
- **Manas River** passes through the national park and it's the major tributary of Brahmaputra River.

Agriculture

1) Minimum Support Price

About MSP

- Minimum Support Price (MSP) is a form of **market intervention** by the Government to insure agricultural producers against any sharp fall in farm prices.
- The minimum support prices are announced by the Government at the **beginning of the sowing season** for certain crops on the basis of the recommendations of the **Commission for Agricultural Costs and Prices (CACP)**.

About CACP

- The Commission for Agricultural Costs & Prices is an attached office of the **Ministry of Agriculture and Farmers Welfare**. It came into existence in 1965.
- It is mandated to recommend MSPs to incentivize the cultivators to adopt modern technology and raise productivity and overall grain production in line with the emerging demand patterns in the country.

How many crops does the minimum support price cover?

- As of now, CACP recommends MSPs of **23 commodities**, which comprise **7 cereals** (paddy, wheat, maize, sorghum, pearl millet, barley and ragi), **5 pulses** (gram, tur, moong, urad, lentil), **7 oilseeds** (groundnut, rapeseed-mustard, soyabean, seasmum, sunflower, safflower, niger seed), and **4 commercial crops** (copra, sugarcane, cotton and raw jute).
- CACP submits its recommendations to the government. The **Cabinet Committee on Economic Affairs (CCEA)** takes a **final decision** on the level of MSPs and other recommendations made by CACP.

Why in News?

- The Cabinet Committee on Economic Affairs chaired by the Prime Minister Narendra Modi, has approved the increase in the Minimum Support Prices for all mandated Kharif Crops for Marketing Season 2022-23.
- The increase in MSP is in line with the government's policy of fixing the **MSPs at a level of at least 1.5 times of the all-India weighted average cost of production**, aiming at reasonably fair remuneration for the farmers.

How is the production cost arrived at?

- As per CACP, there are three definitions of production cost which includes **A2, A2+FL and C2**.
 - A2 covers **all paid-out expenses**, including cash and in kind. It includes costs on seeds, chemicals, hired labour, irrigation, fertilisers and fuel.
 - A2+FL covers **actual paid cost and also unpaid family labour**.
 - C2 cost method is more comprehensive and makes the calculation by including a wider range of inputs. It includes **actual paid out costs, imputed value of family labour, interest on the value of owned capital assets, rent paid for leased-in land and the rental value of owned land**.
- Farmers have been demanding that MSP should be 1.5 times of C2. The **National Commission on Farmers (NCF)** headed by MS Swaminathan also recommended the C2 method to calculate MSP. However, at present, MSP is calculated based on the **A2+FL method**.

It should be noted that there is currently **no statutory backing** for these prices,

nor any law mandating their enforcement.

Economy

1) External debt

About External debt

- External debt is the portion of a country's debt that is borrowed from foreign lenders through commercial banks, governments, or international financial institutions.
- If a country cannot repay its external debt, it faces a debt crisis. If a nation fails to repay its external debt, it is said to be in **sovereign default**.
- India's external debt includes **Commercial Borrowings, Sovereign Borrowings, Non-Resident Deposits, Multilateral Loans and Trade credits**.

Why in News?

- According to RBI's latest data, **India's external debt rose to \$620.7 billion** at end-March 2022, recording an increase of \$47.1 billion over the year earlier period.
- The **external debt to GDP ratio declined to 19.9%** at end-March 2022 from 21.2% a year earlier.
- **U.S. dollar-denominated debt** remained the largest component of India's external debt, with a share of 53.2%, followed by debt denominated in the **Indian rupee** (31.2 per cent).

2) GST council

About GST Council

- Goods & Services Tax Council is a **constitutional body** under Article 279A of the amended Constitution, for making recommendations to the Union and State Government on issues related to Goods and Service Tax.
- The Council was introduced by the **Constitution (One Hundred and First Amendment) Act, 2016**.
- The GST Council is chaired by the **Union Finance Minister** and other

members are the Union State Minister of Revenue or Finance and Ministers in-charge of Finance or Taxation of all the States.

Mandate of GST Council

- The Goods and Services Tax Council shall make recommendations to the Union and the States on—
 - the **taxes, cesses and surcharges** levied by the Union, the States and the local bodies which may be subsumed in the goods and services tax;
 - the goods and services that may be **subjected to, or exempted** from the goods and services tax;
 - the **threshold limit of turnover** below which goods and services may be exempted from goods and services tax;
 - the **rates including floor rates with bands** of goods and services tax;
 - the date on which the goods and services tax be levied on **petroleum crude, high speed diesel, motor spirit (commonly known as petrol), natural gas and aviation turbine fuel**.
- **Quorum:** One-half of the total number of Members of the Goods and Services Tax Council shall constitute the quorum at its meetings.
- **Voting share:** Every decision of the Goods and Services Tax Council shall be taken at a meeting, by a majority of **not less than three-fourths** of the weighted votes of the members present and voting, in accordance with the following principles, namely: —

- the vote of the **Central Government** shall have a weightage of **one-third** of the total votes cast, and
- the votes of all the **State Governments** taken together shall have a weightage of **two-thirds** of the total votes cast, in that meeting.
- No act or proceedings of the Goods and Services Tax Council shall be invalid merely by reason of—
 - any vacancy in, or any defect in, the constitution of the Council; or
 - any defect in the appointment of a person as a Member of the Council; or
 - any procedural irregularity of the Council not affecting the merits of the case.
- **Dispute adjudication:** The Goods and Services Tax Council shall establish a mechanism to adjudicate any dispute
 - between the Government of India and one or more States; or
 - between the Government of India and any State or States on one side and one or more other States on the other side; or
 - between two or more States, arising out of the recommendations of the Council or implementation thereof.
- The Competition Act, 2002, as amended by the Competition (Amendment) Act, 2007, prohibits anti-competitive agreements, abuse of dominant position by enterprises and regulates combinations (acquisition, acquiring of control and Mergers and acquisitions), which causes or likely to cause an appreciable adverse effect on competition within India.
- The objectives of the Act are sought to be achieved through the **Competition Commission of India**, which has been established by the Central Government in 2003.

About CCI

- The Competition Commission of India (CCI) is a **statutory body** established under the **Competition Act, 2002** for the administration, implementation and enforcement of the Act.
- CCI consists of a **Chairperson and 6 Members** appointed by the Central Government.
- The following are the objectives of the Commission.
 - To prevent practices having adverse effects on competition
 - To promote and sustain competition in markets
 - To protect the interests of consumers and
 - To ensure freedom of trade.
- The Commission is also required to give opinion on competition issues on a reference received from a statutory authority established under any law and to undertake competition advocacy, create public awareness and impart training on competition issues.
- Appeals of CCI lie with the **National Company Law Appellate Tribunal**.

Why in News?

- The 47th GST Council meeting was held recently under the Chairmanship of Union Minister for Finance.

3) Competition Commission of India

Competition Act, 2002

Why in News?

- The National Company Law Appellate Tribunal (NCLAT) has rejected an appeal by the U.S. e-commerce giant Amazon against a ₹200-crore penalty imposed by the Competition Commission of India.

About NCLAT

- NCLAT was constituted under the **Companies Act, 2013** for hearing appeals against the orders passed by the **National Company Law Tribunal** under the Insolvency and Bankruptcy Code, 2016 (IBC).
- It also heard appeals against the orders passed by the **Insolvency and Bankruptcy Board of India** (under IBC) and the **Competition Commission of India**.
- NCLAT is also the Appellate Tribunal to hear and dispose of appeals against the orders of the **National Financial Reporting Authority**.
- NCLAT decisions can be **challenged in the Supreme Court** on a point of law.

4) Bad Bank

Background

- Last year, the Union Cabinet approved Rs 30,600 crore government guarantee for the **National Asset Reconstruction Company (NARCL)**, thereby paving the way for operationalisation of bad bank.
- It will acquire non-performing assets (NPAs) worth about **Rs 2 lakh crore** from various commercial banks in different phases. Another entity — **India Debt Resolution Company Ltd (IDRCL)**, which has also been set up — will then try to sell the stressed assets in the market. The **NARCL-IDRCL structure is the new bad bank**.

- It came as a welcome move for the banking sector which has been reeling under the weight of bad loans. One of the key ideas behind formation of bad banks is to **de-stress the balance sheets of the banks**.
 - *NPA is a loan or advance for which the principal or interest payment remains overdue for a period of more than 90 days.*

What is a bad bank?

- A bad bank is a corporate structure that **acquires NPAs from banks and resolves them**.
- The bank, which sells the stressed assets to the bad bank, is now relieved of the burden of the bad loans and can focus instead on growing its business by advancing fresh loans to borrowers requiring credit. The cleaner balance sheet also makes it relatively easier for the lender to raise fresh capital, if required.
- In Budget 2021-22, Finance Minister Nirmala Sitharaman had announced setting up of a bad bank as part of resolution of bad loans worth about Rs 2 lakh crore.

How will the NARCL-IDRCL work?

- The NARCL will first purchase bad loans from banks. It will pay **15% of the agreed price in cash** and the **remaining 85% will be in the form of government-guaranteed security receipts**. When the assets are sold, with the help of IDRCL, the commercial banks will be paid back the rest.
- If the bad bank is unable to sell the bad loan, or has to sell it at a loss, then the **government guarantee will be invoked** and the difference between what the commercial bank was supposed to get and what the bad bank was able to raise will be paid from the Rs 30,600 crore that

has been provided by the government.

- The value of bad loans being carved out of bank books for transfer to the NARCL is around **Rs 2 lakh crore**. About Rs 90,000 crore in bad loans will be transferred in the first phase. The guarantee of Rs 30,600 crore will cover the entire pool of Rs 2 lakh crore.
- The **government guarantee will be valid for a period of five years**.
- To disincentivise delay in resolution, NARCL has to pay a **guarantee fee which increases with the passage of time**.

How bad bank will benefit businesses, consumers?

- If a bank has high NPAs, a large part of its profits would be utilized to cut losses. As a result, any bank with high NPAs is likely to become more risk averse and would be **less willing to lend money to borrowers**. It would become more difficult for businesses and consumers to take loans from banks, thereby **impacting the overall robustness of the economy**.
- Moreover, in India, a large portion of NPAs is with the **government-owned public sector banks**. In the past, the government had to infuse fresh capital to improve the financial health of PSBs. The government infusing fresh capital in PSBs means **less money for other schemes**.

Comparison with global peers

- As per **World Bank data**, the **share of NPA to gross loans in India is significantly higher compared to developed western economies**. It also **exceeds most other emerging economies**.
- In India, the level of NPAs rose alarmingly since 2016. In a big way, this was a result of the RBI

requiring banks to clearly recognise the bad loans on their books. The fact is several banks had witnessed deterioration of their loans portfolio since the global financial crisis of 2008-09.

