



drishti

# Current Affairs (CONSOLIDATION)

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# Polity and Governance

## Highlights

- BCC Framework under SBM-U 2.0
- MSME Sustainable (ZED) Certification Scheme
- Cyber Security
- Indonesia's Palm Oil Export Ban & Its Impact on India
- India's Labour Force Participation Rate
- Need for New IT Law
- Harnessing India's Tech Strength
- MHA on Citizenship Amendment Act (CAA), 2019
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- Indigenisation Efforts of Navy
- Olga Tellis Case 1985
- European Union Digital Services Act

## BCC Framework under SBM-U 2.0

### Why in News?

**Swachh Bharat Mission-Urban 2.0 (SBM-U 2.0)**, has launched the 'National Behaviour Change Communication (BCC) Framework for Garbage Free Cities' to strengthen the ongoing jan andolan for 'Garbage Free Cities'.

### What is the National Behaviour Change Communication Framework?

- The BCC Framework for Garbage Free Cities shall serve as a guiding document and blueprint for States and Cities to undertake large scale multimedia campaigns along with intensive and focused inter-personal communication campaigns.

- The framework focuses on intensifying messaging around the key focus areas of source segregation, collection, transportation, and processing of waste, plastic waste management, and remediation of legacy dumpsites to transform the urban landscape of India.

### What is SBM-U 2.0?

#### ➤ About:

- SBM-U 2.0, announced in **Budget 2021-22**, is the continuation of SBM-U first phase.
- It was **launched on 1st October 2021** to achieve the **vision of 'Garbage Free Cities'** over the next five years.
  - The government is also trying to tap safe containment, transportation, disposal of faecal sludge, and septage from toilets.
- It will be implemented over five years from 2021 to 2026 with an outlay of Rs.1.41 lakh crore.

Note:

- SBM-U first phase was launched on 2nd October 2014 aiming at making urban India **Open Defecation Free (ODF)** and achieving 100% scientific management of municipal solid waste. It lasted till October 2019.
- **Aim:**
  - It focuses on source segregation of garbage, reduction in **single-use plastic** and air pollution, by effectively managing waste from construction and demolition activities and **bioremediation of all legacy dump sites**.
  - Under this mission, all wastewater will be treated properly before it is discharged into water bodies, and the government is trying to make maximum reuse a priority.
- **Mission Outcomes:**
  - All statutory towns will become ODF+ certified (focuses on toilets with water, maintenance and hygiene).
  - All statutory towns with less than 1 lakh population will become ODF++ certified (focuses on toilets with sludge and septage management).
  - 50% of all statutory towns with less than 1 lakh population will become Water+ certified (aims to sustain toilets by treating and reuse of water).
  - All statutory towns will be at least 3-star Garbage Free rated as per MoHUA's Star Rating Protocol for Garbage Free cities.
  - Bioremediation of all legacy dumpsites

## MSME Sustainable (ZED) Certification Scheme

### **Why in News?**

Ministry for Micro, Small and Medium Enterprises has launched the **MSME (Micro, Small and Medium Enterprises) Sustainable (ZED-Zero Defect Zero Effect) Certification Scheme**.

### **What is the Scheme?**

- **About:**
  - This Scheme is **an extensive drive to enable and facilitate MSMEs adopt ZED practices** and motivate and incentivize them for ZED Certification while also encouraging them to become **MSME Champions**.

- MSME Sustainable (ZED) Certification can be attained in Three Levels after registering and taking the ZED Pledge:
  - Certification Level 1: **BRONZE**
  - Certification Level 2: **SILVER**
  - Certification Level 3: **GOLD**
- After taking the ZED Pledge, **the MSME can apply for any Certification Level if it feels that it can fulfil the requirements mentioned in each level.**
- The intent of taking a **ZED Pledge is to take a “pre-commitment” or a solemn promise by MSMEs to uphold the values of Zero Defect Zero Effect** in their practices and to urge them to move ahead on the journey of ZED.
- **Subsidy:**
  - Under the Scheme, **MSMEs get subsidy as per the following structure, on the cost of ZED certification:**
    - **Micro Enterprises:** 80%
    - **Small Enterprises:** 60%
    - **Medium Enterprises:** 50%
  - A provision of up to **Rs. 5 lakhs (per MSME) will be made available for handholding and consultancy support for MSMEs** under ZED Certification for assisting them to move towards Zero Defect Zero Effect solutions.
  - The MSMEs can also avail themselves of several **other incentives offered for ZED Certification by States & UTs, Financial Institutions etc.** and can also apply for free Certification under the **MSME KAWACH (COVID-19 Support) initiative**.
- **Components of the Scheme:**
  - Industry Awareness Programmes/Workshop.
  - Training Programmes.
  - Assessment & Certification.
  - Handholding.
  - Benefits/Incentives.
  - PR campaign, Advertising & Brand Promotion
  - Digital Platform.
- **Benefits:**
  - Through the journey of ZED Certification, **MSMEs can reduce wastages substantially, increase productivity, enhance environmental consciousness, save energy, optimally use natural resources, expand their markets, etc.**

Note:

### What is Zero Defect Zero Effect Scheme?

#### ➤ About:

- Launched in 2016 by the Ministry of MSME, the scheme is an integrated and comprehensive certification system.
- The scheme accounts for productivity, quality, pollution mitigation, energy efficiency, financial status, human resource and technological depth including design and IPR (Intellectual Property Rights) in both products and processes.
- Its mission is to develop and implement the 'ZED' culture in India based on the principles of Zero Defect & Zero Effect.

#### ➤ Zero Defect:

- The Zero-defect concept is focusing on the customer.
- Zero non-conformance or non-compliance
- Zero waste

#### ➤ Zero Effect:

- Zero air pollution, liquid discharge, solid waste
- Zero wastage of natural resources

#### ➤ Objective of the Scheme:

- To develop an Ecosystem for Zero Defect Manufacturing in MSMEs.
- To promote adaptation of quality tools/systems and energy efficient manufacturing. Enable MSMEs for manufacturing of quality products.
- To encourage MSMEs to constantly upgrade their quality standards in products and processes.
- To develop professionals in the area of ZED manufacturing and certification.
- To support the 'Make in India' campaign.

### What are the Other Initiatives to Promote MSMEs Sector?

- Prime Minister's Employment Generation programme (PMEGP)
- Scheme of Fund for Regeneration of Traditional Industries (SFURTI)
- A Scheme for Promoting Innovation, Rural Industry & Entrepreneurship (ASPIRE)
- Interest Subvention Scheme for Incremental Credit to MSMEs
- Credit Guarantee Scheme for Micro and Small Enterprises
- CHAMPIONS portal

## Cyber Security

### Why in News?

Recently, CERT-In has asked all government and private agencies to mandatorily report cyber security breach incidents to it within six hours of noticing them.

- CERT-In is empowered under Section 70B of the Information Technology Act to collect, analyse and disseminate information on cyber security incidents.

### What is CERT-IN?

- Computer Emergency Response Team - India is an organisation of the Ministry of Electronics and Information Technology with the objective of securing Indian cyberspace.
- It is the nodal agency which deals with cybersecurity threats like hacking and phishing.
- It collects, analyses and disseminates information on cyber incidents, and also issues alert on cybersecurity incidents.
- CERT-IN provides Incident Prevention and Response Services as well as Security Quality Management Services.

### What are the Mandates of the CERT-In?

#### ➤ Mandatorily Enable Logs:

- It mandates all service providers, intermediaries, data centres, corporates and government organisations to mandatorily enable logs of all their ICT (Information and Communication Technology) systems.
  - The service providers has to maintain the logs securely for a rolling period of 180 days, and the same shall be maintained within the Indian jurisdiction.
    - The log should be provided to CERT-In along with reporting of any incident or when directed by the computer emergency response team.

#### ➤ Connect and Synchronize all ICT systems:

- To ensure the chain of events is accurately reflected in the time frame, service providers have been asked to connect and synchronize all their ICT systems clocks to the Network Time Protocol (NTP) Server of the National Informatics Centre (NIC) or National Physical Laboratory (NPL).

Note:





- NTP is a protocol used for reliably transmitting and receiving accurate time sources over TCP/IP-based networks.
- It is used for synchronizing the internal clock of computers to a common time source.

#### ➤ Requires Maintaining Records:

- It also require **virtual asset, exchange, and custodian wallet providers to maintain records on KYC and financial transactions for a period of five years.**
- Companies providing cloud, virtual private network (VPN) will also have to register validated names, emails, and IP addresses of subscribers.

#### **What is the Need of Such Initiative?**

##### ➤ Address the issue Hindrance:

- It will address the issue of hindrance in the analysis of breach incidents in handling cyber incidents.

##### ➤ Streamline the Date Records:

- There have been **cases in the past where cases of non-storage or availability of data** and proper records with intermediaries and service providers have been identified.
- These guidelines **will streamline the date records** to be maintained and proper reporting of security incidents to CERT-In.

##### ➤ Address the Users Right to Know:

- **End-user has the right to know** if their data is loaded so that an individual can protect himself from fraud transactions, fake loans, ID misuse etc.
- Government should also force companies to inform their users within 24 hours of the incident.
- Many users are still unaware if their **KYC (Know Your Customer)** and financial data is safe or not.

#### **What are Government Initiatives for Cyber Security?**

- **Cyber Surakshit Bharat Initiative**
- **Cyber Swachhta Kendra**
- **Online cybercrime reporting portal**
- **Indian Cyber Crime Coordination Centre (I4C)**
- **National Critical Information Infrastructure Protection Centre (NCIIPC)**
- **Information Technology Act, 2000**
- **National Cyber Security Strategy 2020**

## **Indonesia's Palm Oil Export Ban & Its Impact on India**

### **Why in News**

Recently, **Indonesia, the world's biggest producer, exporter, and consumer** of palm oil, has announced that it would be **banning all exports of the commodity** and its raw materials to reduce domestic shortages of cooking oil and bring down its rising prices.

- India meets half of its annual need for **8.3 million tons of palm oil** from Indonesia. Thus, an export ban will affect India's interests.

### **What is Palm Oil & Its Use?**

- Palm oil is an edible vegetable oil derived from the **mesocarp (reddish pulp) of the fruit of the oil palms.**
- It is used as cooking oil, and in everything from **cosmetics, processed foods, cakes, chocolates, spreads, soaps, shampoo,** and cleaning products to biofuel.
  - The use of crude palm oil in making **biodiesel** is being branded as **'green diesel'.**
- Indonesia and Malaysia together account for almost **90% of the global palm oil production**, with Indonesia producing the largest quantity at over **45 million tonnes in 2021.**
- The oil palm industry has come under criticism for what are reportedly unsustainable production practices leading to **deforestation, and exploitative labor practices** carried forward from the colonial era.
  - However, **palm oil** is preferred by many as it is **inexpensive**; oil palms produce more oil per hectare than some other vegetable oil plants like **soybean.**

### **How Important is Palm Oil for Global Supply Chains?**

- Palm oil is the world's most widely used vegetable oil with its global production in the year 2020 being over **73 Million Tones (MT)**, according to the United States Department of Agriculture (USDA).
  - It is estimated to be **77 MT for the current year FY 2022-23.**
- According to Reuters, palm oil makes up **40% of the global supply of the four most widely used edible oils:** palm, soybean, rapeseed (canola), and sunflower oil.

Note:



- Indonesia is responsible for 60% of the global supply of palm oil.

### Why are the Prices of Edible Oils Rising?

- India is the **biggest importer of palm oil**. The prices of palm oil rose this year as demand increased because of the short supply of alternative vegetable oils.
- The production of soybean oil, the **second most-produced oil**, is expected to take a hit this year due to a **poor soybean season in major producer Argentina**.
- The production of canola oil was hit in Canada last year due to drought; and supplies of sunflower oil, **80-90% of which is produced by Russia and Ukraine**, has been badly hit by the ongoing conflict.
- Due to **pandemic-induced labor shortage**, and the **global food inflation** linked to the **pandemic** and the **Ukraine crisis**, the global prices of edible oil have risen significantly since the end of last year.

### How Will It Impact India?

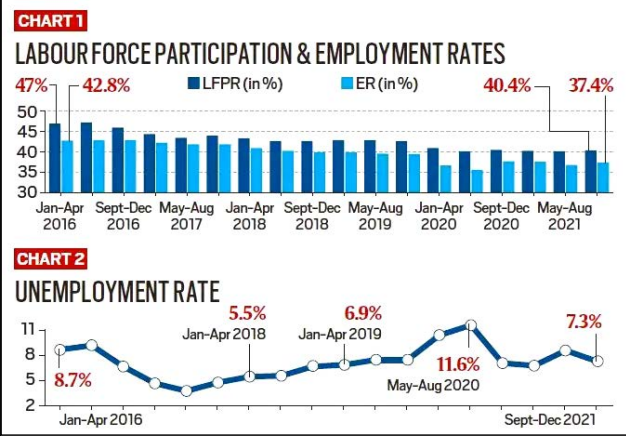
- India is the biggest importer of palm oil, which makes up **40% of its vegetable oil consumption**.
- India meets **half of its annual need for 8.3 MT of palm oil from Indonesia**.
- This would lead to a rise in those already grappling with **record-high wholesale inflation**.
- It is important that, last year, the Centre also unveiled **National Mission on Edible Oil-Oil Palm** to boost India's domestic palm oil production.

## India's Labour Force Participation Rate

### Why in News

Recently, data from the **Centre for Monitoring Indian Economy (CMIE)** shows that **India's Labour Force Participation Rate (LFPR)** has fallen to **just 40% from an already low 47% in 2016**.

- This suggests not only that more than **half of India's population in the working-age group (15 years and older) is deciding to sit out of the job market**, but also that this **proportion of people is increasing**.



### What is LFPR?

- According to the CMIE, the labor force consists of people **who are 15 years or older**, and belong to either of the following two categories:
  - Are Employed
  - Are unemployed and are willing to work and are actively looking for a job.
- These two categories have people **“demanding” jobs**. This demand is what LFPR refers to.
- Thus, the LFPR essentially is the percentage of the **working-age (15 years or older) population that is asking for a job**.
  - It represents the “demand” for jobs in an economy.
  - It includes those who are employed and those who are unemployed.
- The **Unemployment Rate (UER)**, which is routinely quoted in the news, is **nothing but the number of unemployed (category 2) as a proportion of the labor force**.
- In India, the LFPR is not only lower than in the rest of the world but also falling.
  - In India, it has been sliding over the **last 10 years and has shrunk from 47% in 2016 to just 40% as of December 2021**.

### Why is India's LFPR so low?

- The main reason for India's LFPR being low is the **abysmally low level of female LFPR**.
- According to CMIE data, as of **December 2021**, while the **male LFPR was 67.4%**, the **female LFPR was as low as 9.4%**.
- In other words, **less than one in 10 working-age women in India are even demanding work**.

Note:

- Even if one sources data from the **World Bank**, India's female labor force participation rate is **around 25% when the global average is 47%**.
- The reasons or low women LFPR is essentially about the working conditions — **such as law and order, efficient public transportation, violence against women, societal norms** etc. — being far from conducive for women to seek work.
  - Further, lot of **women in India are exclusively involved within their own homes** (caring for their family)

### What is Issue with LFPR calculation?

- **Unemployment Rate** only measures person who are unemployed, but it didn't calculate the total people have stopped demanding work.
  - Typically, this happens when people of the working-age get disheartened from not finding work.
- Thus, it is better to track another variable: **the Employment Rate (ER)**.
  - The ER refers to the total number of employed people as a percentage of the working-age population.

### What are Different Types of Unemployment in India

- **Disguised Unemployment:** It is a phenomenon wherein **more people are employed than actually needed**.
  - It is primarily traced in the agricultural and the unorganized sectors of India.
- **Seasonal Unemployment:** It is unemployment that occurs **during certain seasons of the year**.
  - Agricultural laborers in India rarely have work throughout the year.
- **Structural Unemployment:** It is a category of unemployment arising from the **mismatch between the jobs available in the market and the skills of the available workers** in the market.
  - Many people in India do not get jobs due to lack of requisite skills and due to poor education level, it becomes difficult to train them.
- **Cyclical Unemployment:** It is a result of the **business cycle, where unemployment rises during recessions and declines** with economic growth.
  - Cyclical unemployment figures in India are negligible. It is a phenomenon that is mostly found in capitalist economies.

- **Technological Unemployment:** It is the **loss of jobs due to changes in technology**.
  - In 2016, World Bank data predicted that the proportion of jobs threatened by automation in India is 69% year-on-year.
- **Frictional Unemployment:** Frictional Unemployment, also called Search Unemployment, refers to the **time lag between the jobs when an individual is searching for a new job** or is switching between jobs.
- **Vulnerable Employment:** This means people working informally, **without proper job contracts and thus lacking any legal protection**.
  - These **people are deemed 'unemployed' since records of their work are never maintained**.
  - It is one of the main types of unemployment in India.

### What are Recent Initiatives taken by Government?

- **Support for Marginalized Individuals for Livelihood and Enterprise (SMILE)**
- **PM-DAKSH (Pradhan Mantri Dakshta Aur Kushalta Sampann Hitgrahi)**
- **Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)**
- **Pradhan Mantri Kaushal Vikas Yojana (PMKVY)**
- **Start Up India Scheme**

## Need for New IT Law

### Why in News

Recently, the **Minister of State for Electronics and Information Technology (IT)** spoke on the need for legislative overhaul of the **22-year-old Information Technology Act, 2000**

- The government enacted the **original IT legislation in 2000**.
- The **IT (Amendment) Act** came into force in 2009 and was aimed at facilitating **e-governance, preventing cybercrime** and fostering security practices within the country.
- Recently, the government has notified **Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules 2021**.