- As of March 2021, the **total bad loans in the banking system amounted to Rs 8.35 lakh crore**.

Criticisms

- Critics of the bad bank concept, however, contend that the government's role in guaranteeing some part of the NPAs could lead to **laxity on the part of bankers in assessing risk and thus creating fresh bad loans**.

Why in News?

- The Finance Ministry has announced that the National Asset Reconstruction Company, set up to take over large bad loans from banks, will pick up the first set of such NPAs in July.
- The NARCL, which will acquire the bad loans from banks, and the India Debt Resolution Company Ltd. - which will then manage these assets and seek to enhance their value - have secured necessary approvals and permissions.

5) Government e-Marketplace

About GeM

- Launched in 2016, the Government e-Marketplace (GeM) is a **100 percent government-owned company** setup under the aegis of the **Ministry of Commerce and Industry**.
- It is a completely paperless, cashless and system driven e-market place that **enables procurement of common use goods and services** with minimal human interface. GeM aims to enhance transparency, efficiency and speed in public procurement.

- GeM was developed with the technical support of the **National eGovernance Division** under the Ministry of Electronics and Information Technology.
- In 2017, the government made it **mandatory** for all the departments and ministries to source goods and services from the GeM.

Why in News?

- The Union Cabinet has given its approval for **expanding the mandate of GeM to allow procurement by Cooperatives as buyers on GeM.**
- At present, the platform is open for procurement by **all government buyers:** central and state

ministries, departments, public sector enterprises, autonomous institutions, local bodies, etc.

- As per existing mandate, **GeM is not available for use by private sector buyers. Suppliers (sellers) can be from across all segments: government or private.**
- More than 8.54 lakh registered cooperatives and their 27 Crore members would be benefitted with this initiative.

Organisations

1) World Trade Organization

About WTO

- The World Trade Organization (WTO) is an intergovernmental organization that is concerned with the regulation of international trade between nations.
- The WTO officially commenced on **1 January 1995** under the **Marrakesh Agreement**, replacing the **General Agreement on Tariffs and Trade (GATT)**, which commenced in 1948.
- It is the largest international economic organization in the world.
- The WTO deals with **regulation of trade in goods, services and intellectual property** between participating countries by providing a framework for negotiating trade agreements and a dispute resolution process aimed at enforcing participants' adherence to WTO agreements, which are signed by representatives of member governments ratified by their parliaments.
- **All decisions are taken through consensus and any member can exercise a veto.**

Objectives

- The primary purpose of the WTO is to **open trade for the benefit of all.**
- The WTO is essentially an **alternative dispute or mediation entity** that upholds the international rules of trade among nations. The organization provides a platform that allows member governments to negotiate and resolve trade issues with other members.

- The WTO **prohibits discrimination between trading partners**, but provides exceptions for environmental protection, national security, and other important goals.
- At present, the WTO has over 160 members representing 98 per cent of world trade.
- **India** has been a WTO member since 1 January 1995 and a member of GATT since 8 July 1948.

WTO Structure

Ministerial Conference

- The topmost decision-making body of the WTO is the Ministerial Conference, which usually meets **every two years.**
- It brings together all members of the WTO, all of which are countries or customs unions.
- The Ministerial Conference can take decisions on all matters under any of the multilateral trade agreements.

General Council

- The General Council comprises the representatives of all member countries and acts as the representative of the Ministerial Conference when it comes to daily operations. Its job is to carry out the implementation and monitoring function of the WTO.

Dispute Settlement Body

- The Dispute Settlement Body (DSB) is a **part of the General Council** and is responsible for settling trade disputes between member states.
- According to the procedure established by the WTO, the first step to resolve a trade dispute is engaging in the **consultation process.**
- If two trading partners having a dispute could not resolve at that level, one of them can ask for a

settlement of **DSB** for hearing. The General Council of the WTO convenes as the DSB.

- The DSB's ruling can be challenged at the **appellate body**, the highest court for global trade disputes.

Appellate Body

- The Appellate Body is a standing committee of **seven members** that presides over appeals against judgments passed in trade-related disputes brought by WTO members.
- Members of the Appellate Body have **four-year terms**. In the selection process, WTO members follow the **consensus principle**, which means that the nomination of the Appellate Body members can only proceed smoothly with the agreement of all the members of WTO.
- The Appellate Body **must have at least three sitting members** to hear an appeal.

Why in News?

- The WTO's 12th Ministerial Conference was held recently in Geneva, Switzerland.

Key Takeaways from the Meeting

Curtailing Harmful Fishing Subsidies:

- The WTO passed a **multilateral agreement that would curb 'harmful' subsidies on illegal, unreported and unregulated fishing** for the next four years, to better protect global fish stocks.
- Since 2001, member states have been negotiating the banning of subsidies that promote overfishing to protect the livelihoods of the 260 million people who depend directly or indirectly on marine fisheries.
- The Government of India said that **artisanal and traditional farmers would not face any restrictions** under this agreement.

Global Food Security:

- Members agreed to a binding decision to **exempt food purchased by the UN's World Food Programme (WFP) for humanitarian purposes, from any export restrictions**.
- In light of the global food shortages and rising prices caused by the war between Ukraine and Russia, the group's members issued a **declaration on the importance of trade in global food security and that they would avoid bans on food exports**.
- However, countries would be **allowed to restrict food supplies to ensure domestic food security needs**.

E-commerce Transactions:

- WTO members have **extended a moratorium on placing customs duties on electronic transmissions**, from streaming services to financial transactions and corporate data flows, worth hundreds of billions of dollars a year.
- The moratorium has been in place since 1998. **South Africa and India** had opposed an extension, arguing that developing countries faced the brunt of the financial consequences of such a moratorium by missing out on customs revenues.
- However, all members agreed to continue the long standing moratorium on custom duties until the subsequent Ministerial Conference or until March 31, 2024, depending on whichever comes first.

Covid-19 Vaccine Production:

- WTO members agreed to **temporarily waive intellectual property patents on Covid-19 vaccines without the consent of the patent holder for 5 years**, so that they can more easily manufacture them domestically.

- This will contribute to ongoing efforts to concentrate and diversify vaccine manufacturing capacity so that a crisis in one region does not leave others cut off.

WTO Reform:

- The WTO committed to conduct discussions so as to have a **fully functioning dispute settlement system by 2024**.
- WTO's **dispute appeals court has been paralysed** for nearly two years since then-U.S. president Donald Trump blocked new adjudicator appointments, which has curbed the WTO's ability to resolve trade disputes.
- Members also committed to work towards necessary reforms of the WTO to improve its functions. This work should be transparent and address the interests of all members, including developing countries.

2) Commonwealth

About Commonwealth

- The Commonwealth is a **voluntary association** of more than **50 independent and equal countries** (including **India**) in Africa, Asia, the Americas, Europe and the Pacific.
- It is home to 2.5 billion people, and includes both advanced economies and developing countries. 32 of the members are small states, including many island nations.
- The member governments have agreed to **shared goals like development, democracy and peace**.
- The Commonwealth's roots go back to the British Empire. But today **any country can join the modern Commonwealth**. The last country to join the Commonwealth was Rwanda in 2009.
- Leaders of the Commonwealth countries meet **every two years** at

the **Commonwealth Heads of Government Meeting (CHOGM)**.

Why in News?

- External Affairs Minister Dr S Jaishankar represented India at the CHOGM Foreign Ministers' plenary in Rwanda.

3) UNHRC

About UNHRC

- The Human Rights Council is an **inter-governmental body within the United Nations system**.
- The Council's mandate is to promote "universal respect for the protection of all human rights and fundamental freedoms for all" and "address situations of violations of human rights, including gross and systematic violations, and make recommendations thereon."
- It has the ability to discuss all thematic human rights issues and situations that require its attention throughout the year.
- The Council was created by the **United Nations General Assembly** in **2006**. It replaced the former United Nations Commission on Human Rights.
- The headquarters of UNHRC is in **Geneva, Switzerland**.

Membership

- The Council is made of **47 Member States**, which are elected by the majority of members of the General Assembly of the United Nations through **direct and secret ballot**.
- The Council's Membership is based on **equitable geographical distribution**.
- Members of the Council serve for a period of **three years** and are **not eligible for immediate re-election after serving two consecutive terms**.

Why in News?

- The United Nations Human Rights Council has called on Myanmar to

immediately commence the voluntary, safe, dignified and sustainable repatriation of **Rohingya refugees** stuck in camps for internally displaced persons in Bangladesh.

- The council adopted the resolution, expressing grave concern over continuing reports of serious human rights violations and abuses in Myanmar, in particular against Rohingya Muslims and other minorities.
- More than 740,000 Rohingya were forced to flee their homes in **Myanmar's Rakhine state** due to a bloody military crackdown in 2017 and they remain in camps in Bangladesh.

4) UNGA's resolution on multilingualism

About UNGA

- United Nations General Assembly (UNGA) is the main deliberative, policymaking and representative organ of the UN.
- It is **one of the six principal organs** which make up the UN.
- All 193 Member States of the UN are represented in the General Assembly, making it the **only UN body with universal representation**.
- The annual session is attended by world leaders to discuss and debate the world's most important global issues and how to address them.

Voting

- **Each country has one vote.**
- Decisions on important questions, such as those on peace and security, admission of new members and budgetary matters, require a **two-thirds majority**. Decisions on other questions are by **simple majority**.

Why in News?

- The United Nations General Assembly has adopted an India-sponsored resolution on multilingualism that mentions the Hindi language for the first time. The resolution passed urges the United Nations to continue spreading vital communications and messages in both official and non-official languages, including Hindi.
- In addition to Hindi, the general assembly will also use Bangla, Urdu, Portuguese, Kiswahili, and Persian as unofficial languages.
- The **six official languages** of the United Nations are **Arabic, Chinese, English, French, Russian, and Spanish**, with **English and French** serving as **working languages** for the UN Secretariat.

5) Financial Action Task Force

What is the FATF?

- The Financial Action Task Force (FATF) is an **intergovernmental organization** that designs and promotes policies and standards to combat financial crime.
- The FATF sets **standards or recommendations for countries to achieve in order to plug the holes in their financial systems and make them less vulnerable to illegal financial activities**.
- Recommendations of the FATF target
 - Money laundering
 - Terrorist financing
 - Other threats to the global financial system
- The FATF was created in 1989 by the G7 countries and is headquartered in Paris.
- There are **37 members**, including **India** and **two regional organisations** - European

Commission and the Gulf Cooperation Council.

- The decision-making body of the FATF, known as its **plenary**, meets **thrice a year**.