Note:

### Why is there a need for New IT Law (External Issues)?

- **India Entering into Digital Age:** India is going to have a **trillion-dollar digital economy** in a few years, and a large number of businesses will be on the Indian Internet.
  - Therefore, an **open & secure Internet** becomes an important economic component of our country.
- **Rise of Splinternet:** The global internet as we know it is on the verge of **splintering into smaller bubbles of national networks** due to aggressive national policies, trade disputes, censorship, and dissatisfaction with **big tech companies**.
  - This will have far-reaching consequences that impact international unions, data enterprises and individual consumers alike.
  - Perhaps the most sophisticated instance of a splintered internet today would be **China's Great Firewall**.
  - What are seen as essential services, like **Google Search and Maps, Western social media**, and so on – are **entirely banned and replaced by Chinese alternatives like Weibo** in the name of Cyber Sovereignty

### Why is there a need for New IT Law (Internal Issues)?

- **Majority of Cybercrimes in India are Bailable Offense:** A historical mistake was made when the **IT (Amendment) Act, 2008**, made almost all cybercrimes, barring a couple, bailable offences.
  - The focus was more on enhancing the **quantum of civil liability** and reducing the quantum of punishment, which explains the reason why the number of cybercrime convictions in the country is in single digits.
- **Restricted Cyber Security Remedy:** IT Act is effective in metropolitan cities like Mumbai, Delhi, Hyderabad, Bhopal, Bangalore, etc., but it is **feeble in tier-two level cities as awareness of the law** by enforcement agencies remains a big challenge.
  - The IT Act **does not cover most crimes committed through mobiles**. This needs to be rectified.

### What are Present Government Initiatives for Cyber Security?

- **Cyber Surakshit Bharat Initiative.**
- **Cyber Swachhta Kendra.**
- **Online cybercrime reporting portal.**
- **Indian Cyber Crime Coordination Centre (I4C).**
- **National Critical Information Infrastructure Protection Centre (NCIIPC).**
- **Information Technology Act, 2000**

## Harnessing India's Tech Strength

### Why in News?

Recently, an agreement has been **signed between CSIR (Council of Scientific and Industrial Research) and iCreate** to harness the **country's technological strength**.

### What is iCreate?

- iCreate is an **autonomous centre of excellence of the Gujarat government** and is India's largest institution for transforming start-ups based on tech innovation into businesses.

### What is CSIR?

- CSIR is known for its **cutting-edge Research & Development and Industrial knowledge base** in diverse S&T areas.
- It is a **contemporary R&D organization**.
- CSIR has a **dynamic network of 37 national laboratories**, 39 outreach centres, one Innovation Complex, and three units with a pan-India presence.
  - CSIR has a patent portfolio of 8366 Indian patents and 7806 foreign patents.
- CSIR **covers a wide spectrum of science and technology** – from oceanography, geophysics, chemicals, drugs, genomics, biotechnology and nanotechnology to mining, aeronautics, instrumentation, environmental engineering and information technology.
- It **provides significant technological intervention in many areas concerning societal efforts**.
  - **Societal efforts include** environment, health, drinking water, food, housing, energy, farm and non-farm sectors.
- Further, CSIR's role in Science & Technology human resource development is noteworthy.

Note:

### What are the Highlights of MoU?

- Under the MoU, **CSIR and iCreate intend to establish a collaborative support system for promising tech start-ups** by making combined resources available for entrepreneurs and innovators in the country.
- The partnership **will also catalyse scientific innovation** and the marketability of high-tech start-ups.
  - **Fintech, neobanks, and e-commerce players make the most of the digital environment** and their enterprise can leverage it to the fullest as well and ride the digital boom.
- Further, iCreate will **help set up new incubators at identified CSIR labs**.
  - Such start-ups will access CSIR's equipment, facilities, and scientific manpower.
- CSIR will **provide intellectual property support** and explore methods of financially supporting innovative start-ups from India to boost emerging entrepreneurs.
- iCreate will also **leverage its deep industry connections and market linkages** to identify real needs that can be addressed through scientific innovation by CSIR scientists.
  - It will thus **lead to faster commercialisation of the innovations** coming out of CSIR.

### What is the State of Start-ups in India?

- **About:**
  - Today, **India is the third largest start-up ecosystem globally** (by number of start-ups) with more than 15,000 start-ups established in 2020, up from 5000 in 2010.
  - The underlying enablers of this startup ecosystem include smartphone and internet penetration, **cloud computing, application programming interfaces (APIs)**, and a national payments stack in place.
  - Additionally, amid the **Covid-19 pandemic**, India has witnessed more number of Unicorn startups (startups having valuation of over USD1 billion) in just 2021 than it did in the period 2011-20.
  - However, still there are many challenges (Building and Scaling an Indian Startup, Diversity and the Digital Divide, Complex Regulatory Environment) that act as a hindrance in realizing the true potential of startups in India.

### Other Related Initiatives:

- **Ranking of States on Support to Startup Ecosystems:** It is an **evolved evaluation tool** aimed to **strengthen** the support of States and UTs to holistically build their startup ecosystems.
- **SCO Startup Forum:** The first-ever **Shanghai Cooperation Organisation (SCO)** Startup Forum was launched in October 2020 to develop and improve startup ecosystems collectively.
- **Prarambh:** The 'Prarambh' Summit **aims to provide a platform to the startups** and young minds from around the world to come up with new ideas, innovation and invention.
- **Startup India Seed Fund Scheme:** It **aims to provide financial assistance** to startups for proof of concept, prototype development, product trials, market entry, and commercialization.
- **Fisheries Startup Grand Challenge:** The Department of Fisheries, Ministry of Fisheries, Animal Husbandry & Dairying In association with Startup India, the Ministry of Commerce and Industry inaugurated the Fisheries Startup Grand Challenge.

## MHA on Citizenship Amendment Act (CAA), 2019

### Why in News

Recently, the **Ministry of Home Affairs (MHA)** in its **latest annual report for 2020-21**, has said that the **Citizenship Amendment Act (CAA) 2019** is a compassionate and ameliorative legislation and does not deprive any Indian of citizenship.

- The CAA, which aims to give citizenship to migrants belonging to **Hindu, Sikh, Buddhist, Jain, Parsi or Christian** communities from **Afghanistan, Bangladesh or Pakistan**, was notified on 12th December 2019, and came into force on 10th January 2020.
- The legislation evoked **widespread protests across the country**.

### What are Associated Concerns with CAA?

- **Targeting a Particular Community:** There are apprehensions that the CAA, followed by a country-wide compilation of the **National Register of Citizens (NRC)**, will benefit non-Muslims excluded from the proposed citizens' register, **while excluded Muslims will have to prove their citizenship**.

Note:



- **Issues in the North-East:** It contradicts the **Assam Accord of 1985**, which states that illegal migrants, irrespective of religion, heading in from Bangladesh after **25<sup>th</sup> March, 1971**, would be deported.
  - There are an estimated **20 million illegal Bangladeshi migrants in Assam** and they have inalienably altered the demography of the state, besides putting a severe strain on the state's resources and economy.
- **Against Fundamental Rights:** Critics argue that it is **violative of Article 14** of the Constitution (which guarantees the right to equality and is applicable to both the citizens and foreigners) and the principle of **secularism** enshrined in the preamble of the constitution.
- **Discriminatory in Nature:** India has several other refugees that include Tamils from Sri Lanka and Hindu **Rohingya from Myanmar**. They are not covered under the Act.
- **Difficulty in Administration:** It will be difficult for the government to differentiate between illegal migrants and those persecuted.
- **Hampering Bilateral Ties:** The Act throws light on the religious oppression that has happened and is happening in these three countries and thus **may worsen our bilateral ties with them**.

#### What does MHA Clarified?

- **Not Applicable on Indian Citizens:** The CAA does not apply to Indian citizens. Therefore, **it does not in any way take away or abridge the rights of any Indian citizen**.
- **Legal Process of Acquiring Indian Citizenship Remain Unchanged:** Further, the present legal process of acquiring Indian citizenship by any foreigner of any category as provided in the **Citizenship Act, 1955** is very much operational and the CAA does not amend or alter this legal position in any manner whatsoever.
  - Hence, **legal migrants of any religion from any country will continue to get Indian citizenship once they fulfil the eligibility conditions** already provided in the law for registration or naturalization.
- **Dealing With Issues of North-east India:** The annual report has attempted to once again allay fears in the Northeast over the legislation saying that exclusion of areas under the **Sixth Schedule of the Constitution** and those covered under the **Inner Line Permit** regime would ensure the protection of indigenous and tribal populations of the region.

## Tamil Nadu Bill on Vice Chancellor in Universities

### Why in News

Recently, the **Tamil Nadu Assembly** passed two Bills that seek to **transfer the Governor's power in appointing Vice-Chancellors (VC)** of 13 state universities to the state government.

- Earlier, the Maharashtra and West Bengal Governments have made similar provisions vis-a-vis **the governor appointing Vice-Chancellor of the Universities**.
- In Karnataka, Jharkhand and Rajasthan, state laws underline the need for concurrence between the state and the Governor.
- The terms "**concurrence**" or "**consultation**" are absent from state legislation in most cases.

### What are the Highlights of the two Bills?

- The Bills passed in Tamil Nadu stress that "**every appointment of the Vice-Chancellor shall be made by the Government from out of a panel of three names**" recommended by a **search-cum-selection committee**.
- Currently, the Governor, in his **capacity as the Chancellor of state universities**, has the power to pick a VC from the shortlisted names.
- The Bills also seek to empower the **state government to have the final word on the removal of VCs, if needed**.
- Removal will be carried out **based on inquiries by a retired High Court judge** or a bureaucrat who has served at least as a Chief Secretary.

### What is the UGC's role in this?

- Education comes under the **Concurrent List**, but **entry 66 of the Union List** — "coordination and determination of standards in institutions for higher education or research and scientific and technical institutions" — gives the **Centre substantial authority over higher education**.
- The **University Grants Commission** plays that standard-setting role, even in the case of appointments in universities and colleges.

Note:

- Recently, the University Grants Commission has released **Academic Collaboration between Indian and Foreign Higher Education Institutions to offer Joint Degree, Dual Degree, and Twinning Programmes Regulations, 2022**.
- Under these regulations collaborating institutes will be allowed to offer three kinds of programmes — twinning, joint degrees and dual degrees.
- According to the **UGC (Minimum Qualifications for Appointment of Teachers and other Academic Staff in Universities and Colleges and other Measures for the Maintenance of Standards in Higher Education) Regulations, 2018**, the “Visitor/Chancellor” — mostly the Governor in states — shall appoint the VC out of the panel of names recommended by search-cum-selection committees.
- Higher educational institutions, particularly those that get **UGC funds, are mandated to follow its regulations**.
- These are usually followed without friction in the case of central universities but are sometimes resisted by the states in the case of state universities.

#### **What is the view of Judiciary in this matter?**

- The **Supreme Court** in various judgment held that any appointment as a Vice Chancellor contrary to the provisions of the **UGC Regulations can be said to be in violation of the statutory provisions**, warranting a **writ of quo warranto**”.
- In case of any conflict between state legislation and central legislation, central legislation shall prevail, as the education’ is in the **Concurrent List of the Seventh Schedule** of the Constitution.

#### **What is the Role of Governors in State Universities?**

- In most cases, the Governor of the state is the **ex-officio chancellor of the universities in that state**.
- While as **Governor he functions with the aid and advice of the Council of Ministers**, as **Chancellor he acts independently** of the Council of Ministers and takes his own decisions on all University matters.
- **Case of Central Universities:**
  - Under the **Central Universities Act, 2009**, and other statutes, the **President** of India shall be the Visitor of a central university.

- With their role limited to **presiding over convocations, Chancellors in central universities are titular heads**, who are appointed by the President in his capacity as Visitor.
- The Vice Chancellor too is appointed by the **Visitor from panels of names picked by search and selection committees** formed by the Union government.
- The Act adds that the **President, as Visitor**, shall have the right to authorize inspections of academic and non-academic aspects of the universities and to institute inquiries.

## **Anti-Defection Law**

### **Why in News?**

Recently, the **Vice-President** has said that the time has come to **amend the anti-defection legislation** in the country to plug existing loopholes.

### **What is Anti Defection Law?**

- The anti-defection law **punishes individual Members of Parliament (MPs)/MLAs for leaving one party for another**.
- Parliament added it to the Constitution as the **Tenth Schedule in 1985**. Its purpose was to bring stability to governments by **discouraging legislators from changing parties**.
  - **The Tenth Schedule** - popularly known as the **Anti-Defection Act** - was included in the Constitution via the **52nd Amendment Act, 1985**.
  - It sets the provisions for disqualification of elected members on the grounds of defection to another political party.
  - It was a **response to the toppling of multiple state governments** by party-hopping MLAs **after the general elections of 1967**.
- However, it **allows a group of MP/MLAs to join (i.e., merge with) another political party** without inviting the penalty for defection. And it **does not penalize political parties** for encouraging or accepting defecting legislators.
  - As per the **1985 Act**, a **‘defection’ by one-third of the elected members** of a political party was considered a ‘merger’.

Note:

- But the **91st Constitutional Amendment Act, 2003**, changed this and now at **least two-thirds of the members of a party must be in Favour of a “merger”** for it to have validity in the eyes of the law.
- The **members disqualified under the law can stand for elections** from any political party for a seat in the same House.
- The **decision on questions as to disqualification on ground of defection** are referred to the Chairman or the Speaker of such House, which is subject to **‘Judicial review’**.
  - However, the **law does not provide a timeframe** within which the presiding officer has to decide a defection case.

### **What are the Grounds of Disqualification?**

- If an **elected member voluntarily gives up** his membership of a political party.
- If **he votes or abstains from voting in such House contrary** to any direction issued by his political party or anyone authorized to do so, without obtaining prior permission.
  - As a **pre-condition for his disqualification**, his abstention from voting should not be condoned by his party or the **authorized person within 15 days of such incident**.
- If any **independently elected member joins any political party**.
- If any **nominated member joins any political party** after the expiry of six months.

### **What are the issues with Anti Defection Law?**

- **Undermining Representative & Parliamentary Democracy:**
  - After enactment of the Anti-defection law, **the MP or MLA has to follow the party’s direction blindly** and **has no freedom** to vote in their judgment.
  - Due to Anti-Defection law, the **chain of accountability has been broken** by making legislators accountable primarily to the political party.
- **Controversial Role of Speaker:**
  - There is **no clarity in the law about the timeframe** for the action of the House Chairperson or Speaker in the anti-defection cases.

- Some cases take **six months** and some even three years. There are cases that are disposed off after the term is over.

#### ➤ **No Recognition of Split:**

- Due to the 91<sup>st</sup> amendment, **the anti-defection law created an exception for anti-defection rulings**.
- However, the **amendment does not recognize a ‘split’** in a legislature party and instead recognizes a ‘merger’.

#### ➤ **Subversion of Electoral Mandates:**

- **Defection is the subversion of electoral mandates by legislators** who get elected on the ticket of one party but then find it convenient to shift to another, due to the lure of ministerial berths or financial gains.

#### ➤ **Affects the Normal Functioning of Government:**

- The infamous **“Aaya Ram, Gaya Ram” slogan** was coined against the background of continuous defections by the legislators in the 1960s.
- The defection **leads to instability in the government and affects the administration**.

#### ➤ **Promote Horse Trading:**

- Defection also **promotes horse-trading of legislators** which clearly go against the mandate of a democratic setup.

#### ➤ **Allows only Wholesale Defection:**

- It allows wholesale defection, but **retail defection is not allowed**. Amendments are required to plug the loopholes.
- He raised concern that if a politician is leaving a party, **s/he may do so, but they should not be given a post in the new party**.

### **What are Different Suggestions related to the Anti-defection Law?**

- The **Election Commission** has suggested **it should be the deciding authority** in defection cases.
- Others have argued that the **President and Governors should hear defection petitions**.
- The **Supreme Court** has suggested that **Parliament should set up an independent tribunal** headed by a retired judge of the higher judiciary to decide defection cases swiftly and impartially.
- Some commentators have said the law has failed and recommended its removal. Former Vice President Hamid Ansari has suggested that it applies only to save governments in **no-confidence motions**.

Note:



## Phone Tapping in India

### Why in News?

Recently, a political leader claimed that the Centre is protecting an **Indian Police Service** officer who is facing a **First Information Report (FIR)** in Mumbai and is being probed for allegedly tapping the phones.

### What is Phone Tapping and how are Phones Tapped in India?

- Phone tapping or cell phone tracking/tracing is an **activity where a user's phone calls, and other activities are tracked** using different software.
  - This procedure is majorly carried out without the targeted person being notified of any such activity.
- It can be done by authorities making a **request to the service provider**, which is bound by law, to record the conversations on the given number and provide these in real time through a connected computer.
- However, **Article 21 of the Indian Constitution** says that **"No person shall be deprived of his life or personal liberty except according to procedure established by law."**
  - The expression 'personal liberty' includes '**right to privacy**'. A citizen has a right to safeguard his personal privacy and his family, education, marriage, motherhood, childbearing, and procreation, among other matters.

### Who can Tap Phones?

- **State Level:**
  - In the states, **police have the power to tap phones.**
- **Central Level:**
  - Intelligence Bureau, **Central Bureau of Investigation (CBI), Enforcement Directorate, Narcotics Control Bureau, Central Board of Direct Taxes**, Directorate of Revenue Intelligence, **National Investigation Agency**, Research and Analysis Wing (R&AW), Directorate of Signal Intelligence, **Delhi Police Commissioner.**

### What are the Laws that govern Phone Tapping in India?

- **The Indian Telegraph Act, 1885:**
  - According to **Section 5(2) of the Act** on the occurrence of any public emergency, or in the

interest of public safety, phone tapping can be done by the Centre or states.

- The order can be issued **if they are satisfied it is necessary in the interest of public safety, "sovereignty and integrity of India, the security of the State, friendly relations with foreign States or public order or for preventing incitement to the commission of an offence"**.
- **Exception for Press:**
  - **Press messages intended to be published in India of correspondents accredited to the Central Government or a State Government** shall not be intercepted or detained, unless their transmission has been prohibited under this sub-section.
  - The competent authority **must record reasons for tapping in writing.**

### Who Authorizes Phone Tapping?

- Phone tapping is authorized by **Rule 419A of the Indian Telegraph (Amendment) Rules, 2007.**
  - **In the case of the Central Government:** The order can be issued by an order made by the **Secretary to the Government of India in the Ministry of Home Affairs.**
  - **In the case of a State Government:** By the Secretary to the State Government in-charge of the Home Department.
- **In Emergency Situation:**
  - In such a situation, an **order may be issued by an officer**, not below the rank of a **Joint Secretary of India**, who has been **authorized by the Union Home Secretary, or the State Home Secretary.**
  - In **remote areas or for operational reasons**, if it is **not feasible to get prior directions**, a call can be intercepted with the prior approval of the head or the second senior-most officer of the authorized law enforcement agency at the central level, and by authorized officers, not below the rank of Inspector General of Police, at the state level.
  - The **order must be communicated within three days** to the competent authority, who must **approve or disapprove it within seven working days.**
    - If the confirmation from the competent authority is not received within the stipulated seven days, such interception shall cease.

Note:

- It can be noted here that in 2021, the Central Government notified the **Indian Telegraph Right of Way (Amendment) Rules, 2021**.

### What are the Checks against Misuse?

- **Last Resort:**
  - The law is clear that interception **must be ordered only if there is no other way of getting the information**.
- **Renewal of Interception:**
  - The directions for interception remain in force, **unless revoked earlier, for a period not exceeding 60 days**.
    - They may be **renewed, but not beyond a total of 180 days**.
- **Reasons Needed:**
  - Any order **issued by the competent authority** must contain reasons, and a copy is to be forwarded to a review committee within seven working days.
    - At the Centre, the committee is **headed by the Cabinet Secretary** with the Law and Telecom Secretaries as members.
    - In states, it is **headed by the Chief Secretary** with the Law and Home Secretaries as members.
- The committee is expected to meet at least once in two months to review all interception requests.
- **Destruction of Records:**
  - Under the rules, **records pertaining to such directions** shall be **destroyed every six months** unless these are, or are likely to be, required for functional requirements.
  - Service providers too are required to destroy records pertaining to directions for interception within two months of discontinuance of the interception.

## Arunachal Pradesh and Assam Border Dispute

### Why in News?

Recently, the **Governments of Arunachal Pradesh and Assam** have decided to form **district-level committees** for resolving boundary disputes.

- The **district committees** will undertake joint surveys in the **disputed areas to find tangible solutions** to the long-pending issue based on **historical perspective, ethnicity, contiguity, peoples' will** and administrative convenience of both states.

### What are the Border Disputes in the Country

<b>Assam-Arunachal Pradesh</b>	<ul style="list-style-type: none"> <li>➤ Assam shares an 804.10 km inter-state boundary with Arunachal Pradesh.</li> <li>➤ The state of Arunachal Pradesh, created in 1987, claims some land that traditionally belonged to its residents has been given to Assam.</li> <li>➤ A tripartite committee had recommended that certain territories be transferred from Assam to Arunachal. The two states have since been battling it out in the court over the issue.</li> </ul>
<b>Assam-Mizoram</b>	<ul style="list-style-type: none"> <li>➤ Mizoram used to be a district of Assam before being <b>carved out as a separate union territory and later, becoming another state</b>.</li> <li>➤ Mizoram shares a border with the districts Cachar, Hailakandi and Karimganj of Assam.</li> <li>➤ Over time, the two <b>states started having different perceptions</b> about where the demarcation should be.</li> <li>➤ While Mizoram wants it to be along an inner line notified in <b>1875 to protect tribals from outside influence</b>, which Mizos feel is part of their historical homeland, Assam wants it to be demarcated according to district boundaries drawn up much later.</li> </ul>
<b>Assam-Nagaland</b>	<ul style="list-style-type: none"> <li>➤ The border dispute between the two states has been going on since the <b>formation of Nagaland in 1963</b>.</li> <li>➤ The two states lay claim to Merapani, a small village next to the plains of Assam's Golaghat district.</li> <li>➤ There have been reports of violent clashes in the region since the 1960s.</li> </ul>

Note:

<b>Assam-Meghalaya</b>	<ul style="list-style-type: none"> <li>➤ Meghalaya has identified close to a dozen areas on which it has a dispute with Assam about the state's borders.</li> </ul>
<b>Haryana-Himachal Pradesh</b>	<ul style="list-style-type: none"> <li>➤ The two northern states have a border dispute over the <b>Parwanoo region, which lies next to the Panchkula district of Haryana.</b></li> <li>➤ Haryana has laid a claim to a large part of the land in the area and has accused the hill state of encroaching on some of its area.</li> </ul>
<b>Ladakh-Himachal Pradesh</b>	<ul style="list-style-type: none"> <li>➤ The union territory of <b>Ladakh and Himachal both claim Sarchu</b>, a major halt point for those travelling through Leh-Manali highway.</li> <li>➤ The region is located between <b>Himachal Pradesh's Lahaul and Spiti district and Ladakh's Leh district.</b></li> </ul>
<b>Maharashtra-Karnataka</b>	<ul style="list-style-type: none"> <li>➤ Perhaps the biggest border dispute in the country is <b>between Maharashtra and Karnataka over the Belgaum district.</b></li> <li>➤ Belgaum has a sizable population of <b>both Marathi and Kannada speaking people</b> and the two states have wrestled over the region in the past.</li> <li>➤ The area used to be part of the Bombay presidency from the time of the Britishers but was included in Karnataka after the states reorganisation exercise in 1956.</li> </ul>

### Why do inter-state border disputes remain unresolved?

- **Linguistic Idea of Reorganization:** Although the **States Reorganization Commission, 1956** was based on administrative convenience, states reorganized largely resembled the idea of one language one state.
- **Geographical Complexity:** The other complexity has been terrain — **rivers, hills and forests straddle two states** in many places and borders cannot be physically marked.
  - Colonial maps had left out large tracts of the northeast outside Assam as “thick forests” or marked them “unexplored”.

- **Indigenous Communities:** Indigenous communities were, for the most part, left alone. Boundaries would be drawn for administrative convenience when the “need” arose.
  - The **1956 demarcation** did not resolve the discrepancies.
  - When new states were carved out of **Assam (Nagaland in 1963, Mizoram, Meghalaya, Tripura and Manipur in 1972, and Arunachal Pradesh in 1987)**, it was still not addressed.

## Draft Battery Swapping Policy for Electric Vehicles

### Why in News

Recently, the **NITI Aayog** released the **draft battery swapping policy for Electric Vehicles (EVs)** in the country.

- The policy aims to **improve the efficiency of the battery swapping ecosystem** for electric scooters and three-wheeler electric rickshaws, thereby driving EV adoption.
- As per the draft policy, **all metropolitan cities with a population above 40 lakhs will be prioritized** for the development of a battery swapping network under the first phase.

### What is Battery Swapping?

- **Battery swapping is a mechanism** that involves exchanging discharged batteries for charged ones.
- This provides the flexibility to **charge these batteries separately** and keeps the vehicle in operational mode with negligible downtime.
- Battery swapping is generally used for smaller vehicles such as **two-wheelers and three-wheelers with smaller batteries** that are easier to swap, compared to four-wheelers and e-buses, although solutions are emerging for these larger segments as well.

### What are the key points of the draft Policy?

- **About:** As per the draft policy, battery swapping will **fall under the Battery-as-a-Service (BaaS) business model**, and such models would have to **ensure interoperability between EVs and batteries** for a successful mainstreaming of battery swapping as an alternative.

Note:

### ➤ Objectives:

- **Minimum Technical Standards:** This Policy stipulates the **minimum technical and operational requirements** that battery swapping ecosystems would need to fulfil, to enable effective, efficient, reliable, safe, and customer-friendly implementation of battery-swapping infrastructure.
  - **Financial Support:** Providing direct and indirect financial support to **Battery Providers** (for the cost of batteries) and EV users.
  - **Lowering Taxes:** The draft policy has suggested that the **Goods & Services Tax Council** considers reducing the differential across the tax rates on **Lithium-ion batteries** and electric vehicle supply equipment.
    - Currently, the tax rate on the former is 18% and 5% on the latter.
  - **Unique Identification Number:** The policy also proposes to assign a **Unique Identification Number (UIN)** to swappable batteries at the manufacturing stage to help track and monitor them.
- **Nodal Agency:** The **Bureau of Energy Efficiency (BEE)** is the Central Nodal Agency responsible for the rollout of EV public charging infrastructure and will be responsible for the implementation of battery swapping networks across the country.

### What is the Need for the Policy?

- EVs are traditionally purchased with “fixed” batteries which can only be charged using the power supply while housed within the EV.
- Like fueling stations for conventional vehicles, adequate, affordable, accessible, and **reliable charging networks are a prerequisite for mass EV adoption.**
- Efforts are underway in India to boost the availability of charging infrastructure
- However, **developing charging infrastructure still takes a significantly longer time** and there is a constraint of space in urban areas.
- Therefore, the Government of India in **Budget speech 2022-23** had announced that the Centre would be introducing a battery swapping policy and interoperability standards in order to improve efficiency in the EV ecosystem.

### What is the Significance of the Policy?

- **Decarbonizing Transport Sector:** India is a signatory to the **United Nations Framework Convention on Climate Change (UNFCCC)**, which was signed in 2021.
  - Under the mandate, India is committed to achieving a net-zero target by 2070.
  - To decarbonize transport, the transition to clean mobility, led by electric vehicles (EVs), is paramount.
  - The road transport sector is one of the major contributors to carbon emissions and forms nearly 33% of the particulate matter emissions.
- **Leveraging EV Market:** The overall Indian EV market was pegged at USD 1,434.04 Billion in 2021 and is expected to grow to USD 15,397.19 Billion by 2027 at a CAGR of 47.09%.

### What are Related Government Schemes for EV Promotion?

- The government had launched the **Faster Adoption and Manufacturing of (Hybrid and) Electric Vehicles (FAME) scheme** in 2015 to give a push to EVs and hybrid vehicles.
- Apart from that, it also approved the **Production Linked Incentive (PLI) scheme** for manufacturing **Advanced Chemistry Cell (ACC)** batteries in 2021.
- Another PLI Scheme, which also covers EV startups, was also approved for the automotive sector with a budgetary outlay.

## Central Administrative Tribunal

### Why in News?

Recently, **Central Administrative Tribunal (CAT)** conducted a special drive across all the **19 Benches of the Tribunal** for disposal of cases of most **vulnerable section of applicants** like the senior citizens / pensioners.

### What is Central Administrative Tribunal?

- **About:** It had been established under **Article 323 - A of the Constitution.**
  - It **provides for adjudication of disputes and complaints with respect to recruitment and conditions of service** of persons appointed to public services and posts in connection with the affairs of the Union or other authorities under the control of the Government.

Note:



- **Legal Framework:** In pursuance of Article 323-A, Parliament passed the **Administrative Tribunals Act in 1985**.
  - The act authorizes the Central government to establish one CAT and the state administrative tribunals.
  - This act opened a new chapter in the sphere of providing speedy and inexpensive justice to the aggrieved public servants.
  - CAT was set up during the Prime Ministership of **Rajeev Gandhi**.
- **Benches:** There are **19 Benches in the CAT all over India**.
- **Composition:** A **Chairman** who has been a sitting or **retired Judge of a High Court** heads the CAT.
- **Operating Principles:** The Tribunal is guided by the principles of natural justice in deciding cases and is not bound by the procedure prescribed by the **Civil Procedure Code**.
  - Under Section 17 of the **Administrative Tribunal Act, 1985**, the Tribunal has been conferred with the power to exercise the same jurisdiction and authority in respect of contempt of itself as a High Court.
- **Independence:** The conditions of service of the Chairman and Members are the same as applicable to a Judge of High Court as per the **Administrative Tribunals (Amendment) Act, 2006**.
- **Appeals against Orders:** The orders of the CAT are challenged by way of a **Writ Petition under Article 226/227 of the Constitution** before the respective High Court in whose territorial jurisdiction the Bench of the Tribunal is situated.

## Draft Protection and Enforcement of Interests in Aircraft Objects Bill, 2022

### **Why in News?**

Recently, the **Ministry of Civil Aviation** released the **draft Protection and Enforcement of Interests in Aircraft Objects Bill, 2022**.

- The proposed law will **help international aircraft leasing companies to repossess and transfer planes**

**out of India** in case of a **financial dispute with an Indian airline** at a time many regional airlines have been refused planes for rent.

- The proposed legislation comes more than 14 years after **India acceded to Cape Town Convention**.

### **What are the Key Points of Draft Legislation?**

- **About:** The Bill implements the provisions of the **Convention on International Interests in Mobile Equipment and Protocol on Matters Specific to Aircraft Equipment** which was adopted at a **conference in Cape Town in 2001**.
  - **India acceded** to the **two instruments in 2008**.
  - These **provide default remedies** for the creditor and create a legal regime for disputes.
- **Need:** The draft legislation is necessary because several Indian laws such as the **Companies Act, 2013** and the **Insolvency and Bankruptcy Code, 2016** are in conflict with the **Cape Town Convention and Protocol**.
  - International leasing companies **faced challenges in repossessing and exporting aircraft when Jet Airways shut down in 2019** and failed to pay its aircraft rentals.
  - Also, the Indian entities have suffered as international financial institutions demand implementation legislation.
- **Objective:** The proposed law provides remedies **such as repossession of an aircraft object, or its sale or lease or collection of income** from its use as well as de-registration and export of planes.
  - It also suggests **remedies pending final adjudication of a claim** as well as safeguards a creditor's claim during insolvency proceedings against its Indian buyer.

### **What is the Cape Town Convention and Protocol?**

- **Background:** The Convention on International Interests in Mobile Equipment was concluded in Cape Town on 16<sup>th</sup> November 2001, as was the Protocol on Matters Specific to Aircraft Equipment.
  - The Convention and the Protocol, were adopted under the **joint auspices** of the **International Civil Aviation Organisation (ICAO)** and the **International Institute for the Unification of Private Law (UNIDROIT)**.

Note:

- ICAO is a **United Nations (UN) specialized agency**, established in 1944, which laid the foundation for the standards and procedures for peaceful global air navigation. India is a member.
- **Objective:** To resolve the problem of obtaining certain and opposable rights to high-value aviation assets, namely airframes, aircraft engines and helicopters which, by their nature, **have no fixed location**.
- This problem arises primarily from the fact that **legal systems have different approaches to lease agreements**, which creates uncertainty for lending institutions regarding the efficacy of their rights.
- This **hampers the provision of financing** for such aviation assets and increases the borrowing cost.
- **Advantages of the Convention and the Protocol:**
  - **Predictability & enforceability.** The Convention and Protocol improve predictability with respect to the opposability of the securities and the interest held by sellers of aviation assets.
  - **Cost savings:** The Convention and Protocol are intended to reduce risks for creditors, and consequently, the borrowing costs to debtors, through the resulting improved legal certainty.
- This promotes the granting of credit for the acquisition of more modern and thus more fuel-efficient aircraft.
- The airlines of States that adopt the Convention and the Protocol may receive a **ten percent (10%) discount on export credit premiums**.

#### What is UNIDROIT?

- The **International Institute for the Unification of Private Law (UNIDROIT)** is an **independent intergovernmental Organisation** with its seat in the **Villa Aldobrandini in Rome**.
- Its purpose is to study needs and methods for **modernising, harmonising and coordinating private and in particular commercial law** as between States and groups of States and to formulate uniform law instruments, principles and rules to achieve those objectives.
- It was established in **1926 as part of the League of Nations**.
- It was reestablished in 1940 following the **League's dissolution through a multilateral agreement, the UNIDROIT Statute**.
- It has 63 member countries, with **India as a partner**.

## Global Centre for Traditional Medicine: Gujarat

### Why in News?

Recently, the groundbreaking ceremony was performed for the **first-of-its-kind World Health Organization (WHO) Global Centre for Traditional Medicine (GCTM)** in Jamnagar, Gujarat.

- Additionally, the **Global Ayush Investment and Innovation Summit** will be held later this month in Gandhinagar which is aimed at **increasing investments and showcase innovations** in the field of traditional medicine.
  - It is a **unique attempt to foster long-lasting partnerships**, boost exports and nurture a sustainable ecosystem.

### What is the Purpose for establishing GCTM?

- **Integrating with Technological Advancements:**
  - The Centre **aims to channel the potential of traditional medicine**, by integrating it with technological advancements and evidence-based research.
- **Set Policies and Standards:**
  - It will **seek to set policies and standards on traditional medicine products** and help countries create a comprehensive, safe, and high-quality health system.
- **Support Efforts to Implement WHO Strategy:**
  - It will **support efforts to implement the WHO's Traditional Medicine Strategy (2014-23)**.
    - It **aims to support nations in developing policies & action plans** to strengthen the role of traditional medicine in pursuing the goal of universal health coverage.
  - According to WHO estimates, **80% of the world's population** uses traditional medicine.
  - India has **committed an estimated USD 250 million to support the GCTM's** establishment, infrastructure and operations.
- **Focus on four main strategic areas:**
  - Evidence and learning
  - Data and analytics

Note:



- Sustainability and equity and
- Innovation and technology to optimise the contribution of traditional medicine to global health.

### What is Traditional Medicine?

#### ➤ About:

- According to the WHO, **traditional medicine is the total sum of the “knowledge, skills and practises indigenous** and different cultures have used over time to maintain health and prevent, diagnose and treat physical and mental illness”.
- Its **reach encompasses ancient practices** such as acupuncture, ayurvedic medicine and herbal mixtures as well as modern medicines.