What are FATF's 'grey' and 'black' lists?

- At the end of every plenary meeting, FATF comes out with two lists of countries. The **grey countries** are designated as "**jurisdictions under increased monitoring**", working with the FATF to counter criminal financial activities. For such countries, the watchdog does not tell other members to carry out due-diligence measures vis-a-vis the listed country but does tell them to consider the risks such countries possess. Currently, **23 countries** including Pakistan are on the grey list.
- **Black list** means countries designated as '**high-risk jurisdictions subject to call for action**'. In this case, the countries have **considerable deficiencies in their AML/CFT** (anti-money

laundering and counter terrorist financing) regimens and the body calls on members and non-members to apply enhanced due diligence. In the most serious cases, members are told to apply counter-measures such as sanctions on the listed countries. Currently, **North Korea and Iran** are on the black list.

- Being listed under the FATF's lists makes it hard for countries to get aid from organisations like the International Monetary Fund (IMF), Asian Development Bank (ADB), and the European Union. It may also affect capital inflows, foreign direct investments, and portfolio flows.

Why in News?

- The Financial Action Task Force has decided to retain Pakistan's listing on the "Grey List" of countries.

Science and Technology

1) New VPN Rules

Context

- India's cybersecurity agency Computer Emergency Response Team (CERT-In) passed a rule **mandating VPN (Virtual Private Network) providers to record and keep their customers' logs for 180 days.**
- It also asked these firms to **collect and store customer data for up to five years.** It further mandated that any cybercrime recorded must be reported to the CERT within 6 hours of the crime.
 - CERT-In has been designated to serve as the national agency to perform the following functions in the area of cyber security. It functions under the **Ministry of Electronics and Information Technology.**

What is a VPN and how does it work?

- VPN is a technology that **encrypts one's internet traffic** on unsecured networks to protect the online identity, hide IP address, and shield online data from third parties.
- VPNs use real-time encryption and send the internet data through a secure virtual tunnel to minimize the possibility of anyone tracking what the user is doing online.
- Every time we switch on the VPN connection, a **secure channel is created**, which acts as an intermediary between our device and the destination webpage.
- Our data is then sent to an external VPN server, which then connects us to the destination.
- However, when the VPN server does this, our **IP address**, which is the online equivalent of a user-

specific postal code, is **changed** — and thus websites are unable to accurately track our location.

- This private network **enhances overall privacy on the Web.** It is also used to **get around georestrictions and online censorship.**

Concerns

- In response to CERT-In rules, several VPN firms announced that they will shut down their operations in India. Industry bodies specifically flagged the **six-hour incident reporting timeline.** They argue that the prescribed timeline to report cybersecurity incidents is **too short** and may interfere with an organisation's ability to deploy immediate defensive measures in the wake of an incident.
- Another area of concern is the extent to which the new rules impose **data retention requirements.** VPN providers and others would be under an obligation to **retain user information for five years.** VPNs protect online privacy by masking the users' IP address and most VPNs do not log any user information.
- This **helps protect internet users from snooping**, which is particularly useful when connected to public networks such as at airports, hotels and restaurants. It also helps **circumvent internet shutdowns and enables people to stay connected to**, for instance, access information, education, and healthcare.
- VPNs are also incredibly **helpful for journalists and whistleblowers.** Journalists rely on encryption and VPNs to facilitate private communication in

order to protect their own privacy and security as well as that of their sources.

- However, CERT-In noted that these details are necessary to prevent incitement or commission of any cognisable offence using computer resources or for the handling of any cyber incident which may lead to any disturbance in the sovereignty or integrity of India, defence of India, security of the state, friendly relations with foreign states or public order.

Way Forward

- As the significant number of cybersecurity incidents and data breaches have shown, there is no question that we urgently need concerted action and clear policy at the government level. However, **recognising that privacy and cybersecurity can be mutually reinforcing** is key.
- The national cybersecurity policies adopted by other major democracies recognise this and explicitly state the need to safeguard human rights and ensure that cybersecurity regulation and data protection laws are constructively interlinked.
- India suffers in this regard. **India does not have a data protection law**; the bill for that purpose is still pending in Parliament.
- Since the new CERT-In rules have a significant impact on industry, people's online freedom and safety, and the internet landscape at large, they must therefore be informed by consultation with all stakeholders. CERT-in should actively invite comments and, accordingly, incorporate amendments, prior to enforcement.

2) Anthrax

About

- Anthrax, also known as malignant pustule or woolsorter's disease, is an infectious disease **caused by bacteria** known as **Bacillus Anthracis**, which is found in soil naturally.
- Anthrax spores can remain dormant for years until they find their way into a host. Common hosts for anthrax include **wild or domestic livestock, such as sheep, cattle, horses and goats.**
- Anthrax is a **zoonotic disease**, meaning that it is naturally transmissible from animals to humans. People can get the disease through **contact with infected animals or animal products that are contaminated with bacteria.**
- When anthrax spores get inside the body, they can be "activated." The bacteria can then multiply, spread out in the body, produce toxins, and cause severe illness. Symptoms include black sore, headaches, fever, breathing difficulties, vomiting of blood, diarrhea.
- According to the World Health Organization, Anthrax is generally regarded as **non-contagious.** There have been instances of person-to-person transmission, however, such instances are extremely rare.
- All types of anthrax infection can be treated with **antibiotics.**

Why in News?

- The Government of Kerala is taking steps to prevent the spread of Anthrax following the disease outbreak in Thrissur district.
- Anthrax has usually been found in India's southern states and is less frequently found in the northern states. Over the past years, it has been reported in Andhra Pradesh, Jammu and Kashmir, Tamil Nadu, Assam, Orissa and Karnataka.

3) Malaria

About Malaria

- Malaria is a life-threatening disease caused by ***Plasmodium* parasites**.
- There are **5 parasite species** that cause malaria in humans, and 2 of these species – ***P. falciparum*** and ***P. vivax*** – pose the greatest threat.
- The parasites are spread to people through the bites of infected **female *Anopheles* mosquitoes**.
- Children aged under 5 years are the most vulnerable group affected by malaria.
- **Symptoms:** Fever, tiredness, vomiting, headaches, seizures, chills, etc.
- **Diagnosis:** Examination of blood films or by antigen-based rapid diagnostic tests (RDT).
- **Prevention: Vector control** is the main way to prevent and reduce malaria transmission. Two forms of vector control – **insecticide-treated mosquito nets and indoor residual spraying** – are effective in a wide range of circumstances.
- **Treatment:** Antimalarial medications depending on the type of malaria.
- **Vaccine: RTS,S** (trade name **Mosquirix**) is the world's first malaria vaccine shown to provide partial protection against malaria in young children. In 2021, WHO recommended widespread use of the RTS,S vaccine.

Malaria in India

- According to the **WHO's World Malaria Report, 2020, 11 highest burden countries** - Burkina Faso, Cameroon, the Democratic Republic of the Congo, Ghana, **India**, Mali, Mozambique, Niger, Nigeria, Uganda and Tanzania - account for 70% of the global estimated case burden and 71% of

global estimated deaths from malaria.

- The Government of India aims at **eliminating malaria from the country by 2030**.
- Efforts are being made by the government in the provision of **microscopes, rapid diagnostics Long Lasting Insecticidal Nets (LLINs)**. Sleeping under LLINs is a major control strategy. They are being supplied/distributed to high burden areas leading to reduction in endemicity in these otherwise very high endemic states.

Why in News?

- According to the **"India's march towards malaria elimination"** report released by non-profit organisation **Malaria No More**, the number of malaria cases in India has fallen by a staggering 86 per cent since 2015 and there has been a 79 per cent reduction in the number of deaths caused by the disease between 2015 and 2021.
- The report noted that India's budgetary allocation to fight malaria more than doubled between 2017 and 2019. This was complemented by the distribution of over nine crore long-lasting insecticidal nets.

Challenges

- Some critical challenges that remain to be addressed include getting a greater participation from the private sector, individuals and communities to put up a joint fight against the disease.
- The private sector's participation in effective reporting of malaria, digging out asymptomatic or hidden malaria cases, improved real-time case reporting and technological innovation are areas that require more work.

4) Liquid Mirror Telescope (ILMT)

What's in the news?

- India has set up its first-ever 'liquid mirror telescope' at **Devasthal Observatory in Uttarakhand**. The largest International Liquid Mirror Telescope (ILMT) of Asia has been installed at a height 2,450 metres.
- The ILMT at the Devasthal Observatory campus which is owned by **Aryabhata Research Institute of Observational Sciences (ARIES)** is the **world's first liquid-mirror telescope to be commissioned for astronomy**. The handful of liquid-telescopes that were previously built either tracked satellites or were deployed for military purposes.
- The 4-meter-wide telescope will be used to observe the galaxies and other astronomical elements present at the edge of the world.
- The telescope was built by astronomers from India, Belgium and Canada.



About

- Unlike the conventional telescopes that can be steered to track specific stellar source objects, the **ILMT will be stationary**. It will basically carry out observations and imaging at the zenith, that is, of the overhead sky.

- A liquid mirror telescope, as the name implies, has a **liquid as its primary mirror rather than aluminized glass**. A **revolving dish holds the liquid, which is generally mercury**.
- **Gravity and inertia** are two main forces that act on the mercury as a result of the rotation.
 - The liquid surface is pulled down by gravity, while inertia pushes the liquid sideways at the dish's edge.
- As a result, the **liquid creates a flawless and uniform parabola**, which is excellent for a telescope's reflecting surface.
- This shape helps **concentrate the reflected light** since **mercury is reflective**.
- The liquid mirror surface requires little to no upkeep to remain smooth and beautiful. Gravity and inertia will operate on the liquid to restore it to its former state if it is disturbed.

Significance

- The telescope will help in surveying the sky, making it possible to observe several galaxies and other astronomical sources just by staring at the strip of sky that passes overhead.
- It will acquire terabytes of data once it begins making observations, which will need to be analysed using artificial intelligence and machine learning (AI and ML) capabilities.

5) New Space India Limited

About NSIL

- New Space India Limited, incorporated in 2019 (under the Companies Act, 2013) is a **wholly owned Government of India company**, under the **administrative control of Department of Space (DOS)**.

- NSIL is the **commercial arm of ISRO** with the primary responsibility of enabling Indian industries to take up high technology space related activities.
- It is also responsible for promotion and commercial exploitation of the products and services emanating from the Indian space programme.
- The major business areas of NSIL include:
 - Production of Polar Satellite Launch Vehicle (PSLV) and Small Satellite Launch Vehicle (SSLV) through industry;
 - Production and marketing of space-based services, including launch services and space-based applications like transponder leasing, remote sensing and mission support services;
 - Building of Satellites (both Communication and Earth Observation) as per user requirements;
 - Transfer of technology developed by ISRO centres/ units and constituent institutions of Dept. of Space;
 - Marketing spin off technologies and products/ services emanating out of ISRO activities;
 - Consultancy services.