#### ➤ Traditional Medicine in India:

- In India, it is often **defined as including practices and therapies** — such as **yoga, Ayurveda, Siddha**.
  - These therapies and practices **have been part of Indian tradition historically as well as others** — such as homoeopathy — that became part of Indian tradition over the years.
- Ayurveda and yoga are practised widely across the country.
  - The Siddha system is followed predominantly in Tamil Nadu and Kerala
  - The Sowa-Rigpa system is practised mainly in Leh-Ladakh and Himalayan regions such as Sikkim, Arunachal Pradesh, Darjeeling, Lahaul & Spiti.



### What is the Need to Advance Knowledge of Traditional Medicine?

#### ➤ Traditional Medicine Workers not integrated:

- National health systems and strategies **do not yet fully integrate traditional** medicine workers, accredited courses and health facilities.

#### ➤ Conserving Biodiversity:

- There is a **need to conserve biodiversity and sustainability** as **about 40% of approved pharmaceutical products** today derive from natural substances.

- **For Example:** The discovery of aspirin drew on traditional medicine formulations using the bark of the willow tree, the contraceptive pill was developed from the roots of wild yam plants and child cancer treatments have been based on the rosy periwinkle.

#### ➤ Modernisation in Studying Traditional Medicine:

- The WHO has **referred to modernisation of the ways** traditional medicine is being studied.
  - **Artificial intelligence** is now used to map evidence and trends in traditional medicine.
  - **Functional magnetic resonance imaging** is used to study brain activity and the relaxation response that is part of some traditional medicine therapies such as meditation and yoga, which are increasingly drawn on for mental health and well-being in stressful times.

#### ➤ Serve as a Hub for Other Countries:

- Traditional medicine is also being extensively updated by mobile phone apps, online classes, and other technologies.
- The GCTM will serve as a hub for other countries, and build standards on traditional medicine practices and products.

### What are the Similar Collaborative Efforts taken by India Earlier?

#### ➤ Project Collaboration Agreement (PCA) :

- In 2016, the Ministry of AYUSH signed a **Project Collaboration Agreement (PCA)** with the WHO in the area of traditional medicine.
  - The aim was to **create benchmarks for training** in yoga, Ayurveda, Unani and Panchakarma, for traditional medicine practitioners.

Note:



- The collaboration also **aimed at promoting the quality and safety of traditional medicine** and consumer protection by supporting WHO in the development and implementation of the WHO Traditional and Complementary Medicine Strategy.

#### ➤ Related MoUs Signed:

- At least **32 MoUs for undertaking collaborative research and development** of traditional medicine have been signed with institutes, universities and organisations from the US, Germany, UK, Canada, Malaysia, Brazil, Australia, Austria, Tajikistan, Saudi Arabia, Ecuador, Japan, Indonesia, Reunion Island, Korea and Hungary.
- Also, the **Council of Scientific and Industrial Research (CSIR)** and the **Bill & Melinda Gates Foundation** have signed an MoU to identify **opportunities** for scientific and technological research between researchers within and outside India, including collaborations with foundation-funded entities in the areas including traditional medicine as well as beyond.

## Parliamentary Panel for MSME Finances

### Why in News

Recently, the **Parliamentary standing committee** on finance has **suggested several measures** for strengthening credit flow to the **Micro, Small and Medium Enterprises (MSMEs) sector**.

### Why is there a Need for Improving Credit Flow to MSME Sector?

- **Lack of Formalization:** The need for formalising the credit ecosystem for MSMEs has assumed significance as less than **40% of 6.34 crore MSMEs**, as per government data, borrow from the formal financial system.
  - The overall credit gap in the MSME sector is estimated to be **Rs. 20-25 lakh crore**.
- **Lack of Integrated Data:** The last MSME survey was conducted by **National Sample Survey Office (NSSO)**, **Ministry of Statistics and Programme Implementation** six years ago while the government had **revised the MSME definition in 2020**.

- The committee noted that whatever data is there with regard to the MSME sector, they **exist in a fragmented manner** and there is **no real integration across multiple datasets**.
- This is the reason why **banks were reluctant** in lending to the MSME sector.

Earlier and Revised Definition of MSMEs			
<b>Earlier MSME Classification</b>			
Criteria: Investment in Plant & Machinery or Equipment			
Classification	Micro	Small	Medium
Manufacturing Enterprises	Investment < ₹ 25 lac	Investment < ₹ 5 cr.	Investment < ₹ 10 cr.
Services Enterprise	Investment < ₹ 10 lac	Investment < ₹ 2 cr.	Investment < ₹ 5 cr.
<b>Revised MSME Classification</b>			
Composite Criteria: Investment and Annual Turnover			
Classification	Micro	Small	Medium
Manufacturing & Services	Investment < ₹ 1 cr. & Turnover < ₹ 5 cr	Investment < ₹ 10 cr. & Turnover < ₹ 50 cr.	Investment < ₹ 20 cr. & Turnover < ₹ 100 cr.

### What does the Panel Suggest?

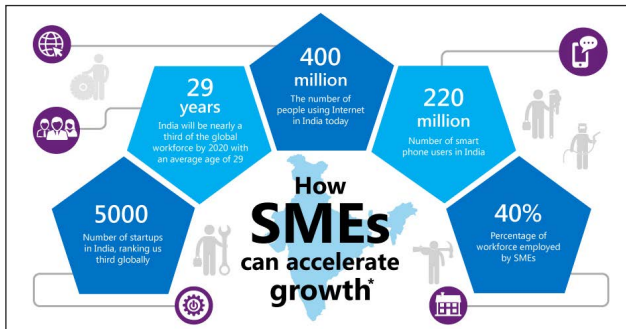
- **One-Stop Central Data Repository:** Developing the **Udyam portal** into a **one-stop central data repository** for the MSME sector by linking it with other databases such as CIBIL data, utility bills data etc.
  - The portal is currently already linked with the **Government e-Marketplace (GeM)**, **Income Tax**, **GST** and **Trade Receivables Discounting System (TReDS)** portals.
  - Further, **Budget 2022** announced linking the Udyam portal with **e-Shram**, **National Career Service (NCS)** and **Atmanirbhar Skilled Employee-Employer Mapping (ASEEM)** in the budget to enhance skilling and recruitment for MSMEs.
- **Innovative Lending System:** Creating a **'Unified Payments Interface (UPI) for MSME Lending'** for all MSMEs in the formal sector to access small-ticket working capital loans in a **mobile-based, contactless, paperless, and low-cost way**.
- **Vyapar' Credit Card:** the panel also recommended a **'Vyapar' credit card** scheme for MSMEs under SIDBI akin to the **Kisan Credit Card (KCC) scheme** of the **National Bank for Agriculture and Rural Development (NABARD)** to bring crores of MSMEs into the formal financial system including street vendors and kirana stores.

Note:



- The credit card can provide short-term working capital loans at low-interest rates and can be further extended to **provide collateral-free loans like the Rs 1 lakh collateral-free facility** available to KCC holders.
- **MSME Census:** survey/census of MSMEs in line with the changed definition, be conducted at the earliest so as to estimate the actual number of MSMEs in the country along with realistic assessments of their credit requirements.

#### Significance of the MSME sector



#### What are Initiatives to Promote MSME Sector

- The Ministry of Micro, Small & Medium Enterprises (M/o MSME) envisions a vibrant MSME sector by promoting growth and development of the MSME Sector, including Khadi, Village and Coir Industries.
- The **Micro; Small and Medium Enterprises Development (MSMED) Act was notified in 2006** to address policy issues affecting MSMEs as well as the coverage and investment ceiling of the sector.
- **Prime Minister's Employment Generation programme (PMEGP)**: It is a **credit linked subsidy scheme**, for setting up of **new micro-enterprises** and to **generate employment** opportunities in **rural as well as urban areas of the country**.
- **Scheme of Fund for Regeneration of Traditional Industries (SFURTI)**: It aims to properly organize the **artisans and the traditional industries** into clusters and thus provide **financial assistance** to make them competitive in today's market scenario.
- **A Scheme for Promoting Innovation, Rural Industry & Entrepreneurship (ASPIRE)**: The scheme promotes innovation & rural entrepreneurship through rural Livelihood Business Incubator (LBI), Technology Business Incubator (TBI) and Fund of Funds for start-up creation in the agro-based industry.

- **Interest Subvention Scheme for Incremental Credit to MSMEs:** It was introduced by the **Reserve Bank of India** wherein **relief is provided** upto **2% of interest** to all the **legal MSMEs on their outstanding fresh/incremental term loan/working capital** during the period of its validity.
- **Credit Guarantee Scheme for Micro and Small Enterprises:** Launched to facilitate easy flow of credit, guarantee cover is provided for collateral free credit extended to MSMEs.
- **Micro and Small Enterprises Cluster Development Programme (MSE-CDP):** It aims to enhance the productivity and competitiveness as well as capacity building of MSEs.
- **Credit Linked Capital Subsidy and Technology Upgradation Scheme (CLCS-TUS):** CLCS aims at **facilitating technology upgradation of Micro and Small Enterprises (MSEs)** by providing **15% capital subsidy for purchase of plant & machinery**.
- **CHAMPIONS portal:** It aims to assist **Indian MSMEs** march into the big league as **National and Global CHAMPIONS** by solving their grievances and encouraging, supporting, helping and hand holding them.
- **MSME Samadhan:** It enables them to directly register their cases about delayed payments by Central Ministries/Departments/CPSEs/State Governments.
- **Udyam Registrations Portal:** This new portal assists the government in **aggregating the data on the number of MSMEs in the country**.
- **MSME SAMBANDH:** It is a **Public Procurement Portal**. It was launched to monitor the implementation of the Public Procurement from MSEs by Central Public Sector Enterprises.

## Award for Excellence to UDAN Scheme

### Why in News?

Recently, the **UDAN (UdeDeshkaAamNagrik)** Scheme has been selected for **Prime Minister's Award for Excellence in Public Administration 2020** under the category **"Innovation (General) – Central"**.

Note:

- The Ministry of Civil Aviation will receive the award on **21<sup>st</sup> April, i.e. Civil Service Day**. The government of India celebrates Civil Services Day, every year as an **occasion for the civil servants to rededicate themselves** to the cause of serving citizens and renew their commitments to public service and excellence in work.
- The Ministry of Civil Aviation plans and commits to construct **100 new airports by 2024 in India with 1,000 new routes under UDAN Regional Connectivity Scheme (RCS) scheme by the year 2026**.

### **What is the PMs Award for Excellence in Public Administration?**

- **About:**
  - It was constituted in 2006 by the Government of India to **acknowledge, recognize and reward the extraordinary and innovative work done** by districts and organisations of the Central and State Governments.
  - The award consists of a **trophy, scroll and an incentive of Rs. 10 lakh to the awarded district or organisation** to be utilised for implementation of project/ programme or bridging resource gaps in any area of public welfare.
- **Restructuring:**
  - The Scheme was restructured in **2014** for recognizing the **performance of District Collectors in Priority Programs, Innovations and Aspirational Districts**.
  - The Scheme was restructured again in **2020**, to **recognize the performance of District Collectors towards economic development of the District**.
  - The Scheme has been **revamped** with a new approach in **2021** with the **objective to encourage Constructive Competition, Innovation, Replication and Institutionalisation of Best Practices**.
    - Under this approach emphasis would be on **good governance, qualitative achievement and last mile connectivity**, rather than only on achievement of quantitative targets.

### **What is the UDAN Scheme?**

- **Launch:**
  - It was launched as a RCS under the Ministry of Civil Aviation in **2016**.

- **Objectives:**
  - To develop the **regional aviation market**.
  - To provide affordable, economically viable and profitable air travel on **regional routes to the common man even in small towns**.
- **Features:**
  - The scheme **envisages providing connectivity to un-served and underserved airports of the country through the revival of existing air-strips and airports**. The scheme is operational for a period of 10 years.
    - Under-served airports are those which do not have more than one flight a day, while **unserved airports are those where there are no operations**.
  - **Financial incentives from the Centre, state governments and airport operators are extended** to selected airlines to encourage operations from unserved and under-served airports, and keep airfares affordable.

### **What are the Achievements of UDAN?**

- **Connecting Northeast:** Till date, **387 routes and 60 airports** have been operationalised out of which 100 routes are awarded in the North East alone.
  - Under the **KRISHI UDAN Scheme**, 16 airports have been identified to enhance the export opportunities of the North East region establishing dual benefits of enhancement of cargo movements and exports.
- **Economic Growth:** UDAN has a **positive impact on the economy of the country** and has witnessed an excellent response from industry stakeholders especially airlines operators and state governments.
- **Balanced Regional Growth:** More than **350 new city pairs are now scheduled to be connected under the scheme, with 200 already connected** and are widely spread geographically providing connectivity across the length and breadth of the country as well as ensuring balanced regional growth resulting in economic growth and employment to the local population.
  - The scheme led to development of new **GreenField Airports** such as **Pakyong** near Gangtok in Sikkim, **Tezu** in Arunachal Pradesh and **Kurnool** in Andhra Pradesh.
- **Increased Passenger Share:** The scheme led to **5% incremental growth in domestic passenger share** of non-metro airports.

Note:

**What are the Phases of UDAN?**

- **UDAN 1.0:**
  - Under this phase, **5 airlines companies were awarded 128 flight routes to 70 airports** (including 36 newly made operational airports).
- **UDAN 2.0:**
  - In 2018, the Ministry of Civil Aviation announced **73 underserved and unserved airports**.
  - For the first time, helipads were also connected **under phase 2 of the UDAN scheme**.
- **UDAN 3.0:**
  - Inclusion of Tourism Routes under UDAN 3 in coordination with the Ministry of Tourism.
  - Inclusion of **Seaplanes for connecting Water Aerodromes**.
  - Bringing in a number of routes in the North-East Region under the ambit of UDAN.
- **UDAN 4.0:**
  - In 2020, **78 new routes were approved under the 4<sup>th</sup> round of RCS-UDAN** to further enhance the connectivity to remote & regional areas of the country.
  - Kavaratti, Agatti, and Minicoy islands of Lakshadweep will be connected by the new routes of UDAN 4.0.
- **UDAN 4.1:**
  - The **UDAN 4.1 focuses on connecting smaller airports**, along with special helicopter and seaplane routes.
  - Some new routes have been proposed under the **Sagarmala Seaplane services**.
  - Sagarmala Seaplane Services is an ambitious project under the Ministry of Ports, Shipping and Waterways with potential airline operators.

**40<sup>th</sup> Hunar Haat****Why in News**

Recently, the 40<sup>th</sup> edition of the '**Hunar Haat**' was inaugurated in **Mumbai**. In this edition, more than a thousand craftsmen and artisans coming from **31 states and Union Territories** participated.

**What are Key Points****Associated with Hunar Haat?**

- **About:**
    - Hunar Haat has been conceptualized to **protect and promote the country's ancestral legacy of arts and crafts** in the current global competition and to support the traditional artisans and craftsmen.
    - The artisans selected in the Hunar Haat exhibition are those whose **forefathers were involved in such traditional handmade work** and are still continuing the profession.
  - **Theme:**
    - **Vocal for Local** and "Best from Waste"
  - **Aim:**
    - To provide market **exposure and employment opportunities** to artisans, craftsmen and traditional culinary experts.
    - **Boosting the skills** of craftsmen, weavers and artisans who are already engaged in the traditional ancestral work.
  - **Organizer:**
    - These are organized by the Ministry of Minority Affairs under **USTTAD (Upgrading the Skills & Training in Traditional Arts/Crafts for Development) scheme**.
      - The USTTAD scheme aims to promote and preserve the rich heritage of the traditional arts & crafts of the minority communities.
  - **Significance:**
    - **Aatmanirbhar Bharat** is being strengthened by initiatives like Hunar Haat.
    - Skill training is provided so that you do not become job-seekers, instead become job-givers.
- For Example:**
- '**Tejas'a skilling programme** which has been launched by the Government of India.
  - Under this initiative, India will send skilled manpower to the UAE. Within a year, 30,000 skilled job-seekers will be sent to the UAE.
  - Through Hunar Haats one will get to witness '**Ek Bharat Shreshtha Bharat**' and experience the essence of '**Unity in Diversity**'.

Note:



## e-DAR Portal

### Why in News?

Recently, the **Ministry of Roads, Transport and Highways (MoRTH)** developed the portal named 'e-DAR' (**e-Detailed Accident Report**).

- The portal provides **instant information on road accidents** and **helps accelerate accident compensation claims**, bringing relief to victims' families.

### What is the Status of Road Accidents in India?

- Road safety continues to be a major developmental issue, a public health concern and a leading cause of death and injury across the world.
- It kills more than **1.35 million globally as reported in the Global Status report on Road Safety 2018** with 90% of these casualties taking place in the developing countries and 11% alone being accounted for by India.
- As per the **Report on Road accidents in India 2019**, the accident related deaths in India in 2019 were **1,51,113 in number**.

### What are the Benefits of e-DAR portal?

- **Integrated Database: Digitalised Detailed Accident Reports (DAR)** will be uploaded to the portal for easy access.
  - The web portal will be linked to the **Integrated Road Accident Database (iRAD)**.
  - From iRAD, applications to more than **90% of the datasets** would be pushed directly to the e-DAR.
  - Stakeholders like the **police, road authorities, hospitals**, etc., are required to enter very **minimal information for the e-DAR forms**.
  - Thus, e-DAR would be an extension and **e-version of iRAD**.
- **Tackling Fake Claims:** DAR portal would conduct multiple checks against fake claims by conducting a **sweeping search of vehicles involved in the accident**, the date of the accident, and the **First Information Report number**.
- **Cross-Platform Linkages:** The portal would be linked to other government portals like **Vaahan** or and would get access to information on driving licence details and registration of vehicles.

- **Identifying Accident Hotspots:** Hotspots for accidents would also be identified so as to obtain solutions to avoid accidents at these hotspots.

### What are Other Initiatives Related to Road Safety?

- **Global Level:**
  - **Brasilia Declaration on Road Safety (2015):**
    - The **declaration** was signed at the second Global High-Level Conference on Road Safety held in Brazil. India is a signatory to the Declaration.
    - The countries plan to achieve the **Sustainable Development Goal 3.6** i.e. half the number of global deaths and injuries from road traffic accidents by 2030.
  - **UN Global Road Safety Week:**
    - It is celebrated every two years, the sixth edition (held from 17<sup>th</sup> to 23<sup>rd</sup> May 2021) highlighted the need for strong leadership for road safety.
  - **The International Road Assessment Programme (iRAP):**
    - It is a registered charity dedicated to saving lives through safer roads.
- **India:**
  - **Motor Vehicles Amendment Act, 2019:**
    - The **Act** hikes the penalties for traffic violations, defective vehicles, juvenile driving, etc.
    - It provides for a Motor Vehicle Accident Fund, which would provide compulsory insurance cover to all road users in India for certain types of accidents.
    - It also provides for a National Road Safety Board, to be created by the Central Government through a notification.
    - It also provides for the protection of good samaritans.
  - **The Carriage by Road Act, 2007:**
    - The Act provides for the regulation of common carriers, limiting their liability and declaration of the value of goods delivered to them to determine their liability for loss of, or damage to, such goods occasioned by the negligence or criminal acts of themselves, their servants or agents and for matters connected therewith or incidental thereto.

Note:

- **The Control of National Highways (Land and Traffic) Act, 2000:**
  - The Act provides the control of land within the National Highways, right of way and traffic moving on the National Highways and also for removal of unauthorised occupation thereon.
- **The National Highways Authority of India Act, 1998:**
  - The Act provides for the constitution of an authority for the development, maintenance and management of NHs and for matters connected therewith or incidental thereto.

## Criminal Justice System

### *Why in News?*

Recently, the **Supreme Court** gave two months to **high courts and states** to implement a set of guidelines meant to **streamline inadequacies and deficiencies in criminal trials**.

- These guidelines are referred to as **Draft Rules of Criminal Practice, 2020**.
- The Draft Rules **recommends reforms in investigation and trial, including proposals to employ separate teams of lawyers** to help the police during the probe and for the trial; details to be covered while drafting **spot panchamas** and even **corrections in body sketches**.

### *What is Criminal Justice System in India?*

- **Criminal Justice System** refers to the **agencies of government charged with enforcing law, adjudicating crime, and correcting criminal conduct**.
- **Objective:**
  - To prevent the occurrence of crime.
  - To punish the transgressors and the criminals.
  - To rehabilitate the transgressors and the criminals.
  - To compensate the victims as far as possible.
  - To maintain law and order in society.
  - To deter offenders from committing any criminal act in the future

### *Why There is a Need for Reforms?*

- **Colonial Legacy:** The criminal justice system- **both substantive and procedural- are replica of the British colonial jurisprudence**, which were designed with the purpose of ruling the nation.

- Therefore, the relevance of these 19th century laws is debatable in the 21st century.
- **Ineffective Justice Delivery:** The purpose of the criminal justice system was to protect the rights of the innocents and punish the guilty, but **nowadays the system has become a tool of harassment of common people**.
- **Pendency of Cases:** According to **Economic Survey 2018-19**, there are about 3.5 crore cases pending in the judicial system, especially in district and subordinate courts, which leads to actualization of the maxim **Justice delayed is justice denied."**
- **Huge Undertrials:** India has one of the world's largest numbers of undertrial prisoners.
  - According to **National Crime Records Bureau (NCRB)**-Prison Statistics India, **67.2% of our total prison population** comprises of **under trial prisoners**.
- **Police Issue:** Police are being a front line of the criminal **judiciary system**, which played a vital role in the administration of justice. Corruption, huge workload and accountability of police is a major hurdle in speedy and transparent delivery of justice.

### **What are Related initiatives Taken by Government?**

- **National Mission for Justice Delivery and Legal Reforms**
- **AI Portal SUPACE**
- **Modernisation of Police Scheme**

## 91<sup>st</sup> Amendment & Ceiling on Cabinet

### *Why in News*

Recently, the **High Court of Bombay** noted that **arguable issues have been raised in a Public Interest Litigation (PIL)** challenging the "lifetime status of the rank of **Cabinet minister**" according to **Pratap Singh Rane, a six-time Chief Minister of Goa and a legislator for a full 50 years**.

- The PIL has contended that Goa has a **12-member Cabinet**, and the conferment of Cabinet status on Rane results in the number of **Cabinet ranks rising to 13**, which exceeds the **ceiling mandated by the Constitution**.

Note:

- This limit was set by **91st Amendment) Act, 2003** to the Indian Constitution.

### What is the 91st Amendment Act?

- The Constitution (**91st Amendment) Act, 2003** inserted **clause 1A in Article 164**, which says “the **total number of Ministers, including the Chief Minister, in the Council of Ministers in a State** shall not exceed **15%** of the **total number of members of the Legislative Assembly of that State**.
  - It also provided that the number of Ministers, including the Chief Minister in a State shall **not be less than twelve**”.
- Similar amendments were also **made under Article 75**.
  - According to it, the PM shall be appointed by the **President and the other Ministers shall be appointed by the President on the advice of the PM**.
  - The total number of ministers, including the Prime Minister, in the COM shall not exceed **15% of the total strength of the Lok Sabha**.
- The purpose of the 91st Amendment was to prevent jumbo Cabinets and the resultant drain on the public exchequer.

### What is the Council of Ministers?

- **Article 74 of the Constitution** deals with the status of the **council of ministers** while Article 75 deals with the appointment, tenure, responsibility, qualification, oath and salaries and allowances of the ministers.
- The **COM consists of three categories of ministers, namely, cabinet ministers, ministers of state, and deputy ministers**. At the top of all these ministers stands the Prime Minister.
  - **Cabinet Ministers:** These head the important ministries of the Central government like home, defense, finance, external affairs and so forth.
- The Cabinet is the chief policy formulating body of the Central government.
  - **Ministers of State:** These can either be given independent charge of ministries/ departments or can be attached to cabinet ministers.
  - **Deputy Ministers:** They are attached to the cabinet ministers or ministers of state and assist them in their administrative, political, and parliamentary duties.

### What is Public Interest Litigation?

- Public interest Litigation (PIL) means **litigation filed in a court of law**, for the protection of “**Public Interest**”, such as **Pollution, Terrorism, Road safety, Constructional hazards etc**.
  - Any matter where the interest of the public at large is affected can be redressed by filing a Public Interest Litigation in a court of law.
- Public interest litigation is **not defined in any statute or in any act**. It has been interpreted by judges to consider the intent of the public at large.
- Public interest litigation is the **power given to the public by courts through judicial activism**.
  - However, the person filing the **petition must prove to the satisfaction of the court that the petition is being filed for a public interest** and not just as frivolous litigation by a busy body.
- The court can itself take **cognizance of the matter and proceed suo motu** or cases can commence on the petition of any public spirited individual.
- **Some of the matters which are entertained under PIL are:**
  - **Bonded Labour** matters
  - Neglected Children
  - Non-payment of minimum wages to workers and exploitation of casual workers
  - Atrocities on women
  - Environmental pollution and disturbance of ecological balance
  - Food adulteration
  - Maintenance of heritage and culture
- The era of the PIL movement was heralded by **Justice P.N. Bhagwati** in the case of **S.P. Gupta vs. Union of India 1981**.
  - In this case it was held that “any member of the public or social action group acting Bonafide” can invoke the **Writ Jurisdiction of the High Courts (under article 226) or the Supreme Court (under Article 32)**.
  - Through PIL any person can seek redressal against violation of legal or constitutional rights of persons who due to social or economic or any other disability cannot approach the Court.

Note:



## National Panchayati Raj Day

### Why in News?

India commemorates the 12th National Panchayati Raj day on 24th April 2022.

- The Prime Minister has launched the distribution of **e-property cards under the SWAMITVA (Survey of Villages and Mapping with Improved Technology in Village Areas)** scheme on the Day.

### What is National Panchayati Raj Day?

- **Background:**
  - The first National Panchayati Raj Day was celebrated in 2010. Since then, the National Panchayati Raj Day is celebrated on 24th April every year in India.
  - The day **marks the enactment of the 73rd amendment of the constitution in 1992.**
- **Awards Presented on the Day:**
  - The Ministry of Panchayati Raj has been awarding the best performing Panchayats/States/UTs across the country in recognition of their good work.
  - Awards are given under various categories namely,
    - Deen Dayal Upadhyay Panchayat Sashaktikaran Puraskar,
    - Nanaji Deshmukh Rashtriya Gaurav Gram Sabha Puraskar,
    - Child-friendly Gram Panchayat Award,
    - Gram Panchayat Development Plan Award and
    - e-Panchayat Puraskar (given to States/UTs only).

### What is Panchayati Raj?

- After the Constitution came into force, Article 40 made a mention of panchayats and Article 246 empowered the state legislature to legislate with respect to any subject relating to local self-government.
- **Panchayati Raj Institution (PRI)** was constitutionalized through the 73rd Constitutional Amendment Act, 1992 to build democracy at the grass roots level and was entrusted with the task of rural development in the country.
- PRI is a system of rural local self-government in India.
  - Local Self Government is the management of local affairs by such local bodies who have been elected by the local people.

- To strengthen e-Governance in Panchayati Raj Institutions (PRIs) across the country, **the Ministry of Panchayati Raj (MoPR)** has launched eGramSwaraj, a user-friendly web-based portal.
  - It unifies the planning, accounting and monitoring functions of Gram Panchayats. Its combination with the Area Profiler application, Local Government Directory (LGD) and the **Public Financial Management System (PFMS)** renders easier reporting and tracking of Gram Panchayat's activities.

### What are the Salient Features of the 73rd Constitutional Amendment

- The 73rd Constitutional Amendment **added Part IX titled "The Panchayats"** to the Constitution.
- Basic unit of democratic system-**Gram Sabhas** (villages) comprising all the adult members registered as voters.
- **Three-tier system** of panchayats at village, intermediate block/taluk/mandal and district levels except in States with population is below 20 lakhs (Article 243B).
- Seats at all levels to be filled by **direct elections** (Article 243C (2)).
- **Reservation of Seats:**
  - Seats reserved for Scheduled Castes (SCs) and Scheduled Tribes (STs) and the chairpersons of the Panchayats at all levels also shall be reserved for SCs and STs in proportion to their population.
  - One-third of the total number of seats to be reserved for women.
  - One-third offices of chairpersons at all levels reserved for women (Article 243D).
- **Duration:**
  - Uniform five year term and elections to constitute new bodies to be completed before the expiry of the term.
  - In the event of dissolution, elections compulsorily within six months (Article 243E).
- **Independent Election Commission in each State** for superintendence, direction and control of the electoral rolls (Article 243K).
- **Power of Panchayats:** Panchayats have been authorised to prepare plans for economic development and social justice in respect of subjects illustrated in Eleventh Schedule (Article 243G).

Note:

- **Source of Revenue (Article 243H):** State legislature may authorise the Panchayats with
  - Budgetary allocation from State Revenue.
  - Share of revenue of certain taxes.
  - Collection and retention of the revenue it raises.
- **Establish a Finance Commission in each State** to determine the principles on the basis of which adequate financial resources would be ensured for panchayats and municipalities (Article 243I).
- **Exemptions:**
  - The Act does not apply to the states of Nagaland, Meghalaya and Mizoram and certain other areas because of socio-cultural and administrative considerations. These areas include:
    - the Scheduled areas and the tribal areas (**under Schedule VI of the Constitution**) in the states.
    - the hill areas of Manipur for which district councils exist,
    - Darjeeling district of West Bengal for which Darjeeling Gorkha Hill Council exists.
  - However, the Parliament has extended the provisions of Part IX to **Vth schedule** areas through an Act called the Provisions of Panchayats (Extension to the Scheduled Areas) Act, 1996.
    - At present, 10 States namely Andhra Pradesh, Chhattisgarh, Gujarat, Himachal Pradesh, Jharkhand, Madhya Pradesh, Maharashtra, Odisha, Rajasthan and Telangana have Fifth Schedule Area.

## National Apprenticeship Mela

### **Why in News?**

The Ministry of Skill Development and Entrepreneurship has conducted a National Apprenticeship Mela.

- The National Policy of Skill Development and Entrepreneurship, 2015 recognizes apprenticeship as a means to provide gainful employment to a skilled workforce with adequate compensation.
- Apprenticeship is a Skill Training program wherein a person is engaged by a company as an apprentice and gains classroom (theory) learning for a short period, followed by on-the-job (practical) training.

### **What is the National Apprenticeship Mela?**

- The aim is to **support the hiring of more than one lakh apprentices and assist employers in tapping the right talent** and developing it further with training and providing practical skill sets.
- Applicants will get a **monthly stipend as per the Government standards for developing new skills**, an opportunity to earn while they learn.
- Individuals having a 5th–12th grade pass certificate, a skill training certificate, an ITI Diploma, or a graduate degree were eligible to participate in the PM Apprenticeship Mela.
- The candidates will get **certificates, recognized by National Council for Vocational Education and Training (NCVET)**, increasing the chances of their employability after the training.
  - **NCVET** was notified by MSDE on 5th December 2018.

### **What are the Government Policies related to Apprenticeship?**

- The **Apprentices Act, 1961** was enacted with the objective of regulating the program of training of apprentices in the industry by utilizing the facilities available therein for imparting on-the-job training.
  - Ministry of Skill Development and Entrepreneurship is the administrative ministry responsible for implementation of the Act.
- The government has **brought comprehensive amendments in the Act in December 2014** to make it more attractive for both industry and youth.
  - Major changes **introduced in the amendment are:**
    - Replacing the outdated system of trade wise and unit wise regulation of apprentices with a band of 2.5% to 10% of the total workforce (including contractual workers), introduction of optional trades, removing stringent clauses like imprisonment & allowing industries to out-source basic training.
- **National Apprenticeship Promotion Scheme:**
  - National Apprenticeship Promotion Scheme (NAPS) was launched on **19th August 2016** to promote apprenticeship training and increase the engagement of apprentices.
  - NAPS has replaced **Apprentice Protsahan Yojna (APY)**.

Note:

- The scheme has the following **two components**:
  - **Reimbursement of 25% of prescribed stipend** subject to a maximum of Rs. 1500/- per month per apprentice by the Government of India to all employers who engage apprentices.
  - **Reimbursement of cost of basic training** ( upto a limit of Rs. 7500/- for a maximum of 500 hours/3 months) by the Government of India to Basic Training Providers (BTPs) in respect of apprentices who come directly for apprenticeship training without any formal training.

#### What are the Initiatives to Promote Apprenticeships?

- **Scheme for Higher Education Youth in Apprenticeship and Skills (SHREYAS)**
- **Skills Strengthening for Industrial Value Enhancement Scheme**
- **YuWaah Youth Skilling Initiative**
- **Pradhan Mantri Kaushal Vikas Yojana**

## Integrated Command and Control Center: Smart Cities Mission

### Why in News?

Recently, the **Ministry of Housing and Urban Affairs** has announced that all 100 smart cities will have **Integrated Command and Control Centers (ICCCs)**, under **Smart Cities Mission (SCM)**.

- These ICCCs are spread across various states that have been developing Smart Cities, with states such as Tamil Nadu, Uttar Pradesh, Madhya Pradesh and Gujarat leading in terms of the total number of ICCCs set up.

### What is an Integrated Command and Control Centre?

- **About:**
  - ICCC will act as the **“nerve center” for operations management in the city with day-to-day exception handling** and disaster management.
  - ICCCs provide **smart solutions to the city's municipal corporation** and help manage safety and surveillance of the city.

- The centres comprise video walls for real-time monitoring, emergency response system, operations planning to include critical ones and 24x7 manual maintenance.
- The centres are being established to enable smart living, smart environment, smart economy, smart governance, smart population and smart mobility.
- The centre will also provide valuable insights by processing complex data sets at an aggregated level to derive intelligence for improved planning and policymaking.
- The ICCCs are now also **linked to the CCTNS** (Crime and Criminal Tracking Networks and Systems) network under the Ministry of Home Affairs.

#### ➤ Aim:

- To aggregate information across multiple applications and sensors deployed across the city and provide actionable information with appropriate visualization for decision-makers.

### What is the Smart Cities Mission?

#### ➤ About:

- It is a **Centrally Sponsored Scheme**, launched in **June 2015 to transform 100 cities** to provide the necessary core infrastructure and clean and sustainable environment to enable a decent quality of life to their citizens through the application of **“Smart Solutions”**.
- The mission aims to meet the aspirations of India's population living in cities through various urban development projects.

#### ➤ Features:

- Among its strategic components is ‘area-based development’, which includes city improvement (retrofitting), city renewal (redevelopment) and city extension (greenfield development), plus a pan-city initiative in which ‘smart solutions’ are applied covering larger parts of the city.
- Key focus areas of the scheme include **construction of walkways, pedestrian crossings, cycling tracks, efficient waste-management systems, integrated traffic management and assessment**.
- The scheme also assesses various indices to track urban development such as the **Ease of Living Index, Municipal Performance Index, City GDP framework, Climate Smart Cities assessment framework, etc.**

Note:

### ➤ Status:

- The period of implementation of SCM has been extended to June 2023.
- The SCM has so far covered over 140 public-private partnerships, 340 'smart roads', 78 'vibrant public places', 118 'smart water' projects and over 63 solar projects.