Why in News?

- The Union Cabinet has approved increasing the authorized share capital of NSIL from Rs.1000 crore to **Rs.7500 crore**.
- Transfer of these assets to NSIL will further provide the desired financial autonomy to the company to realize capital intensive programmes/ projects and thereby offering huge employment

potential and technology spin-off to other sectors of the economy.

- This approval is expected to trigger domestic economic activity in the space sector and increase India's share in the global space market.

6) Tuberculosis

What is TB?

- Tuberculosis (TB) is a disease **caused by bacteria called Mycobacterium tuberculosis**. TB is an ancient disease and has been documented to have existed in Egypt as early as 3000 BC.
- TB most commonly affects the **lungs** (pulmonary TB), but it can also affect **other organs** (extra-pulmonary TB).
- TB **spreads through the air** when a person with TB of the lungs or throat coughs, sneezes, or talks.
- Common symptoms of TB are:
 - Cough for three weeks or more, sometimes with blood-streaked sputum;
 - Fever, especially at night;
 - Weight loss and Loss of appetite.

Who is at risk?

- **Over 95% of cases and deaths are in developing countries.**
- People infected with TB bacteria have a 5–10% lifetime risk of falling ill with TB. Those with **compromised immune systems**, such as people living with HIV, malnutrition or diabetes, or people who use tobacco, have a **higher risk of falling ill**.
- However, TB is **curable and preventable**.

Treatment for TB

- **Directly Observed Treatment Short-course (DOTS)** is the strategy followed for treatment of TB. Tuberculosis treatment requires **at least 6 months of treatment**.

- Currently, **BCG (Bacillus Calmette-Guerin)** is the only licensed vaccine available for the prevention of TB.
- **BCG works well in certain places but not so well in others.** Generally, the farther a country is from the equator, the higher is the efficacy.
- However, BCG gives **excellent protection against severe forms of tuberculosis in children.**

What is Multidrug-resistant TB?

- Anti-TB medicines have been used for decades and **strains that are resistant** to one or more of the medicines have been documented in every country surveyed. Drug resistance emerges when **anti-TB medicines are used inappropriately**, through incorrect prescription by health care providers, poor quality drugs, and patients stopping treatment prematurely.
- **Multidrug-resistant tuberculosis (MDR-TB)** is a form of TB caused by **bacteria that do not respond to isoniazid and rifampicin**, the 2 most effective first-line anti-TB drugs.
- MDR-TB is treatable and curable by **using second-line drugs.** However, second-line treatment options are **limited and require extensive chemotherapy** (up to 2 years of treatment) with medicines that are expensive and toxic.

India and TB

- According to the **WHO's Global TB Report**, 10 million people developed TB in 2019 with 1.4

million deaths. **India accounts for 27% of these cases.**

- **BCG** was first introduced in a limited scale in 1948 and became a part of the National TB Control Programme in 1962.
- **National Tuberculosis Elimination Programme (NTEP)** aims at **eliminating TB by 2025** in India. It is crafted in line with other health sector strategies and global efforts, such as the World Health Organization's (WHO) End TB Strategy.

Government Measures

- **Nikshay Portal:** Nikshay is a unified ICT system for TB patient management and care in India and allows both public and private sector health care providers to manage their patients.
- **Nikshay Poshan Yojana (NPY):** Under the Nikshay Poshan Yojana government provide financial help to TB Patients for their treatment. The government provides Rs 500/- per month financial incentive to TB patients for their treatment and food. Nikshay Poshan Yojana Money will be transferred directly to the patient's bank account.

Why in News?

- The Union Ministry of Health and Family Welfare reviewed measures taken by state governments to make the country **TB free by 2025.**

Reports and Indices

1) State of Environment Report, 2022

What's the news?

- The State of Environment report, 2022 was released recently.
 - The State of Environment report is an annual publication of the **Centre for Science and Environment** (New Delhi-based research and advocacy organisation) and **Down to Earth magazine**.
 - It covers areas such as climate change, migration, health and food systems along with biodiversity, forest and wildlife, energy, industry, habitat, pollution, waste, agriculture and rural development.

Highlights of the Report

Overall Performance:

- The report notes that between 2019 and 2020, **India has slipped on climate action**.
- The **parameters** covered under climate action include: **Lives lost due to extreme weather events** (per 100 million population); **disaster preparedness score** as per Disaster Resilience Index; **share of renewable** in total energy mix (including allocated shares); and **life years lost due to disability caused by air pollution** (per 100,000 population).
- The scores on these parameters are **falling in India**.

Renewable Energy Capacity:

- India has managed to meet its **target of biomass energy of 10GW**. But the overall target of **achieving 175 GW of renewable energy generation capacity by 2022 remains unmet**. India has

managed to achieve **150 GW renewable energy capacity**.

Air Pollution:

- Reducing air pollution to meet the World Health Organization's standards would add **2.2 years to global life expectancy**. In India, the life expectancy will go up by **5.9 years** if the country meets the **WHO levels of PM2.5**.

Water Pollution:

- **Three out of every four river monitoring stations (75%) in India posted alarming levels of heavy toxic metals** such as lead, iron, nickel, cadmium, arsenic, chromium and copper.
- **River Ganga** which is the focus of the Centre's Namami Gange mission has **high levels of lead, iron, nickel, cadmium and arsenic**.
- India dumps 72% of its sewage waste without treatment and 10 States do not treat their sewage at all.

Coastal Erosion:

- **More than a third of India's coastline**, which is spread around 7000 km, **recorded erosion** between 1990 and 2018 due to sea level rise and anthropogenic activities.
- **West Bengal** is the worst hit with over 60% of its shoreline under erosion.
- The reasons for coastal erosion include increase in frequency of cyclones and sea level rise and anthropogenic activities such as construction of harbors, beach mining and building of dams.

Climate Change:

- **Climate change** is causing **more internal displacements than conflicts**, and **India is the fourth**

worst hit behind China, Philippines, and Bangladesh.

Forest Cover:

- India has a forest cover of 77.53 million hectares. India's total forest cover has registered a little over a 0.5% increase between 2017 and 2021 though most of the increase has taken place in the **open forest category**, which includes **commercial plantations**.
- At the same time, **very dense forests, which absorb maximum carbon dioxide from the atmosphere, occupy just 3% of total forest cover.**

Agriculture:

- While the **cost of cultivation has increased** in India by almost 35 per cent between 2012-13 and 2018-19, the **share of the income from cultivation in an agricultural household has gone down** from 48 per cent in 2012-13 to 37 per cent in 2018-19.
- **50 per cent of agricultural households in the country are reeling under debt.** On an average, every household has a debt burden of over Rs 74,000, and about 29 farmers and farmlabourers commit suicide in the country daily.

Solid Waste:

- In 2019-20, India generated 3.5 million tonne of plastic waste. **Only**

12 per cent of this was recycled, and 20 per cent was burnt. The remaining 68 per cent remains unaccounted for, which means it is in the environment (land and water) or in dumpsites.

Food and Food systems:

- More than 1.7 million Indians die due to diseases attributable to unhealthy diet. The diet of an Indian, on an average, **lacks in fruits, vegetables, legumes, nuts and whole grains.**

2) Environmental Performance Index 2022

About Environmental Performance Index (EPI)?

- The EPI is an international ranking system of countries based on their **environmental health.**
- It is a **biennial index** prepared by **researchers from Yale and Columbia Universities** in the United States.

Why in News?

- The Environmental Performance Index 2022 was released recently.
- EPI 2022 uses **40 performance indicators across 11 categories** to assess and **rank 180 countries** to judge countries on climate change performance, environmental health and ecosystem vitality.

The 2022 EPI Framework, illustrating 3 policy objectives, 11 issue categories, and 40 indicators.

Climate	Environmental Health				Ecosystem Vitality						
Climate Change Mitigation	Air Quality	Waste Management	Water & Sanitation	Heavy Metals	Biodiversity & Habitat	Ecosystem Services	Fisheries	Agriculture	Acid Rain	Water Resources	
CO ₂ Growth Rate	PM _{2.5}	Controlled Solid Waste	Unsafe Sanitation	Lead Exposure	Land Biome Protection (National)	Tree Cover Loss	Fish Stock Status	Sustainable Nitrogen Use	SO ₂ Emissions	Wastewater Treatment	
CH ₄ Growth Rate	Household Solid Fuels	Recycling	Unsafe Drinking Water		Land Biome Protection (Global)	Wetland Loss	Marine Trophic Index	Sustainable Pesticide Use	NO _x Emissions		
N ₂ O Growth Rate	Ozone	Ocean Plastics			Marine Protected Areas	Grassland Loss	Trawling and Dredging				
F-Gas Growth Rate	Nitrogen Oxides				Protected Areas Rep. Index						
Black Carbon Growth Rate	Sulfur Dioxide				Biodiversity Habitat Index						
Projected 2050 Emissions	Carbon Monoxide				Species Protection Index						
CO ₂ from Land Cover	Volatile Organics				Species Habitat Index						
GHG Intensity											
GHG per Capita											

Highlights of the Report

India's Performance

- With a **rank of 180 and a score of 18.9**, India has fallen from rank 168 and a score of 27.6 in 2020.
- India comes after Pakistan, Bangladesh, Vietnam and Myanmar, the poorest performers. **Denmark** tops the list with a score of 77.9.
- India ranks close to the bottom on a number of indicators including ecosystem vitality (178th), biodiversity (179th), biodiversity habitat index (170th), species protection index (175th), wetland loss, air quality (179th), PM 2.5 (174th), heavy metals such as lead in water (174th), waste management (151st) and climate policy (165th) including projected greenhouse gas emissions (171st).
- India has also scored low on rule of law, control of corruption and government effectiveness.

India's GHG trends

- According to the report, **deteriorating air quality and**

rapidly increasing greenhouse gas emissions are the primary reasons behind India's low score, and need urgent attention.

- Current trends and EPI projections suggest that **China, India, the U.S., and Russia will account for over 50% of residual global greenhouse gas emissions in 2050.**

Fossil Fuel and Air Quality Challenges

- **India is home to 21 of the 30 most polluted cities in the world** and has an air quality rated one of the poorest in the world and **over 16 lakh people in India die from air pollution every year.**
- It also identifies **household fuel combustion** as the largest contributor to the country's particulate matter emissions.

Plastic waste generation

- **India and Indonesia** have been identified as the top two generators of marine plastic waste in the world, while **China** has managed to decrease its ocean plastic pollution.