### What is a Smart City?

- There is no standard definition or template of a smart city. In the context of our country, the **six fundamental principles** on which the concept of Smart Cities is based are:



### What are the other Initiatives Related to Urban Development?

- **Atal Mission for Urban Rejuvenation and Urban Transformation (AMRUT).**
- **Pradhan Mantri Awas Yojana-Urban (PMAY-U).**
- **Climate Smart Cities Assessment Framework 2.0.**
- **TULIP-The Urban Learning Internship Program.**

## Rules for Resignation and Reinstatement of an Officer

### Why in News?

Recently, an **Indian Administrative Service (IAS)** officer who resigned from the service in protest against the "unabated" killings in Kashmir in 2019, has been reinstated.

### What are the Rules regarding the Resignation of IAS officers?

- The resignation of an officer of any of the three **All-India Services** is governed by **Rules 5(1) and 5(1)(A)** of the All India Services (Death-cum-Retirement Benefits) Rules, 1958.
  - **All-India Services includes:** IAS, the Indian Police Service (IPS) and Indian Forest Service (IFS).
- There are **similar rules for resignation of officers** belonging to the other central services as well.

### What is the Meaning of Resignation by an Officer?

#### ➤ About:

- A resignation is a **formal intimation in writing** by an officer of his/her intention or a proposal to leave the IAS, either immediately or at a specified date in the future.
  - A resignation **has to be clear and unconditional.**
- Resignation from service is **entirely different from accepting the government's Voluntary Retirement Scheme (VRS).**
  - Those who take VRS are entitled to pension, whereas those who resign are not.

#### ➤ To whom it is Submitted:

- **In case of State Deputation:**
  - **The chief secretary of the state.**
- **If Case of Central Deputation:**
  - The secretary of the concerned Ministry or Department.
    - The Ministry/Department then forwards the officer's resignation to the concerned state cadre, along with its comments or recommendations.

### What is the Process after the Resignation is Submitted?

#### ➤ At State Level:

- The state checks to see if **any dues are outstanding against the officer**, as well as the vigilance status of the officer or whether any cases of corruption etc. are pending against him/her.
  - In case there is such a case, the resignation is normally rejected.

#### ➤ At Central Level:

- The resignation of the officer is **considered by the competent authority**, i.e., the central government, only after the recommendation of the concerned cadre has been received.
- **The competent authorities are:**
  - Minister of State at the Department of Personnel & Training (DoPT) in respect of the IAS
  - The Minister for Home Affairs in respect of the IPS
  - Minister for Environment, Forest and Climate Change in respect of the Forest Service.

Note:



- As Minister in Charge of the DoPT, the **Prime Minister** makes decisions regarding the IAS.

### **What are the Circumstances for Accepting or Rejecting Resignation?**

- **Regarding Accepting:**
  - Where a government servant who is under suspension submits a resignation the competent authority should examine, with reference to the **merit of the disciplinary case pending against the Government servant**, whether it would be in the public interest to accept the resignation.
- **Regarding Rejecting:**
  - Resignation can be rejected if **disciplinary cases are pending against officers**.
    - In such cases, concurrence of the **Central Vigilance Commission (CVC)** is obtained.
  - The government also checks **whether the concerned officer had executed any bond to serve the government** for a specified number of years on account of having received specialised training, a fellowship, or scholarship for studies.

### **What about the Withdrawal of a Resignation after Submission?**

- According to **Rule 5(1A)(i) of the amended DCRB Rules**, the central government may permit an officer to withdraw his/her resignation **"in the public interest"**.
- The **period of absence from duty** between the date on which the resignation became effective and the date on which the member is allowed to resume duty as a result of permission to withdraw the resignation is **not more than ninety days**.
- Request for withdrawal of resignation **shall not be accepted by the Central Government in case:**
  - A member of the Service resigns from his/her service or post with a view to be associated with any political parties or any organisation which takes part in politics,
  - A member is to **take part in any political movement or use his/her influence in connection with**, or take part in, an election to any legislature or local authority.
- The resignation will be **deemed to have been automatically withdrawn**, if an officer who has submitted his/her resignation **sends an intimation in writing withdrawing it before its acceptance** by the competent authority.

## **Amendment in Civil Registration System**

### **Why in News?**

According to the 2020-21 annual report of the **Ministry of Home Affairs (MHA)**, the Central government is planning to revamp the **Civil Registration System (CRS)** to enable the registration of birth and death in real-time with minimum human interface that will be independent of location.

- The **RGI (Registrar General of India)** is empowered under Section 3(3) of the Registration of Births and Deaths (RBD) Act, 1969 to take steps to coordinate and unify the activities of Chief Registrars of Births and Deaths of all States

### **What is the Civil Registration System?**

- Civil Registration System (CRS) in India is **the unified process of continuous, permanent, compulsory and universal recording** of the vital events (births, deaths, stillbirths) and characteristics thereof.
- The data generated through a complete and up-to-date CRS is **essential for socio-economic planning**.

### **What are the Proposed Amendments?**

- **Updating for New Changes due to Birth and Death:**
  - There is a need to update the **NPR (National Population Register)** again, first collated in 2010 and updated in 2015 with **Aadhaar**, mobile and ration card numbers **"to incorporate the changes due to birth, death and migration"**.
- **CRS facing various Challenges:**
  - The CRS system is **facing challenges** in terms of timelines, efficiency and uniformity, leading to delayed and under-coverage of birth and death.
  - To address the challenges faced by the system in providing prompt service delivery to the public, the Government of India has decided **to introduce transformational changes in the Civil Registration System** of the country through an IT [information technology] enabled backbone leading to registration of birth and death on a real-time basis with minimum human interface.

Note:

- **Automation and Time Bound System:**
  - The changes would be **in terms of automating the process delivery points so that the service delivery was time-bound**, uniform and free from discretion.
  - The changes would be sustainable, scalable and independent of the location.
- **Amendments to RBD Act:**
  - It also proposed amendments to the **Registration of Births and Deaths (RBD) Act, 1969** that will enable it to “**maintain the database of registered birth and deaths at the national level.**”
  - According to the proposed amendments, the **database may be used to update the Population Register, Electoral Register, Aadhar, Ration Card, Passport and Driving License databases.**
  - The registration of birth and death is mandatory under the RBD Act and the Chief Registrar is mandated to publish a statistical report on the registered births and deaths during the year.

## Section 144 CrPC

### *Why in News?*

Recently, the administration of Uttarakhand's Haridwar district imposed prohibitory orders under **Section 144 of the Code Of Criminal Procedure (CrPC), 1973** near the town of Roorkee.

### *What is Section 144 CrPC?*

- **About:**
  - This law **empowers the magistrate of any state or union territory in India** to pass an order prohibiting the gathering of four or more people in a specified area.
  - It is **imposed in urgent cases of nuisance or apprehended danger** of some event that has the potential to cause trouble or damage to human life or property.
  - This order can be **passed against a particular individual or general public.**
- **Features of Section 144:**
  - It **places restrictions on handling or transporting any kind of weapon in the given jurisdiction.**
    - The **maximum punishment for such an act is three years.**

- According to the order under this section, **there shall be no movement of public** and all educational institutions shall also remain closed.
- Further, **there will be a complete bar on holding any kind of public meeting or rallies** during the period of operation of this order.
- It is **deemed a punishable offence to obstruct law enforcement agencies** from disbanding an unlawful assembly.
- It also **empowers the authorities to block internet access** in the region.
- The ultimate purpose of Section 144 is to **maintain peace and order in the areas** where trouble could erupt to disrupt the regular life.
- **Duration of Section 144 Order:**
  - **No order** under this section **can remain in force for a period of more than 2 months.**
  - Under the state government's discretion, **it can choose to extend the validity for two more months with the maximum validity extendable to six months.**
  - Once the situation becomes normal, **Section 144 levied can be withdrawn.**

### *What is the Difference between Section 144 and Curfew?*

- **Section 144 prohibits the gathering of four or more people** in the concerned area, while during **curfew people are instructed to stay indoors** for a particular period. The government puts a complete restriction on traffic as well.
- **Markets, schools, colleges and offices remain closed under the curfew** and only essential services are allowed to run on prior notice.

### *Why has this Section been Criticized?*

- **Gives Absolute Power:**
  - It is **too broad and the words of the section are wide enough** to give **absolute power to a magistrate** that may be exercised unjustifiably.
    - The **immediate remedy against such an order is a revision application** to the magistrate himself.
- **Infringement of Rights:**
  - An aggrieved individual can approach the **High Court** by filing a **writ petition** if his **fundamental rights** are at stake.

Note:

- However, fears exist that before the High Court intervenes, **the rights could already have been infringed.**
- **Imposing Prohibition on Large Area not Justifiable:**
  - **Imposing prohibitory orders over a very large area is not justified** because the security situation differs from place to place and cannot be dealt with in the same manner.
  - Prohibitory orders over a very large area were ordered in all of Uttar Pradesh during the protests against the **Citizenship (Amendment) Bill.**

### **What has been the Court's Ruling on Section 144?**

- **Dr Ram Manohar Lohiya case 1967:** The **Supreme Court** held that "no democracy can exist if 'public order' is freely allowed to be disturbed by a section of the citizens".
- **'Madhu Limaye vs Sub-Divisional Magistrate, 1970:**
  - A seven-judge Bench headed by then Chief Justice of India M Hidayatullah said the **power of a magistrate under Section 144 "is not an ordinary power flowing from administration** but a power used in a judicial manner and which can stand further judicial scrutiny.
  - The court, however, **upheld the constitutionality of the law**, ruling that the **restrictions imposed through Section 144 are covered under the "reasonable restrictions"** to the fundamental rights laid down under **Article 19(2) of the Constitution.**
  - The Court held that the fact that the **"law may be abused"** is no reason to strike it down.
- In 2012, the Supreme Court **criticised the government for using Section 144** against a sleeping crowd in Ramlila Maidan.
  - The court held that such a provision **can be used only in grave circumstances** for maintenance of public peace.
  - The efficacy of the provision is to **prevent some harmful occurrence immediately.** Therefore, the emergency must be sudden and the consequences sufficiently grave.
- The Supreme Court also held that **such a section cannot be used to impose restrictions on citizens'**

**fundamental right** to assemble peacefully, cannot be invoked as a 'tool' to 'prevent the legitimate expression of opinion or grievance or exercise of any democratic rights'.

## **Gratuity For Anganwadi Workers**

### **Why in News**

Recently, the **Supreme Court** held that **anganwadi workers** were entitled to gratuity, a basic social security measure.

### **What did the Supreme Court Held?**

- The Court recognized their right to be paid gratuity under the **Payment of Gratuity Act, 1972.**
- The court **underscored that it was time for the Centre and the States to "collectively consider" bettering the service conditions of anganwadi workers and helpers.**
- It also said that the **Integrated Child Development Scheme (ICDS)** deserved far greater attention in public policy.
  - The scheme acts as an **"institutional mechanism for realization of child and women rights"**.
  - Yet these services are regarded as **State Charity rather than as enforceable entitlements.**
- Thus, a relook into their **service conditions was necessary to ensure quality** in the delivery of services and community participation.

### **Who are Anganwadi Workers?**

- Anganwadi is a **centrally sponsored scheme** implemented by the States / UTs which serves as a rural child and maternal care centre in India.
- It was **started by the Government of India in 1975** as part of the **ICDS** program to combat child hunger and malnutrition.
- Anganwadi centers provide a package of six services: **supplementary nutrition, pre-school non-formal education, immunization, health check-up, nutrition and health education, and referral services.**
- The beneficiaries under the **Anganwadi Services Scheme** are identified based on **Aadhaar.**

Note:



### What is the Importance of Anganwadi Workers?

- The court held that anganwadi workers and helpers taking care of the **nutrition needs** of around **158 million children** who were considered the **“future resource of the country”**.
  - They perform a bouquet of vital services at the grassroots level and were often the bridge between the government and beneficiaries under the **National Food Security Act, 2013** and the **ICDS**.
- **Anganwadi workers and helpers served in disadvantaged areas** and catered to the needs of underprivileged groups.
  - They formed the **backbone of the ICDS**.
- **Socialized childcare** contributes to the liberation of women.
  - It lightens the burden of looking after children, provides a potential source of remunerated employment for women and gives them an opportunity to build women’s organizations.

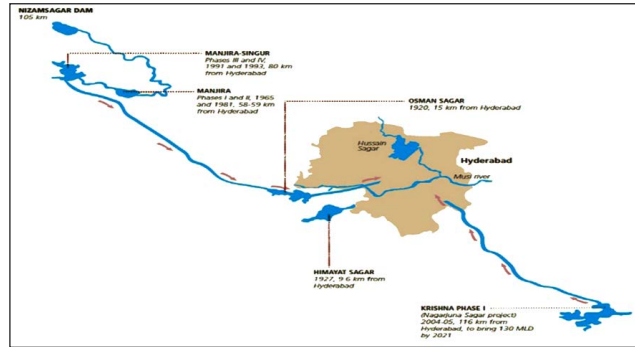
### What is Gratuity?

- Gratuity is a benefit that is payable under the **Payment of Gratuity Act 1972**.
- Gratuity is a **financial component** offered by an employer to an employee in recognition of his/her service rendered to an organization.
  - It is a part of the **salary an employee** receives and can be viewed as a benefit plan designed to aid an individual in his/her retirement.
- Gratuity is paid by an employer when an employee leaves the job after serving the same organization for a **minimum period of 5 years**.
  - One can consider it to be a **financial “Thank you”** to an employee for rendering continuous service to an employer.

## GO 111

### Why in News?

Environmentalists and activists are criticizing the Telangana government for withdrawing an over 25-year-old government order (GO) 111 protecting the historic Osman Sagar and Himayat Sagar reservoirs in Hyderabad, which they say will destroy the fragile surrounding ecosystem.



### What was the government order that protected the two lakes?

- On 8<sup>th</sup> March, 1996, the government of erstwhile (undivided) Andhra Pradesh had issued **GO 111 prohibiting development or construction works in the catchment area of the Osman Sagar and Himayat Sagar lakes** up to a radius of 10 km.
  - The GO prohibited the setting up of industries, residential colonies, hotels, etc. which cause pollution.
  - The aim of the restrictions was to **protect the catchment area, and to keep the reservoirs pollution-free**.
    - The lakes had been supplying water to Hyderabad for nearly 70 years and were the main source of drinking water for the city at the time.

### When and why were these reservoirs constructed?

- The reservoirs were created by **building dams on the Musi** (also known as Moosa or Muchkunda) river, a **major tributary of the Krishna**, to protect Hyderabad from floods.
  - The proposal to build the dams came after a major flood during the reign of the sixth nizam Mahbub Ali Khan (1869-1911) in 1908, in which more than 15,000 people were killed.
  - The lakes came into being during the reign of the last nizam, Osman Ali Khan (1911-48). Osman Sagar was completed in 1921, and Himayat Sagar in 1927. The nizam’s guesthouse at Osman Sagar is now a heritage building.

### Why has the government withdrawn GO 111?

- The city **no longer depends on these two reservoirs** for water supply, and there was no need to continue with the restrictions on development in the catchment radius.

Note:

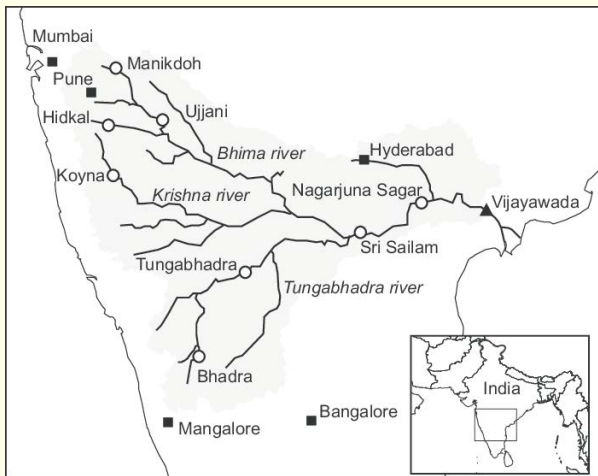
- Hyderabad's drinking water **requirement has increased to more than 600 Million Gallons per Day (MGD), which is being drawn from other sources** including the Krishna river.

### What are environmentalists and activists saying?

- They are still an **important water source for the city**.
- A huge concrete jungle will come up around them. It seems the powerful real estate lobby put a lot of pressure.
- There are already over 10,000 illegal constructions around the two lakes.
- The reservoirs, located in the southwest direction of the city, also **provide quality wind during the southwest monsoon**. Any kind of pollution in those areas would affect the wind quality.
- The **Murugavani National Park** between the twin reservoirs and the entire area acts as a heat absorption unit for the city and if that is allowed to get concretised, the city would become a furnace.

### Krishna River

- **Source:** It originates near Mahabaleshwar (Satara) in Maharashtra. It is the second biggest river in peninsular India after the Godavari River.
- **Drainage:** It runs from four states Maharashtra (303 km), North Karnataka (480 km) and the rest of its 1300 km journey in Telangana and Andhra Pradesh before it empties into the Bay of Bengal.
- **Tributaries:** Tungabhadra, Mallaprabha, Koyna, Bhima, Ghataprabha, Yerla, Warna, Dindi, Musi and Dudhganga.



## Arunachal Pradesh and Assam Border Dispute

### Why in News?

Recently, the **Governments of Arunachal Pradesh and Assam** have decided to form **district-level committees** for resolving boundary disputes.

- The **district committees** will undertake joint surveys in the **disputed areas to find tangible solutions** to the long-pending issue based on **historical perspective, ethnicity, contiguity, peoples' will** and administrative convenience of both states.