- **Indonesia, India, the U.S, Brazil and Thailand** are the top five producers of ocean plastic pollution and are responsible for 43 per cent of the global total.
- The annual plastic generation in India has been rising, but it is important to note that India has announced a **ban on single-use plastic, scheduled to be in effect from July 1.**

India's Objection

- India rejected the calculation methodology of GHG emissions, saying that some of the indicators used for assessing performance are extrapolated and based on unscientific methods.
- The Ministry of Environment, Forest and Climate Change claimed that for a developing country like India, the accurate method would be to calculate **GHG emissions per capita.**

3) Performance Grading Index for Districts

What's in the news?

- The **Ministry of Education** has released its Performance Grading Index for Districts (PGI-D) for 2019-20. The Index assessed the

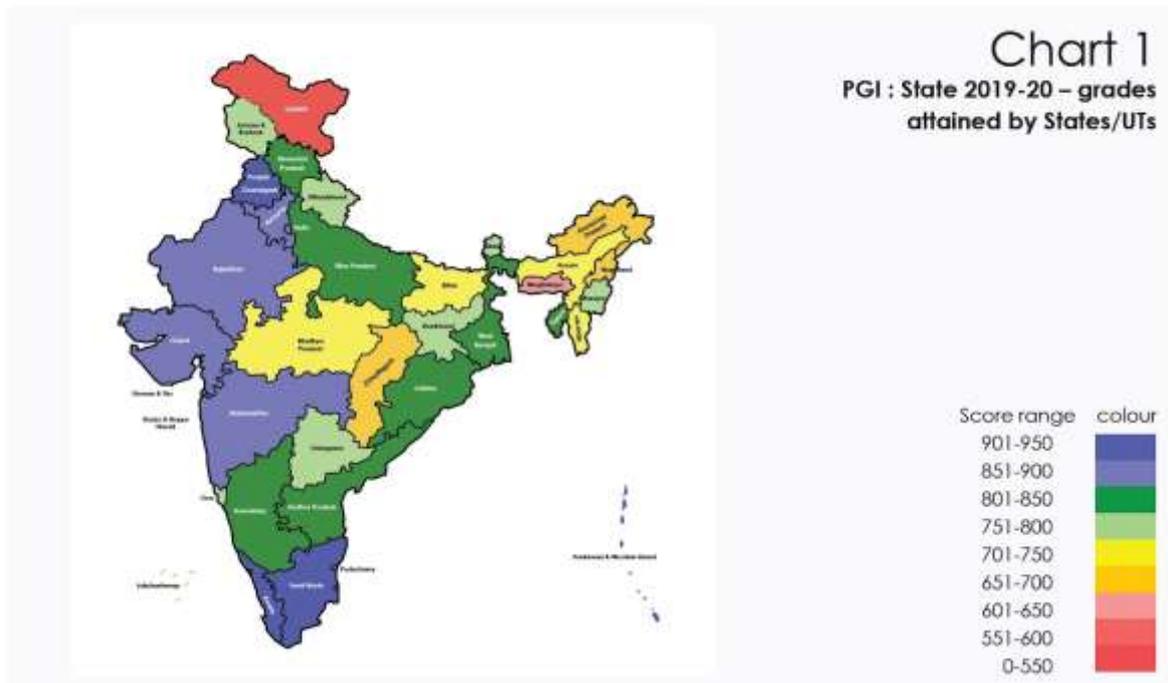
performance of school education system at the district level.

About the Index

- The Index studied **83 indicators grouped in six categories.** These categories are **outcomes, effective classroom transaction, infrastructure facilities and student's entitlements, school safety and child protection, digital learning and governance process.**
- PGI-D has graded the districts into **ten grades** viz., Highest achievable Grade is Daksh, which is for the districts scoring more than 90 per cent of the total points in that category or overall. The lowest grade in PGI-D is called Akanshi-3 which is for scores upto 10 per cent of the total points.

Highlights of the Report

- The report showed that **33 States and UTs have improved their PGI score** in 2019-20 compared to the previous year.
- No district in India has been placed in the Daksh grade, while three districts from **Rajasthan** bagged the second grade (Utkarsh).
- The top 5 achievers in PGI 2019-20 includes **Punjab, Chandigarh, Tamil Nadu, Andaman & Nicobar Islands and Kerala.**



Significance

- The PGI-D is expected to help the state education departments to **identify gaps** at the district level and improve their performance in a decentralized manner. The indicator-wise PGI score shows the areas where a district needs to improve.
- The PGI-D will reflect the relative performance of all the districts in a uniform scale which encourages them to perform better.

4) India's gig workforce will grow to 2.35 crore by 2029-30

What's in the news?

- The government's policy think tank **NITI Aayog** has released a report titled '**India's Booming Gig and Platform Economy**'.
- The report is a first-of-its-kind study that presents comprehensive perspectives and recommendations on the gig-platform economy in India.

Highlights of the Report

Classification

- Gig workers are those **engaged in livelihoods outside the**

traditional employer-employee arrangement. They can be broadly classified into **platform and non-platform-based workers.**

- **Platform workers** are those whose work is based on online software apps or digital platforms such as food aggregator platforms Zomato, Swiggy, Ola, and others.
- **Non-platform gig workers** are generally casual wage and own-account workers in conventional sectors, engaged part-time or full-time.

Key Figures

- According to the report, the **number of workers engaged in the gig economy is estimated to be 77 lakh in 2020-21.** It is expected to grow to **2.35 crore by 2029-30.**
- At present, about 47% of gig work is in medium skilled jobs, about 22% in high skilled, and about 31% in low skilled jobs, and the trend shows the concentration of workers in medium skills is

gradually declining and that of the **low skilled and high skilled is increasing.**

- While in 2020-21, the gig workforce constituted **2.6% of the non-agricultural workforce or 1.5% of the total workforce** in India, by 2029-30, gig workers are expected to form **6.7% of the non-agricultural workforce or 4.1% of the total livelihood workforce in India.**

Challenges

- The report also talks about rising challenges of the sector that need to be addressed. Top among them are the **lack of job security, irregularity of wages and uncertain employment status** for workers.
- Platform workers are termed as “independent contractors”. As a result, platform workers cannot access many of the workplace protections and entitlements.

Recommendations

- The report puts forth suggestions for **platform-led transformational and outcome-based skilling, enhancing social inclusion** through gender sensitization and accessibility awareness programmes for workers and their families and **extending social security measures** including paid leave, occupational disease and work accident insurance, support during irregularity of work and pension plans, for the gig workforce in the country.
- It also recommended that **access to institutional credit** may be enhanced through financial products specifically designed for platform workers and those interested to set-up their own platforms.

- To harness the potential of the gig-platform sector, the report recommends **linking self-employed individuals** engaged in the business of selling regional and rural cuisine, street food, etc., **with platforms** to enable them to sell their produce to wider markets in towns and cities.
- Other recommendations include undertaking a **separate enumeration exercise** to estimate the size of the gig and platform workforce and collecting information during official enumerations to identify gig workers.
- The study states that India requires a **framework that balances the flexibility offered by platforms while also ensuring social security of workers.**

5) Periodic Labour Force Survey About PLFS

- In India, the **National Statistical Office (NSO)** has been **quinquennially** (over a period of five years) collecting data on employment and unemployment but from **2017** onwards, the Periodic Labour Force Survey (PLFS) was **launched by the NSO.**
 - *The NSO is a wing of the Ministry of Statistics and Programme Implementation.*
- It aimed to provide **quarterly employment and unemployment data.**
- Under the PLFS, households are selected in **both rural and urban areas** by providing 75 per cent weightage to households where at least one member has secondary education (Class 10) or above.
- PLFS is India's **first computer-based survey** which gives estimates of Key employment and unemployment Indicators like the

Labour Force Participation Rates (LFPR), Worker Population Ratio (WPR), Unemployment Rate (UR), etc. These indicators are defined as follows:

- **Labour Force Participation Rate (LFPR):** LFPR is defined as the percentage of persons in the labour force (i.e. working or seeking or available for work) in the population.
- **Worker Population Ratio (WPR):** WPR is defined as the percentage of employed persons in the population.
- **Unemployment Rate (UR):** UR is defined as the percentage of persons unemployed among the persons in the labour force.
- **Activity Status- Usual Status:** The activity status of a person is determined on the basis of the activities pursued by the person during the specified reference period. When the activity status is determined on the **basis of the reference period of the last 365 days preceding the date of survey**, it is known as the usual activity status of the person.
- **Activity Status- Current Weekly Status (CWS):** The activity status determined on the **basis of a reference period of last 7 days preceding the date of survey** is known as the current weekly status of the person.
- The PLFS also gives the **distribution of educated and unemployed people**, which in turn can be used as a basis for

skilling of youth to make them more employable by industry.

- It also provides data on the **earnings of different segments of workers.**

Objective of PLFS

- The objective of PLFS is primarily twofold:
 - to estimate the key employment and unemployment indicators (viz. Worker Population Ratio, Labour Force Participation Rate, Unemployment Rate) in the **short time interval of three months for the urban areas only** in the **Current Weekly Status.**
 - to estimate employment and unemployment indicators in **both Usual status and CWS in both rural and urban areas annually.**

Why in News?

- The Ministry of Statistics and Programme Implementation has released the Periodic Labour Force Survey for 2020-21.

Highlights of the Report

- The **unemployment rate saw a decrease of 0.6% and fell to 4.2%** in 2020-21, compared with 4.8% in 2019-20. This means that only 4.2% of adults who looked for jobs could not get any work in rural and urban areas of the country in 2020-21. Rural areas recorded an unemployment rate of 3.3% and urban areas recorded an unemployment rate of 6.7%.
- The **Labour Force Participation Rate**, the percentage of persons in the labour force (that is, working or seeking work or available for work) in the population was **41.6%** during 2020-21. It was 40.1% in the previous year.

- The PLFS data shows that the **share of the labour force engaged in agriculture continued to show a rise** in 2020-21, increasing to **46.5 per cent** from 45.6 per cent in 2019-20 and 42.5 per cent in 2018-19 — a reversal of the decades-long decline in the labour force participation in agriculture.
- This suggests that the movement of labour out of agriculture, which had gathered pace post 2004-05, seems to have been stymied by the economic slowdown and the pandemic. The **reverse migration of labour** from cities to villages would have only increased the pressure on agriculture to absorb the workers.
- The **Worker Population Ratio was 39.8%**, an increase from 38.2% of the previous year.
- **Migrants** are defined in the survey as a household member whose last usual place of residence, at any time in the past, was different from the present place of enumeration. The **migration rate**, according to the survey, is **28.9%**. The **migration rate among women was 48% and 47.8%** in rural and urban areas, respectively.

6) State Food Safety Index

About the Index

- The State Food Safety Index has been developed by the **Food Safety and Standards Authority of India (FSSAI)** to measure the performance of states on various parameters of Food Safety.
- This index is based on performance of State/ UT on **five significant parameters** – **Human Resources and Institutional Data** having 20% of the weightage, **Compliance** with 30% weightage, **Food Testing** – **Infrastructure and Surveillance**

being given 20% weightage, **Training and Capacity Building** having 10% weightage and **Consumer Empowerment** being given 20% weightage.

- The Index is a dynamic quantitative and qualitative benchmarking model that provides an objective framework for evaluating food safety across all States/UTs.
- The Index is prepared for three categories - **large states, small states and Union Territories** to ensure comparability among similar entities.

Why in News?

- FSSAI has released its State Food Safety Index for 2021-22.

Highlights of the Index

- **Tamil Nadu** has topped the State Food Safety Index this year with a score 82 out of 100, followed by **Gujarat** and **Maharashtra**.
- Among the smaller States, **Goa** stood first, followed by **Manipur** and **Sikkim**. Among the Union Territories, **Jammu and Kashmir, Delhi and Chandigarh** secured first, second and third ranks respectively.
- This was the fourth State Food Safety Index award, which was started in 2018-19 with the **aim of creating a competitive and positive change in India's food safety ecosystem**.

AyurvedaAahar Logo

- The government also launched the AyurvedaAahar logo, which contains the initials of Ayurveda and Ahara, the first in Devanagari and the second in English, with five leaves symbolising five elements of nature.
- This logo will help in **easy identification of ayurvedic foods**.



About FSSAI

- It is an **autonomous statutory body** established under the Food Safety and Standards Act, 2006.

- The **Ministry of Health & Family Welfare** is the administrative Ministry of FSSAI.
- FSSAI is responsible for protecting and promoting public health through the regulation and supervision of food safety.

Polity

1) Has the anti-defection law failed?

Context

- The political scenario in Maharashtra, where several ruling party legislators revolted against the Chief Minister, has brought back the focus on the Anti-defection law.

Anti-defection Law

- The **Tenth Schedule** of the Constitution, commonly known as the **anti-defection law**, was introduced in **1985** with a view to curb the tendency among legislators to switch loyalties from one party to another and facilitate the toppling of regimes and formation of new ones. The law applies to **both Parliament and state assemblies**.
- It provides for the **Presiding Officer** of the legislature to disqualify any defector on a petition by another member.
- Disqualification is done when:
 - Member **voluntarily gives up party membership**;
 - If a member **violates a direction (whip) issued by his party** to vote in a particular way or to abstain from voting.
 - If an **independent candidate** joins any political party after their election to legislature;
 - If a **nominated member** joins a party after 6 months of his/her nomination.
- While voting contrary to the party's whip is quite a straightforward instance of defection, the other mode of defection has proved to be a source of dispute and litigation. A member 'voluntarily giving up membership' does not refer to a

simple resignation letter and formally joining another party. It is often an inference drawn by the party that **loses a member to another based on the legislator's conduct**.

- The Supreme Court has also ruled that 'voluntarily giving up membership' **can be inferred from the conduct of a person**.

Merger & Split

- Under Tenth Schedule, **disqualification on account of defection will not apply in case of a merger of one party with another**. There is a deemed merger **only if two-thirds of the party's total strength agrees to the merger**.
- Originally, the 10th Schedule had spoken of a '**split**' in a legislature party as an exception to the disqualification rule. That is if one-third of a legislature party leaves it or joins another party, it amounts to a 'split' and such members would not attract disqualification.
- This proved to be an escape clause for legislators to form a group that amounted to one-third of the legislature party's total strength and then cross over. This provision which allowed the use of a split to avoid disqualification for defection was **deleted by the Constitution (91st Amendment) Act, 2003**.

Effectiveness of the Law

- What was introduced as a panacea for the menace of floor-crossing and toppling of elected regimes by engineering defections has **proved largely ineffective in many cases**. Recent instances give an idea of the various ploys adopted by parties, legislators and Speakers to either evade the law against defection or to achieve partisan political ends.

- The most common these days is for a ruling party with a big majority to poach the main Opposition parties without any regard for the anti-defection law. When the aggrieved party moves for disqualification, **Speakers choose not to act, thus formalising the defection.** The law **does not specify a time period** for the Presiding Officer to decide on a disqualification plea.

Way Forward

- The **170th Law Commission report** underscored the importance of intra-party democracy by arguing that a political party cannot be a dictatorship internally and democratic in its functioning outside. The parties should listen to the opinions of the members and have discussions giving the freedom of speech and expression and promote inner-party democracy.
- **Justice Verma** in *Kihoto Hollohan judgment* said that tenure of the Speaker is dependent on the continuous support of the majority in the House and therefore, he does not satisfy the requirement of such independent adjudicatory authority. So there is a need for an **independent authority** to deal with the cases of defection.
- The **Election Commission** has recommended that decisions under the Tenth Schedule should be made by the **President/ Governor on the binding advice of the Election Commission.**
- In 2020, the **Supreme Court** held that ideally, Speakers should take a decision on a defection petition **within three months**, in the absence of exceptional reasons. The Court said Parliament should set up an **independent tribunal** headed by a retired judge of the higher

judiciary to decide defection cases swiftly and impartially.

- **Former Vice President Hamid Ansari** has suggested applying it only to save governments in no-confidence motions.

2) NITI Aayog

About

- The National Institution for Transforming India, also called NITI Aayog, was formed via a **resolution of the Union Cabinet on January 1, 2015.**
- NITI Aayog is the **premier policy 'Think Tank' of the Government of India**, providing both **directional and policy inputs.**
- While designing strategic and long term policies and programmes for the Government of India, NITI Aayog also provides relevant technical advice to the Centre and States.

Objectives

- To **foster cooperative federalism** through structured support initiatives and mechanisms with the States on a continuous basis, recognizing that strong States make a strong nation.
- To develop mechanisms to **formulate credible plans** at the village level and aggregate these progressively at higher levels of government.
- To ensure, in areas that are specifically referred to it, that the interests of national security are incorporated in economic strategy and policy.
- To pay **special attention** to the sections of our society that may be at risk of **not benefitting adequately from economic progress.**
- To provide **advice and encourage partnerships between key stakeholders and national and**

international like-minded Think Tanks, as well as educational and policy research institutions.

- To create a **knowledge, innovation and entrepreneurial support system** through a collaborative community of national and international experts, practitioners and other partners.

Governing Council of NITI Aayog

- The Governing Council of NITI Aayog is **chaired by the Prime Minister** and comprises Chief Ministers of all the States and Union Territories with legislatures; Lt Governors of other Union Territories; Ex-Officio Members; Vice Chairperson; Full-time Members; Special Invitees and Chief Executive Officer.
- It is the premier body tasked with evolving a shared vision of national priorities and strategies, with the active involvement of States, in shaping the development narrative.
- The Governing Council, which embodies the objectives of cooperative federalism, presents a platform to discuss inter-sectoral, inter-departmental and federal issues to accelerate the implementation of the national development agenda.

Important reports released by NITI Aayog

- **Healthy States, Progressive India Report**
- **Composite Water Management Index**
- **SDG India Index**
- **North-Eastern Region District SDG Index**
- **Multidimensional Poverty Index**
- **Export Preparedness Index**

Why in News?

- The **Appointments Committee of Cabinet** has selected Parameswaran Iyer as the new

Chief Executive Officer of the NITI Aayog.

About Appointments Committee of the Cabinet

- It is chaired by the **Prime Minister**.
- It decides all higher-level appointments in the Central Secretariat, Public Enterprises, Banks and Financial Institutions.

3) Inter-State Council

Context

- Tamil Nadu Chief Minister M K Stalin has written to Prime Minister Narendra Modi asking that at least three meetings of the Inter-State Council (ISC) should be held every year to strengthen the spirit of cooperative federalism.
- Stalin also suggested that bills of national importance should be placed before the Council before being tabled in Parliament.

What is the Inter-State Council?

- It is a mechanism that was constituted to **support Centre-State and Inter-State coordination and cooperation in India**.
- The Inter-State Council was established under **Article 263** of the Constitution, which states that the **President** may constitute such a body if a need is felt for it.
- The Article, which was unanimously adopted by the Constituent Assembly, is modelled on Section 135 of the **Government of India Act of 1935** that provided for establishment of a similar body called the **Inter Provincial Council**.
- The Council is basically meant to serve as a **forum for discussions among various governments**.

Evolution

- The **First Administrative Commission**, set up in **1966** by the Union government, made

constructive recommendations for the constitution of the ISC.

- Subsequently, in **1969**, the **Justice Rajamannar Committee** constituted by the government of Tamil Nadu for studying the Union government-state relationship also recommended that ISC be constituted and consulted on all matters of national importance including discussions on bills that could potentially affect the relationship between the Union government and a state or the Union government and one or more states.
- It went further to suggest that all recommendations made by the ISC should be **ordinarily binding** on both states and the Union government.
- The above suggestions deeply influenced the **Sarkaria Commission** which was set up in **1983** and which strongly recommended the establishment of the ISC to facilitate conversations between the Union government and the states to improve upon their relationship. As a result, the ISC was finally established by the Government of India in **1990** through a **Presidential Order**.

Functions

- The main functions of the Council are:
 - inquiring into and advising on disputes between states,
 - investigating and discussing subjects in which two states or states and the Union have a common interest, and
 - making recommendations for the better coordination of policy and action.

Composition

- The **Prime Minister** is the chairman of the Council, whose members include the Chief

Ministers of all states and UTs with legislative assemblies, and Administrators of other UTs. Six Ministers of Cabinet rank in the Centre's Council of Ministers, nominated by the Prime Minister, are also its members.

- The Council was **reconstituted in May 2022**. The body will now have **10 Union Ministers as permanent invitees**, and the **standing committee** of the Council has been reconstituted with the **Home Minister as Chairman**.

What issues has Chief Minister Stalin raised?

- Mainly, the TN Chief Minister has flagged the lack of regular meetings, saying the Council has **met only once in the last six years** — and that there has been no meeting since July 2016.
- ISC has not been effectively used by any Union government for furthering the relationship with states through dialogues resulting in it becoming an almost defunct institution.
- Since its constitution in 1990, the body has **met only 11 times**, although its **procedure states it should meet at least three times every year**.

Way Forward

- **B R Ambedkar** firmly believed that both the Union government and states are equal in a federal polity. Legitimate demands of the states must be considered without any political one upmanship.
- The late **Justice V R Krishna Iyer** once said that India can be strong only if the Union government is strong and it can be strong only if the units are equally strong and operate on a common wavelength in matters fundamental to the country's governance.