### What are the Border Disputes in the Country

<b>Assam-Arunachal Pradesh</b>	<ul style="list-style-type: none"> <li>➤ Assam shares an 804.10 km inter-state boundary with Arunachal Pradesh.</li> <li>➤ The state of Arunachal Pradesh, created in 1987, claims some land that traditionally belonged to its residents has been given to Assam.</li> <li>➤ A tripartite committee had recommended that certain territories be transferred from Assam to Arunachal. The two states have since been battling it out in the court over the issue.</li> </ul>
<b>Assam-Mizoram</b>	<ul style="list-style-type: none"> <li>➤ Mizoram used to be a district of Assam before being <b>carved out as a separate union territory and later, becoming another state</b>.</li> <li>➤ Mizoram shares a border with the districts Cachar, Hailakandi and Karimganj of Assam.</li> <li>➤ Over time, the two <b>states started having different perceptions</b> about where the demarcation should be.</li> <li>➤ While Mizoram wants it to be along an inner line notified in <b>1875 to protect tribals from outside influence</b>, which Mizos feel is part of their historical homeland, Assam wants it to be demarcated according to district boundaries drawn up much later.</li> </ul>

Note:

<b>Assam-Nagaland</b>	<ul style="list-style-type: none"> <li>➤ The border dispute between the two states has been going on since the <b>formation of Nagaland in 1963</b>.</li> <li>➤ The two states lay claim to Merapani, a small village next to the plains of Assam's Golaghat district.</li> <li>➤ There have been reports of violent clashes in the region since the 1960s.</li> </ul>
<b>Assam-Meghalaya</b>	<ul style="list-style-type: none"> <li>➤ Meghalaya has identified close to a dozen areas on which it has a dispute with Assam about the state's borders.</li> </ul>
<b>Haryana-Himachal Pradesh</b>	<ul style="list-style-type: none"> <li>➤ The two northern states have a border dispute over the <b>Parwanoo region, which lies next to the Panchkula district of Haryana</b>.</li> <li>➤ Haryana has laid a claim to a large part of the land in the area and has accused the hill state of encroaching on some of its area.</li> </ul>
<b>Ladakh-Himachal Pradesh</b>	<ul style="list-style-type: none"> <li>➤ The union territory of <b>Ladakh and Himachal both claim Sarchu</b>, a major halt point for those travelling through Leh-Manali highway.</li> <li>➤ The region is located between <b>Himachal Pradesh's Lahaul and Spiti district and Ladakh's Leh district</b>.</li> </ul>
<b>Maharashtra-Karnataka</b>	<ul style="list-style-type: none"> <li>➤ Perhaps the biggest border dispute in the country is <b>between Maharashtra and Karnataka over the Belgaum district</b>.</li> <li>➤ Belgaum has a sizable population of <b>both Marathi and Kannada speaking people</b> and the two states have wrestled over the region in the past.</li> <li>➤ The area used to be part of the Bombay presidency from the time of the Britishers but was included in Karnataka after the states reorganisation exercise in 1956.</li> </ul>

### **Why do inter-state border disputes remain unresolved?**

- **Linguistic Idea of Reorganization:** Although the **States Reorganization Commission, 1956** was based on administrative convenience, states reorganized largely resembled the idea of one language one state.
- **Geographical Complexity:** The other complexity has been terrain — **rivers, hills and forests straddle two states** in many places and borders cannot be physically marked.
  - Colonial maps had left out large tracts of the northeast outside Assam as “thick forests” or marked them “unexplored”.
- **Indigenous Communities:** Indigenous communities were, for the most part, left alone. Boundaries would be drawn for administrative convenience when the “need” arose.
  - The **1956 demarcation** did not resolve the discrepancies.
  - When new states were carved out of **Assam (Nagaland in 1963, Mizoram, Meghalaya, Tripura and Manipur in 1972, and Arunachal Pradesh in 1987)**, it was still not addressed.

## **Front of Package Labelling (FOPL) System**

### **Why in News?**

Recently, **40 global health experts claimed** that the “**health star rating**” system that the **Food Safety Standards Authority of India (FSSAI)** plans to adopt to help consumers reduce their intake of unhealthy foods is “**not evidence-based**” and **has failed to alter buyer behavior**.

- FSSAI is an autonomous statutory body established under the Food Safety and Standards Act, 2006 (FSS Act).

### **What is the Background?**

- In India, **Front of Package Labelling (FOPL)** was **first recommended in 2014** by an expert committee constituted by FSSAI in 2013.
- In 2019, the FSSAI issued draft notification **Food Safety Standards (Labelling and Display) Regulations**.
  - The draft mandates colour-coded labels on food items.

Note:



- In 2019 December, the FSSAI delinked FOPL from general labelling regulations.
- On 15th February 2022 the FSSAI decided to adopt the “health-star rating system” in its draft regulations for Front of Package Labelling (FOPL).

### What is Health Star Rating (HSR) System?

- Health-star rating system gives a product 1/2 a star to 5 stars.
- The HSR format ranks a packaged food item based on salt, sugar, and fat content and the rating will be printed on the front of the package.
- The rating will be the **first such in India**, a country burdened with lifestyle diseases, and is aimed at guiding consumers to opt for healthy food.

### What is a Front-of-Pack (FoP) Labelling System?

- FoP labelling system has long been listed as one of the global best practices to nudge consumers into healthy food choices.
  - It works just the way cigarette packets are labelled with images to discourage consumption.
- As India is experiencing a dietary shift, with people increasingly consuming more processed and ultra-processed foods and a burgeoning market, these factors prompt the need for FoP labelling for India.
  - It will play a handy role in fighting increasing obesity and many non-communicable diseases.
- The World Health Organization (WHO) defines FoP labels as nutrition labelling systems that are presented on the front of food packages in the principal field of vision; and present simple, often graphic information on the nutrient content or nutritional quality of products.
  - To complement the more detailed nutrient declarations provided on the back of food packages.
- The Codex Alimentarius Commission mentions that “FoP labelling is designed to assist in interpreting nutrient declarations”.

### What is the Need for Health Rating System for Food?

- **Save Healthcare Costs:**
  - Most of the countries have started to reap the benefits from positive consumer behaviour since the implementation of the FoPL.

- It has helped those governments to **save money from direct and indirect healthcare costs.**
  - **Chile and Brazil are among the countries that have adopted** ‘high-in’ warning labels upfront on their food packs, which has succeeded in reducing consumption of unhealthy ultra-processed foods and beverages.

### To Promote a Healthier Lifestyle:

- In India, front-of-package warning labelling is a **major component of a comprehensive strategy** to promote a healthier lifestyle, as they enable consumers to identify products high in sugar, sodium, saturated fats, trans fats, and total fats, which are critical nutrients associated with **Non-Communicable Diseases (NCDs)**.

### What are the Related Concerns?

- **Masking of Positive Nutrients:** Most consumer organisations objected as ‘positive nutrients’ will mask the negative impact of high fat, salt and sugar in the food and the industry will use it to mislead the consumer.
- **Restricted Target Audience:** The labelling format appears to be aimed only at individuals who are literate and nutritionally aware.
  - Further, limited general and nutrition literacy mean understanding of the text-intensive nutrient information is difficult.
- **Can Confuse Consumers:** HSR system can lead to a “health halo”, which can confuse consumers as stars can be interpreted as an endorsement of a product.

## Indigenisation Efforts of Navy

### Why in News?

The Navy is ramping up indigenisation efforts especially in weapons and aviation related items in line with the Government’s push to cut down on defence imports and boost domestic manufacturing.

- Indigenisation efforts has gained further urgency due to **ongoing Russian war in Ukraine** and the large scale dependency of Indian military on Russian arms and equipment.
- Earlier, the Ministry of Defence (MoD) has released the **third positive indigenisation list** of 101 items, comprising major equipment/platforms.

Note:



## What are the Efforts taken by the Navy for Indigenisation?

### ➤ Indian Navy Indigenisation Plan 2015-2030:

- In 2014 Navy promulgated the **Indian Navy Indigenisation Plan (INIP) 2015-2030** to enable indigenous development of equipment and system.
- Till date, **the Navy has indigenised around 3400 items under INIP**, including over 2000 machinery and electrical spares, over 1000 aviation spares and over 250 weapon spares.

### ➤ Naval Aviation Indigenisation Roadmap 2019-22:

- The existing **Naval Aviation Indigenisation Roadmap (NAIR) 2019-22** is also under revision.
- **All fast moving aircraft mandatory** spares and high cost indigenous repairs are being included in the revised NAIR 2022-27.
- There is **particular focus on the fight component** (which is weapons) as there is still a long way to go compared to the float and move components.
- **Float consists of the ship**, move comprises the propulsion and fight consist of weapons and sensors.

### ➤ Indigenisation Committees:

- **Four in-house indigenisation committees** have been formed to handle indigenisation of spares with respect to naval aircraft.

### ➤ Naval Liaison Cells:

- In addition, the **Naval Liaison Cells (NLCs)** located at various places have been nominated as **'indigenisation cells'**.
  - There are **currently 41 ships and submarines under construction**, 39 are being built in India shipyards while in principle approval from MoD exists for 47 ships to be built in India.
  - Since 2014, **78 % of Acceptance of Necessity (AoN)**, by value, and 68 % of contracts, by value, have been awarded to Indian vendors.
    - **AoN clears the way** for the tendering process to start.

### ➤ Collaboration with DRDO:

- The Navy is working with the **Defence Research and Development Organisation (DRDO)** and the industry to cut down developmental timelines.
  - **Some of the focus areas include** indigenous design and development and production of **Anti-Submarine Weapons and sensors, Satcom**

and electronic warfare equipment, Anti-Ship Missiles and **Medium Range Surface to Air Missile**, combat management system, software defined radios, network encryption devices, Link II communication system, main batteries for submarines, distress sonar system, components of missiles and **torpedoes** etc.

### ➤ Naval Innovation and Indigenisation Organisation (NIIO):

- Launched in August 2020, it **provides a flexible and accessible interface for academia and industry** with Indian Navy capability development apparatus.
- In the last two years, **36 Intellectual Property Rights (IPR) applications** have been filed by Navy personnel.
  - Over two IPR applications are filed every month since the creation of NIIO and Transfer of Technology to 12 **Micro, Small and Medium-sized Enterprises (MSMEs)** has already been undertaken.

### ➤ User Inputs under Naval Project Management Teams:

- The Navy has **now forward deployed** user inputs through **Naval Project Management Teams** at cluster Headquarters of DRDO and two such clusters are already operational.
- These have **interfaced with the DRDO labs and their Development cum Production Partners (DcPP)** to provide user inputs at every stage to 15 futuristic Technology and 100 plus DRDO projects underway for development of Indian Navy's combat capability.

### ➤ Make I & Make II:

- The Navy has more than **20 Make I & Make II cases being progressed**, under various domestic development routes of the procurement procedure.
  - The **'Make' category of capital acquisition** is the cornerstone of the **Make in India initiative** that seeks to build indigenous capabilities through the involvement of both public and private sector.
  - **'Make-I' refers to** government-funded projects while **'Make-II'** covers industry-funded programmes.
    - **Make-I is involved in development of big-ticket platforms** such as light tanks and communication equipment with Indian security protocols.

Note:





- **Make-II category involves prototype development of military hardware** or its upgrade for import substitution for which no government funding is provided.

### What is the Indigenisation of Defence?

- **About:**
  - Indigenisation is the **capability of developing and producing any defence equipment within the country** for the dual purpose of achieving self reliance and reducing the burden of imports.
  - Self-reliance in defence manufacturing is one of the key objectives of Department of Defence Production.
    - **Defence Research Development Organisation (DRDO), Defence Public Sector Undertakings (DPSUs)** and private organisations are playing a critical role in indigenisation of defence industries.
  - India is among the **world's largest arms importers**, and the armed forces are expected to spend about USD 130 billion on defence purchases over the next five years.
- **Related Initiatives:**
  - Increased the **Foreign Direct Investment (FDI)** limit from 49% to 74%
  - **Corporatization of the Ordnance Factory Boards**
  - **Defence India Startup Challenge**
  - **SRIJAN Portal:** To provide access to the vendors to take up items for indigenization.

## Olga Tellis Case 1985

### Why in News

Recently, the Constitution Bench judgment of the **Supreme Court** in *Olga Tellis vs Bombay Municipal Corporation, in 1985 case*, held that pavement dwellers are different from trespassers may become a game-changer in the *Jahangirpuri (Delhi) case*.

### What were the Questions Discussed before the Supreme Court?

- **About the Issue:** The case started in **1981 when the State of Maharashtra and the Bombay Municipal Corporation** decided that **pavement and slum dwellers in Bombay city should be evicted** and “**deported to their respective places of origin** or places outside the city of Bombay.”

- **Question on Right to Life of Pavement Dwellers:** One of the main questions was whether eviction of a pavement dweller would amount to depriving him/her of their livelihood guaranteed under **Article 21 of the Constitution**.
  - Article 21 mandates that “**no person shall be deprived of his life or personal liberty except according to procedure established by law**”.
  - Approximately, there are **20 million pavement dwellers** in India.
- **Question of Prior Approval for Anti-Encroachment:** The Constitution Bench was also asked to determine if provisions in the **Bombay Municipal Corporation Act, 1888**, allowing the removal of encroachments without prior notice, were arbitrary and unreasonable.
- **Question on Trespassing:** The Supreme Court also decided to examine the question of whether it was **constitutionally impermissible** to characterize pavement dwellers as trespassers.

### What did Supreme Court Ruled in Olga Tellis vs Bombay Municipal Corporation, 1985 Case?

- The *Olga Tellis vs Bombay Municipal Corporation judgment in 1985* ruled that **eviction of pavement dwellers using unreasonable force, without giving them a chance to explain is unconstitutional**.
  - It is a **violation of their right to livelihood**.
- The court had emphatically **objected to authorities treating pavement dwellers as mere trespassers**.
  - “They (pavement dwellers) manage to find a habitat in places which are mostly filthy or marshy, out of sheer helplessness.”

### What was the State Government's Defense?

- **Question of Estoppel:** The State government and the corporation countered that pavement dwellers should be estopped.
  - **Estoppel** is a judicial device **whereby a court may prevent or “estop” a person from making assertions**.
  - Estoppel may **prevent someone from bringing a particular claim** contending that the shacks constructed by them on the pavements cannot be demolished because of their right to livelihood.
- **Public's Right of Way:** They cannot claim any **fundamental right** to encroach and put-up huts on pavements or public roads over which the **public has a ‘right of way.’**

Note:

### What did the Supreme Court rule Presently?

- **On Estoppel:** The court rejected the government's argument of Estoppel, saying **"there can be no Estoppel against the Constitution."**
  - The court held that the right to life of pavement dwellers was at stake here.
- **On Right to Livelihood:** The **right to livelihood was an "integral component" of the right to life.**
  - If the right to livelihood is not treated as a part of the constitutional right to live, the **easiest way of depriving a person of his right to life would be to deprive him of his means of livelihood** to the point of abrogation.
- **On Prior Notice:** On the second question whether provisions in law allowing statutory authorities to remove encroachments **without prior notice was arbitrary.**
  - Such powers are designed to operate as an **"exception" and not the "general rule."**
  - The procedure of eviction should lean in **Favour of procedural safeguards which follow the natural principles of justice** like giving the other side an opportunity to be heard.
  - The right to be heard gives affected persons an opportunity to participate in the **decision-making process** and also provides them with a **chance to express themselves with dignity.**
- **On Trespassing:** Finally, the court emphatically **objected to authorities treating pavement dwellers as mere trespassers.**
  - The apex court ruled that pavement dwellers live on **"filthy footpaths out of sheer helplessness"** and not with the object of **offending, insulting, intimidating or annoying anyone.**
  - They live and earn on footpaths because they have **"small jobs to nurse in the city and there is nowhere else to live."**

## European Union Digital Services Act

### Why in the News?

Recently, the **European Parliament and European Union (EU) Member States** announced that they had reached a political agreement on the **Digital Services Act (DSA), 2022.**

- It is a landmark legislation to **force big Internet companies** to act against disinformation and illegal and harmful content, and to **"provide better protection for Internet users and their fundamental rights".**
- The proposed Act seeks to end the **era of self-regulation by tech companies** and give 'practical effect to the principle that **what is illegal offline, should be illegal online'**.
- In India, a bill (**Data Protection Bill 2019**) on similar issue is pending in **Parliament.**

### What is the DSA, and to whom will it Apply?

- **About:** As defined by the EU Commission, the DSA is **"a set of common rules on intermediaries' obligations and accountability across the single market"**, and ensures **higher protection to all EU users**, irrespective of their country.
- **Objective:** The DSA will tightly regulate the way intermediaries, especially large platforms such as **Google, Facebook, and YouTube, function when it comes to moderating user content.**
- **Self Regulation Era is Over:** Instead of letting platforms decide **how to deal with abusive or illegal content**, the DSA will lay down specific rules and obligations for these companies to follow.
- **Applicability:** According to the EU, DSA will apply to a **"large category of online services, from simple websites to Internet infrastructure services and online platforms."**
  - The obligations for each of these **will differ according to their size and role.**
  - The legislation brings in its ambit platforms that provide Internet access, domain name registrars, hosting services such as cloud computing and web-hosting services.
  - However, more importantly, **Very Large Online Platforms (VLOPs) and Very Large Online Search Engines (VLOSEs)** will face "more stringent requirements."
    - For example, any service with more than **45 million monthly active users in the EU will fall into this category.**
    - Those with under 45 million monthly active users in the EU will be exempt from certain new obligations.