- This can be realised if the ISC is actively used as an avenue to encourage dialogue resulting in a win-win situation for both.

4) Dam Safety Act

What is the Dam Safety Act?

Main Objective

- The Act proposes to help all states and Union Territories **adopt uniform dam safety procedures**. It provides for the surveillance, inspection, operation, and maintenance of **all specified dams** across the country. These are dams with **height more than 15 metres, or height between 10 metres to 15 metres** with certain design and structural conditions.
- As of 2019, India has 5,745 large dams. Of these, 5,675 large dams are operated by states, 40 by central public sector undertakings, and five by private agencies. **Over 75% of these dams are more than 20 years old and about 220 dams are more than 100 years old.**
- Due to the lack of legal and institutional architecture for dam safety in India, dam safety is an issue of concern. Unsafe dams are a hazard and dam break may cause **disasters**, leading to huge loss of life and property. Therefore, monitoring dam safety is essential.

Legal Provisions

- Though **water** is under the **state list**, the Centre has brought the legislation under **Article 246 of the Constitution** read with **Entry 56 and Entry 97 of List I in the Union list**.
- **Article 246** empowers Parliament to legislate on any matter enumerated in List I of the Union list in the Seventh Schedule of the Constitution. **Entry 56** allows Parliament to make laws on the

regulation of inter-state rivers and river valleys if it declares such regulation to be expedient in public interest. **Entry 97** allows Parliament to legislate on any other matter not enumerated in List II or List III including any tax not mentioned in either of those Lists.

National Committees

- The Act constitutes two national bodies: the **National Committee on Dam Safety**, whose functions include evolving policies and recommending regulations regarding dam safety standards; and the **National Dam Safety Authority**, whose functions include implementing policies of the National Committee, providing technical assistance to State Dam Safety Organisations (SDSOs), and resolving matters between SDSOs of states or between a SDSO and any dam owner in that state.

State Bodies

- It also constitutes two state bodies: **State Committee on Dam Safety**, and **State Dam Safety Organisation**. These bodies will be responsible for the surveillance, inspection, and monitoring the operation and maintenance of dams within their jurisdiction.
- The state dam safety organisation must also report events such as dam failures to the National Dam Safety Authority and also maintain records of major dam incidents of each specified dam.
- Functions of the national bodies and the State Committees on Dam Safety have been provided in **Schedules to the Act**. These Schedules can be amended by a government notification.

Penalties

- An offence under the Act can lead **to imprisonment of up to two years, or a fine, or both**.

Why has the Act become contentious?

- Several States, including Karnataka, Kerala, Tamil Nadu and Odisha, opposed the legislation on the ground that it **encroached upon the sovereignty of States to manage their dams**.
- Critics also raised the **constitutional validity of the legislation in the light of water being a State subject**.
- **Tamil Nadu** has all along been a critic of the legislation as it fears that it will lose its hold over four of its dams, which are located in Kerala. The dams include **Mullaperiyar**, whose structural stability and safety are being debated for over 40 years, and **Parambikulam**, an important reservoir that caters to irrigation requirements of the western districts of Tamil Nadu.
- Taking a cue from the **2011 report by the Parliamentary Standing Committee on Water Resources** to invoke **Entry 56 of the Union List**, the Centre framed the legislation, declaring that “it is expedient in public interest that the Union should take under its control the regulation of uniform dam safety procedure for specified dams.”
- Another point adduced in support of the legislation is that **inter-State basins cover 92% of the country’s area and most of the dams**, making the Centre competent to enact such a law.

Why in News?

- The Central Water Commission organized a National Workshop on Dam Safety Act, 2021, sensitizing stakeholders about the provisions of the Dam Safety Act, 2021.

About CWC

- Central Water Commission is a premier Technical Organization of

India in the field of Water Resources and is presently functioning as an attached office of the **Ministry of Jal Shakti**. It was established in **1945**.

- The Commission is entrusted with the general responsibilities of initiating, coordinating and furthering in consultation of the State Governments concerned, schemes for control, conservation and utilization of water resources throughout the country, for purpose of Flood Control, Irrigation, Navigation, Drinking Water Supply and Water Power Development.
- It also undertakes the investigations, construction and execution of any such schemes as required.

5) Surrogacy (Regulation) Act, 2021

About the Act

- The Surrogacy (Regulation) Act, 2021 defines surrogacy as a practice where a woman gives birth to a child for an intending couple with the intention to hand over the child after the birth to the intending couple. It was passed by the Parliament last year.

Highlights of the Act

Regulation of surrogacy

- The Act **prohibits commercial surrogacy, but allows altruistic surrogacy**. Altruistic surrogacy involves **no monetary compensation** to the surrogate mother other than the medical expenses and insurance coverage during the pregnancy.
- Commercial surrogacy includes surrogacy or its related procedures undertaken for a monetary benefit or reward (in cash or kind) exceeding the basic medical expenses and insurance coverage.

Purposes for which surrogacy is permitted

- Surrogacy is permitted when it is: (i) for intending couples who suffer from proven infertility; (ii) altruistic; (iii) not for commercial purposes; (iv) not for producing children for sale, prostitution or other forms of exploitation; and (v) for any condition or disease specified through regulations.

Eligibility criteria for intending couple

- The intending couple should have a 'certificate of essentiality' and a 'certificate of eligibility' issued by the appropriate authority.
- A certificate of essentiality will be issued upon fulfilment of the following conditions: (i) a certificate of proven infertility of one or both members of the intending couple from a District Medical Board; (ii) an order of parentage and custody of the surrogate child passed by a Magistrate's court; and (iii) insurance coverage for a period of 16 months covering postpartum delivery complications for the surrogate.
- The certificate of eligibility to the intending couple is issued upon fulfilment of the following conditions: (i) the couple being **Indian citizens and married for at least five years**; (ii) **between 23 to 50 years old (wife) and 26 to 55 years old (husband)**; (iii) they **do not have any surviving child** (biological, adopted or surrogate); this would not include a child who is mentally or physically challenged or suffers from life threatening disorder or fatal illness; and (iv) other conditions that may be specified by regulations.
- The law also allows **single women (widow or a divorcee between**

the age of 35 and 45 years) to resort to surrogacy.

Eligibility criteria for surrogate mother

- To obtain a **certificate of eligibility** from the appropriate authority, the surrogate mother has to be: (i) a **close relative** of the intending couple; (ii) a **married woman** having a child of her own; (iii) **25 to 35 years old**; (iv) a **surrogate only once** in her lifetime; and (v) possess a **certificate of medical and psychological fitness** for surrogacy. Further, the surrogate mother cannot provide her own gametes for surrogacy.

National and State Surrogacy Boards

- The central and the state governments shall constitute the **National Surrogacy Board (NSB) and the State Surrogacy Boards (SSB)**, respectively.
- Functions of the NSB include, (i) advising the central government on policy matters relating to surrogacy; (ii) laying down the code of conduct of surrogacy clinics; and (iii) supervising the functioning of SSBs.

Parentage and abortion of surrogate child

- A child born out of a surrogacy procedure will be **deemed to be the biological child of the intending couple**. An abortion of the surrogate child requires the **written consent** of the surrogate mother and the authorisation of the appropriate authority. This authorisation must be compliant with the **Medical Termination of Pregnancy Act, 1971**.
- Further, the surrogate mother will have an option to withdraw from surrogacy before the embryo is implanted in her womb.

Offences and penalties

- The offences under the Act include: (i) undertaking or advertising commercial surrogacy; (ii) exploiting the surrogate mother; (iii) abandoning, exploiting or disowning a surrogate child; and (iv) selling or importing human embryo or gametes for surrogacy.
- The penalty for such offences is imprisonment up to 10 years and a fine up to 10 lakh rupees.

Why in News?

- Two petitioners have approached the Delhi High Court to question why marital status, age, or gender should be criteria for prohibiting

someone from commissioning a surrogacy.

- Under the Surrogacy (Regulation) Act, 2021 a married couple can opt for surrogacy **only on medical grounds**. Though the law allows **single women** to resort to surrogacy, she has to be a **widow or a divorcee between the age of 35 and 45 years. Single men are not eligible**.
- The petitioners also challenged the ban on commercial surrogacy.

International Relations

1) G-7's Partnership for Global Infrastructure and Investment

Context

- The G-7 grouping of the world's most industrialised nations — **Canada, France, Germany, Italy, Japan, the U.K. and the U.S.** along with the **European Union** — has launched the **Partnership for Global Infrastructure and Investment (PGII)**.
- The U.S. led new initiative aims at **collective mobilisation of \$600 billion by 2027 to invest in sustainable and quality infrastructure projects in developing countries**, including India, and strengthen global supply chains.
- The PGII is being seen as the **G7's counter to China's multi-trillion dollar Belt and Road Initiative (BRI)** to build connectivity, infrastructure, and trade projects in Asia, Europe, Africa, and Latin America.

What is the PGII?

- The West has been sceptical of the BRI, since it was launched in 2013 by President Xi Jinping, as it was considered to be part of **China's larger strategy to increase geopolitical influence in Asia and other developing countries**.
- The U.S., along with G7 partners, had in 2021 announced the launch of the **Build Back Better World (B3W)** with the aim of **narrowing the \$40 trillion infrastructure gap in the developing world**. PGII is therefore a relaunch of the B3W plan.
- PGII is envisaged as a values-driven, high-impact, and transparent infrastructure partnership to meet the enormous infrastructure needs of low and

middle-income countries and support the United States' and its allies' economic and national security interests.

What kind of projects will the PGII undertake?

- All PGII projects will be driven by **four priority pillars** that will define the second half of the 21st century.
- First, the G7 grouping aims to tackle the **climate crisis** and ensure global energy security through clean energy supply chains. Second, the projects will focus on **bolstering digital information and communications technology (ICT) networks** facilitating technologies such as 5G and 6G internet connectivity and cybersecurity. Third, the projects aim to **advance gender equality and equity**, and lastly, to **build and upgrade global health infrastructure**.

How does it compare to China's BRI?

- The Belt and Road project was started to **revive connectivity, trade, and infrastructure along what was China's ancient Silk Road**. China had announced a **two-pronged approach** of building a **Silk Road Economic Belt on Land** and a **maritime 21st century Silk Road**.
- The project initially aimed to strengthen connectivity with Southeast Asia but later expanded to South and Central Asia, Africa, Europe, and Latin America.
- The G7 meanwhile has specifically touted the PGII as a **values-based plan to help underfunded low and middle-income countries meet their infrastructure needs**. PGII has laid focus on climate

action and clean energy, while China has built large coal-fired plants under BRI along with solar, hydro, and wind energy projects.

- While the G7 has pledged \$600 billion by 2027, China's overall funding for BRI by that time could reach \$1.2 to 1.3 trillion dollars. Under the PGII, **large private capital** will be also mobilised while China's BRI is **majorly state-funded**.
- While G7 leaders emphasised '**transparency**' as the cornerstone of PGII projects, the BRI has faced criticism for making countries sign confidential tenders for extending massive loans, leaving countries **indebted to China**.
- China builds BRI's projects by extending large, low-interest loans to countries that have to usually be paid over 10 years. There have been cases of debt-saddled countries failing to repay on time. Sri Lanka, for instance, had to cede its key **Hambantota Port** on a 99-year lease to China. Meanwhile PGII aims to build projects through **grants and investments**.
- A PGII project has already been announced in India but **India had opted out of China's BRI**, being wary of Beijing's aim to increase its influence in the Indian Ocean Region by roping in Pakistan as a major BRI recipient.

Way Forward

- The BRI has been the centrepiece of Chinese President Xi Jinping's foreign policy for nearly a decade. But some projects are stalling as countries struggle to repay related debts.
- The PGII can begin by avoiding theoretical vagueness and deliver on its promise of transparency. But unless the U.S. is seriously invested in turning the PGII's plans into a

reality, its reliability as an ally and partner will remain in question in the region, at least in the economic domain.

2) Indus Water Treaty

What is the Indus Water Treaty (IWT)?

- Signed in the year **1960** by **former Prime Minister Jawaharlal Nehru and the then President of Pakistan, Ayub Khan**, the Indus Water Treaty is an agreement that was made to chalk out the control over the 6 rivers that run across India and then Pakistan into the Indus basin.
- This treaty was signed following the partition of the subcontinent.
- On an international level, the IWT has been seen as one of the most successful cases of conflict resolution. It is so because India and Pakistan, ever since IWT was signed, have engaged in 4 major wars but the treaty has stayed in place.

Which rivers belong to India and which ones to Pakistan?

- The Indus Waters Treaty was signed in 1960 after nine years of negotiations between India and Pakistan with the help of the **World Bank**, which is also a signatory.
- Precise details were laid out about how the water will be divided.
 - While **Jhelum, Chenab and Indus** (3 western rivers) were allocated to Pakistan, India received the control of **Ravi, Beas and Sutlej** (3 eastern rivers).



- In effect, Pakistan got 80% of the water from the Indus river system and India 20%.
- While Pakistan has rights over the waters of Jhelum, Chenab and Indus, the treaty allows India certain **agricultural uses**, and to **build 'run of the river' hydropower projects**, meaning projects not requiring live storage of water.

Permanent Indus Commission

- The treaty also required both countries to create a Permanent Indus Commission, a bilateral commission of officials from India and Pakistan, created to implement and manage goals of the Indus Waters Treaty, 1960.
- The commission's responsibilities include providing a venue for the exchange of river-related information, fostering continuous collaboration, and serving as a first point of contact for conflict resolution.
- The Commission, according to the treaty, **shall meet regularly at least once a year, alternately in India and Pakistan.**

Dispute Resolution

- The IWT also provides a **three step dispute resolution mechanism**, under which "questions" on both sides can be resolved at the **Permanent Commission**, or can

also be taken up at the **inter-government level.**

- In case of unresolved questions or "differences" between the countries on water-sharing, such as technical differences, either side can approach the World Bank to appoint a **Neutral Expert (NE)** to come to a decision.
- And eventually, if either party is not satisfied with the NE's decision or in case of "disputes" in the interpretation and extent of the treaty, matters can be referred to a **Court of Arbitration.**

Points of Contention

- One of the longest conflicts that arose from Pakistan's objections to Indian projects on the western water bodies was over the **Kishanganga Hydro Electricity Project (KHEP)**, which was initially a storage-cum-hydropower project.
- **Kishanganga** also known as **Neelum, a tributary of the Jhelum river**, originates in J&K and joins the river in Pakistan occupied Kashmir. The work for the project was supposed to be completed by 2016, but before the construction started, Pakistan had raised objections regarding the height of the dam. The project was then inaugurated in 2018, following a Court of Arbitration's ruling which gave green signal for the project.
- In recent years, the Indus Water Treaty has been brought up a couple of times during geo-political tension between India and Pakistan. In the aftermath of the attack on J&K's Uri army camp in 2016, Prime Minister Narendra Modi had said, **"Blood and water cannot flow simultaneously,"** soon after which, the Permanent Indus Commission talks were

suspended for that year by the Indian side.

- IWT **does not have a unilateral exit provision**, and is supposed to remain in force unless both the countries ratify another mutually agreed pact.

Why in News?

- Indian and Pakistani conducted 118th meeting of the **Permanent Indus Commission** that took place in Delhi recently.

Defence

1) Defence Acquisition Council

About DAC

- Defence Acquisition Council (DAC) is **constituted under the Ministry of Defence (MoD) for overall guidance of the defence procurement planning process.**
- It includes **Defence Minister as Chairman** and Minister of State for Defence (when appointed), Chief of Defence Staff (CDS), Chiefs of triservices, Defence Secretary, Secretary Dept. of Defence Production and Supplies, Secretary Defence Research & Development, Secretary Defence Finance, Vice Chief of Defence Staff (when appointed) and Secretary (Acquisition) as members.
- The DAC is the **highest decision-making body** in the defence ministry for deciding on new policies and capital acquisitions for the three services and the Indian Coast Guard.
- The objective of the DAC is to ensure expeditious procurement of the approved requirements of the Armed Forces in terms of capabilities sought, and time frame prescribed, by optimally utilizing the allocated budgetary resources.

Why in News?

- The Defence Acquisition Council headed by Defence Minister Rajnath Singh has cleared proposals worth more than 76 thousand crore rupees to boost self-reliance in the defence sector.
- The DAC also approved the "**Digital Coast Guard**" project in pursuance of the government's vision for digital transformation in defence.
- Under this project, a pan-India secure network for digitising various surface & aviation

operations, logistics and finance of Coast Guard will be established.

About Indian Coast Guard

- The Indian Coast Guard (ICG) is a maritime law enforcement and search and rescue agency of India with jurisdiction over its territorial waters including its contiguous zone and exclusive economic zone.
- The Indian Coast Guard was formally established by the Coast Guard Act, 1978 of the Parliament of India. It operates under the **Ministry of Defence.**
- It is responsible for marine environment protection in maritime zones of India and is coordinating authority for response to oil spills in Indian waters.

2) Chief of Defence Staff

What is the role of the Chief of Defence Staff?

- In 2019, the Union Cabinet had given approval to create the post of Chief of Defence Staff (CDS) in the **rank of a four-star General with salary and perquisites equivalent to a Service Chief** and then Army Chief Gen. Rawat was appointed to the post.
- It is a long-pending demand to **bring in tri-service synergy and integration** and the biggest top-level military reform since Independence.
- The CDS is the **Principal Military Adviser to the Defence Minister and Permanent Chairman Chiefs of Staff Committee (CoSC).**
- In addition, the **Department of Military Affairs** was created as the fifth department in the Ministry of Defence (MoD) with the **CDS functioning as its Secretary.**

Mandate

- The broad mandate of the CDS includes bringing about jointness in operations, logistics, transport, training, support services, communications, repairs and maintenance of the three Services.
- He acts as the **Principal Military Adviser to the Defence Minister on all tri-Services matters**. However, the three Chiefs continue to advise the Defence Minister on matters exclusively concerning their respective Services.
- The CDS **do not exercise any military command, including over the three Service Chiefs**.
- The CDS is also meant to bring about synergy and optimise procurements, training and logistics and facilitate restructuring of military commands for optimal utilisation of resources by bringing about jointness in operations.
- The **specialised tri-service divisions** — special operations, defence cyber and defence space — were also brought under the ambit of the CDS.
- While **capital procurements are still with the Department of Defence (DoD)**, the **prioritisation is with the CDS**.

Why in News?

- Setting the stage for appointment of the next Chief of Defence Staff, the Government has **amended Service Rules of the Army, Navy and Air Force, allowing retired Service Chiefs and three-star officers eligible for consideration for the country's top military post**.
- However, with an **age limit that the retired officer should not have attained 62 years** on the date of appointment, retired Service Chiefs are largely ruled out for the present consideration.
- As the Government considers several officers for the post, this amendment makes all three-star rank officers who have retired in the last two years eligible, as Lieutenant Generals in the Army, Vice-Admirals in the Navy and Air Marshals in the Air Force retire at the age of 60.
- Gen. Bipin Rawat, who had served as the Army Chief from December 31, 2016 till December 31, 2019, took over as the first CDS on January 1, 2020. He was killed in a chopper crash in December 2021. The post of CDS has been lying vacant since then.
- The **age limit** for the CDS's post is **65 years with no fixed tenure defined**, unlike for the Service Chief which is three years of tenure or 62 years of age.

3) BrahMos

About BrahMos Missile

- BrahMos is the **supersonic cruise missile** jointly developed by **Defence Research and Development Organisation (DRDO)** of India and NPOM of Russia.
- BrahMos is an amalgamation of the names of the rivers **Brahmaputra** of India and **Moskva** of Russia.
- BrahMos is a **two-stage missile** with solid propellant booster as first stage and liquid ramjet as the second stage.
- The missile has a **very low radar signature**, making it stealthy, and can achieve a variety of trajectories.
- Being a cruise missile it can be guided towards a **predetermined land- or sea-based target**.
- With a capability to attain **speeds 2.8 times that of sound (Mach 2.8)**, BrahMos is classified as a **supersonic cruise missile**.

- The 'fire and forget' type missile can achieve a **cruising altitude of 15 km and a terminal altitude as low as 10 m** to hit the target.
- The **range of the BrahMos was originally limited to 290 kms** as per obligations of the **Missile Technology Control Regime (MTCR)** of which Russia was a signatory. Following **India's entry into the club in 2016**, plans were announced to extend the range initially to 450 kms and subsequently to 600 kms. BrahMos with extended range upto 450 kms has been tested several times since.
 - *Established in 1987, the voluntary MTCR aims to limit the spread of ballistic missiles and other unmanned delivery systems that could be used for chemical, biological, and nuclear attacks.*
 - *The regime includes 35 members (including **India**). MTCR membership helps countries to have access to crucial missile technologies.*
- Various versions of the BrahMos, including those which can be fired from land, warships, submarines and Sukhoi-30 fighter jets have already been developed and successfully tested in the past.

Why in News?

- The BrahMos supersonic cruise missile was recently tested from a land-based launcher in Chandipur, Odisha.