Note:



- **Implementation:** Once the DSA becomes law, each EU Member State will have the primary role in enforcing these, along with a new “**European Board for Digital Services.**”
  - The EU Commission will carry out “**enhanced supervision and enforcement**” for the VLOPs and VLOSEs.
  - Penalties for breaching these rules could be huge — as **high as 6% of the company’s global annual turnover.**

### **What do the new Rules State?**

- **New Procedures for Faster Removal:** Online platforms and intermediaries such as Facebook, Google, YouTube, etc. will have to add “**new procedures for faster removal**” of content deemed illegal or harmful.
- **Impose a Duty of Care:** Marketplaces such as Amazon will have to “**impose a duty of care**” on sellers who are using their platform to sell products online.
  - They will have to **collect and display information** on the products and services sold in order to ensure that consumers are properly informed.
- **Auditing Mechanism:** The DSA adds “an **obligation for very large digital platforms and services to**

**analyze systemic risks they create and to carry out risk reduction analysis”.**

- This audit for platforms like Google and Facebook will need to take place every year.
- **Independent Researchers:** The Act proposes allowing **independent vetted researchers** to have access to public data from these platforms to carry out studies to understand these risks better.
- **Ban Misleading Interfaces:** The DSA proposes to ban “**Dark Patterns**” or “**misleading interfaces**” that are designed to trick users into doing something that they would not agree to otherwise.
- **Crisis Mechanism:** The DSA incorporates a new crisis mechanism clause — it refers to the **Russia-Ukraine conflict** — which will be “activated by the Commission on the recommendation of the board of **national Digital Services Coordinators**”.
  - However, these special measures will only be in place for three months.
- **Transparency Measures:** It also proposes “transparency measures for online platforms on a variety of issues, including on the algorithms used for recommending content or products to users”.

Note:

# Economic Scenario

## Highlights

- RBI's Report on Currency and Finance
- Household Consumer Expenditure Survey
- Fincluvation
- Export Promotion Capital Goods Scheme
- Oil bonds
- Issue of Petrol and Diesel Pricing in India
- World Economic Outlook: IMF
- Vertical Farming
- Formation & Promotion of 10,000 FPOs
- Special Purpose Acquisition Companies (SPACs)
- Seaweed Farming
- Parboiled Rice
- Remission of Duties and Taxes on Export Products Scheme
- South Asia Economic Focus: World Bank

## RBI's Report on Currency and Finance

### Why in News?

According to recent **Reserve Bank of India's (RBI) Report on Currency and Finance (RCF)**, the Indian economy may take more than a decade to overcome the losses caused by the outbreak of **Covid-19 pandemic**.

- The **theme of the report is "Revive and Reconstruct"** in the context of nurturing a durable **recovery post-Covid-19** and rising trend growth in the medium-term.

### What are the Concerns Highlighted by the Report?

- **Covid-19, Worst Health Crises:** The Covid-19 pandemic will go down in history as one of the worst health crises the world has ever faced.
- **Growth Data:** The pre-Covid trend growth rate works out to **6.6%** and excluding the slowdown years it works out to **7.1%**.
  - Taking actual growth rate of **(-) 6.6% for 2020-21, 8.9% for 2021-22** and assuming growth rate of **7.2% for 2022-23 and 7.5%** beyond that, India is expected to overcome Covid-19 losses in **2034-35**.
- **Economic Challenges of Pandemic:** Its economic impact may linger for many more years and confront Indian Economy with the challenges of rebuilding livelihoods, safeguarding businesses and reviving the economy.

- India suffered among the biggest pandemic induced losses in the world in terms of output, lives and livelihoods, which may take years to recover.

- **Russia-Ukraine Conflict:** The **Russia-Ukraine conflict** has also dampened the momentum of recovery, with its impact transmitting through record high commodity prices, weaker global growth outlook and tighter global financial conditions.
- **Deglobalization Threat:** Concerns surrounding **deglobalisation** impacting future trade, capital flows and supply chains have amplified uncertainties for the business environment.

### What are the Reforms Highlighted in the Report?

- **Seven Wheels of Economic Progress:** The blueprint of reforms proposed in the Report revolves around seven wheels of economic progress:
  - Aggregate demand.
  - Aggregate supply.
  - Institutions, intermediaries and markets.
  - Macroeconomic stability and policy coordination.
  - Productivity and technological progress.
  - Structural change.
  - Sustainability.
  - A feasible range for medium-term steady state **Gross Domestic Product (GDP) growth** in India works out to **6.5 – 8.5%**, consistent with the blueprint of reforms.
- **Rebalancing of Monetary and Fiscal Policies:** Timely rebalancing of **monetary** and **fiscal policies** will likely be the first step in this journey.

Note:



- **Price Stability:** Price stability is a necessary precondition for strong and sustainable growth.
- **Reducing Government Debt:** Reducing general government debt to below **66% of GDP over the next five years** is important to secure India's medium-term growth prospects.
- **Structural Reforms:** Suggested structural reforms include:
  - Enhancing access to litigation free low-cost land.
  - Raising the quality of labor through public expenditure on education and health and the Skill India Mission.
  - Scaling up R&D activities with an emphasis on innovation and technology.
  - Creating an enabling environment for **start-ups and unicorns**.
  - Rationalization of subsidies that promote inefficiencies.
  - Encouraging urban agglomerations by improving the housing and physical infrastructure.
- **Promoting Industrial revolution 4.0: Industrial revolution 4.0** and committed transition to a **net-zero emission target** warrant a policy ecosystem that facilitates provision of adequate access to risk capital and a globally competitive environment for doing business.
- **Better FTA Negotiations:** India's ongoing and future **free trade agreement (FTA) negotiations** may focus on the transfer of technology and better trade terms for high quality imports from partner countries to improve the outlook for exports and domestic manufacturing.

## Household Consumer Expenditure Survey

### *Why in News?*

The **All-India Household Consumer Expenditure Survey** is set to resume this year (2022) after a prolonged break.

- The results will include **separate data sets for rural and urban parts**, and **splice spending patterns** for each State and Union Territory, as well as different socio-economic groups.

### *Why has the Government Stopped Conducting the Survey?*

- The government had **discontinued the findings of the last Survey**, conducted in 2017–18, citing “**data quality**” issues.
  - In 2019, the government had dismissed reports that the **2017–18 Survey findings** were being withheld due to adverse outcomes reflecting a decline in consumer spending.
- It was also noted that **there was a significant increase in the divergence in not only the levels in the consumption pattern** but also the direction of the change when compared to the other administrative data sources like the actual production of goods and services.
- There were also concerns about the “**ability/sensitivity of the survey instrument** to capture consumption of social services by households especially on health and education.

### *What is a Household Consumer Spending Survey?*

- **Time Interval:**
  - Traditionally, a **quinquennial (recurring every five years) survey** conducted by the **National Sample Survey Office - NSSO** (comes under the **National Statistical Office**), Ministry of Statistics and Programme Implementation.
- **Scope:**
  - **Collects information on the consumption spending patterns** of households across the country, both urban and rural.
- **Information Generated:**
  - **Reveals the average expenditure** on goods (food and non-food) and services.
  - **Helps generate estimates of household Monthly Per Capita Consumer Expenditure (MPCE)** as well as the distribution of households and persons over the MPCE classes.
- **Significance in General:**
  - **Helps in calculating the demand dynamics** of the economy.
  - **Helps in understanding the shifting priorities** in terms of baskets of goods and services, thus providing pointers to the producers of goods and providers of services.

Note:



- To assess living standards and growth trends across multiple strata.
- **Significance for Policymakers:**
  - The **CES is an analytical as well as a forecasting tool** which helps the Government in planning required interventions and policies.
  - To spot and address possible structural anomalies that may cause demand to shift in a particular manner in a specific socio-economic or regional division of the population.
  - To rebase the **Gross Domestic Product (GDP)** and other macro-economic indicators.

## Fincluvation

### **Why in News?**

Recently, the **India Post Payments Bank (IPPB)** launched the **Fincluvation Platform** to promote innovative solutions in collaboration with **fintech startups** to accelerate **financial inclusion** among the underserved and unserved population.

- The term **Fintech (Financial Technology)** refers to software and other modern technologies used by businesses that provide automated and improved financial services.

### **What is Fincluvation?**

- Fincluvation will be a **permanent platform of IPPB to co-create inclusive financial solutions with participating start-ups.**
  - IPPB and Department of Post (DoP) collectively serve close to 430 million customers through post offices and at their doorsteps via more than 4,00,000 Post Office employees and Gramin Dak Sevaks - making it one of the **largest and most trusted postal networks in the world.**
- It is an **Industry first initiative** to create a powerful platform to **mobilize the start-up community towards building meaningful financial products** aimed at financial inclusion.
- **Startups are encouraged to develop solutions aligned with any of the following tracks:**
  - **Creditization-** Develop Innovative & Inclusive credit products aligned with the use cases of target customers and take them to their doorsteps through Postal network.

- **Digitization** - Bring convenience through convergence of traditional services with Digital Payment Technologies such as making the traditional Money Order service as Interoperable Banking service.
- **Market Led Solution-** Any Market-led solutions that can help solve any other problem relevant to IPPB and/or DoP in serving the target customers.
- Fincluvation mentors will work closely with the startups to tweak products to the customer needs and align the go-to-market strategies with operating models of IPPB and DoP.

### **What is the Need of Fincluvation in India?**

- **To Grab New Opportunities:** Intersection of technology with financial services coupled with traditional distribution networks is opening up a **new set of business opportunities.**
- **To Increase User Experience:** Conventional model of technology procurement led product creation by banks often **lacks value in user experience** leaving a huge gap between customer expectations and service delivery.
- **Failure of Traditional Technologies:** Traditional technology firms **fail to meet the service expectations of customers with a deficit of ownership** in product creation. Indian citizens have varied and complex needs that need careful thought, empathetic product design, and rapid prototyping among users.

### **What is India Post Payments Bank?**

- IPPB was **launched by the Prime Minister in 2018** with 100% equity owned by the Government of India.
- It is a payments bank of the Indian postal department which works through a network of post offices and nearly 4 lakh postmen. It is governed by the **Reserve Bank of India (RBI).**
- The bank has been set up with the vision to build the **most accessible, affordable and trusted bank for the common man in India.** The fundamental mandate of IPPB is to remove barriers for the unbanked and under-banked and reach the last mile.
- IPPB is committed to providing a fillip to a **less cash economy and contribute to the vision of Digital India.**

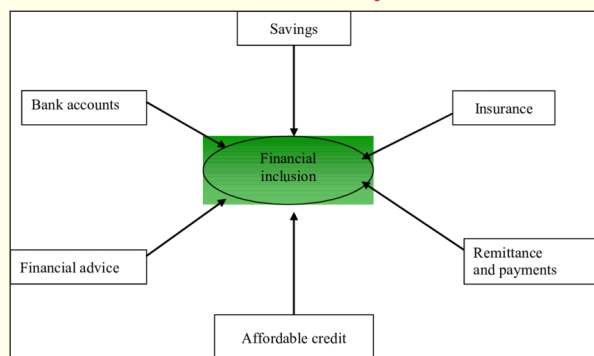
Note:

### What is Financial Inclusion?

- Financial inclusion is the **process of ensuring access to appropriate financial products** and services needed by individuals and businesses including vulnerable groups such as **weaker sections and low-income groups** at an affordable cost in a fair and transparent manner by mainstream institutional players.

### What are Some other Initiatives for Financial Inclusion?

- **Pradhan Mantri Mudra Yojana,**
- **Stand-Up India Scheme**
- **Pradhan Mantri Jeevan Jyoti Bima Yojana**
- **Pradhan Mantri Suraksha Bima Yojana**
- **Atal Pension Yojana.**
- **Pradhan Mantri Jan Dhan Yojana**



## Export Promotion Capital Goods Scheme

### Why in News?

Recently, the **Ministry of Commerce and Industry** has relaxed various procedures under the **Export Promotion Capital Goods (EPCG) scheme** in order to **reduce compliance requirements** and facilitate **ease of doing business**.

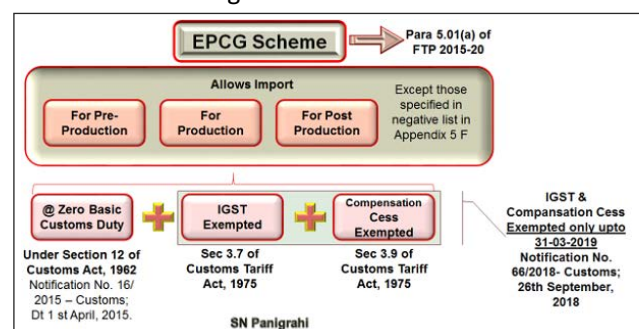
### What are Capital Goods?

- Capital goods are **physical assets that a company uses in the production process to manufacture products and services that consumers will later use.**
- Capital goods include **buildings, machinery, equipment, vehicles, and tools.**
- Capital goods are not finished goods, instead, they are used to make finished goods.

- The Capital Goods sector has a **multiplier effect and has bearing on the growth of the user industries as it provides critical input**, i.e., machinery and equipment to the remaining sectors covered under the manufacturing activity.

### What is the EPCG Scheme?

- **About:**
  - EPCG Scheme was **launched in the 1990s to facilitate import of capital goods** with the aim to enhance the production quality of goods and services, thereby, increasing India's international manufacturing competitiveness.
  - Under the scheme, **manufacturers can import capital goods for pre-production, production and post-production goods without attracting any customs duty** on them.
    - **Second-hand capital goods may also be imported** without any restriction on age under the EPCG Scheme.
  - The exemption from paying the obligation of **customs duty** on the import of capital goods is **subject to fulfilment of an export value equivalent to 6 times of duty saved on the importation of such capital goods within 6 years** from the date of issuance of the authorization.
    - This would mean that the importer (being export-oriented) needs to attract earnings in foreign currency which equals 600% of the customs duty saved in domestic currency, within 6 years of availing benefits of the Scheme.



- **Coverage:**
  - Manufacturer exporters with or without supporting manufacturer(s),
  - Merchant exporters tied to supporting manufacturer(s) and

Note:

- Service Providers including Common Service Providers (CSP).
- **New Norms:**
  - Imports of capital goods are allowed **duty free, subject to an export obligation.**
  - The authorisation holder (or exporter) under the scheme has to **export finished goods worth six times of the actual duty saved in value terms in six years.**
  - **Requests for export obligation** extension should be made within six months of expiry instead of the earlier prescribed period of 90 days. However, applications made after six months and up to six years are subject to a late fee of Rs 10,000 per authorisation.
  - According to the changes, **requests for block-wise export obligation extension should be made within six months of expiry.** However, applications made after six months and up to six years will entail a late fee of Rs 10,000 per authorisation.
  - The facility to pay customs duty through scrips **MEIS (Merchandise Exports from India Scheme) / Remission of Duties or Taxes On Export Product (RoDTEP)/RoSCTL (Rebate of State and Central Taxes and Levies)** for default under EPCG has been withdrawn.
- **Benefit from EPCG Scheme:**
  - EPCG is intended for **promoting exports and the Indian Government with the help of this scheme offers incentives and financial support to the exporters.**
  - Heavy exporters **could benefit from this provision.** However, it is not advisable to go ahead with this scheme for those who don't expect to manufacture in quantity or expect to sell the produce entirely within the country, as it could become almost impossible to fulfil the obligations set under this scheme.

#### What are other Schemes to Promote Export?

- **Merchandise Exports from India Scheme:**
  - MEIS was introduced in the **Foreign Trade Policy (FTP) 2015-20**, under MEIS, the government provides duty benefits depending on product and country.

#### ➤ **Service Exports from India Scheme:**

- It was introduced in April 2015 for 5 Years under the Foreign Trade Policy of India 2015-2020.
  - Earlier, this Scheme was named as Served from India Scheme (SFIS Scheme) for Financial Year 2009-2014.

#### ➤ **Remission of Duties or Taxes on Export Product:**

- It is a fully automated route for Input Tax Credit (ITC) in the **GST (Goods and Service Tax)** to help increase exports in India.

#### ➤ **Rebate of State and Central Taxes and Levies:**

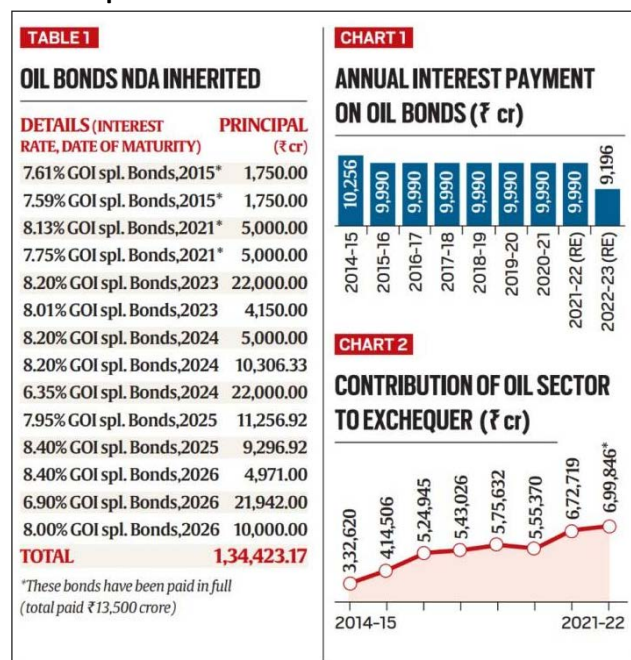
- Announced in March, 2019, RoSCTL was offered for embedded state and central duties and taxes that are not refunded through GST.

## Oil bonds

### Why in News?

Recently, the Finance Minister has countered criticism of high oil prices by claiming that the government **cannot bring down taxes - and thus oil prices** because it has to pay for **oil bonds** issued by the Previous Government.

- However, critics claim that what the government has had to pay for oil bonds, the payout is **not big compared to revenues earned in this sector.**



Note:

### What Percentage of Fuel Price is Tax?

- There are **two components to the domestic retail price** — the price of crude oil itself, and the taxes levied on this basic price.
- Together they make up the retail price. The **taxes vary from one product to another**. For instance, as of now, **taxes account for 50% of the total retail price for a litre of petrol, and 44% for a litre of diesel.**

### What are Oil Bonds?

- When fuel prices were too high for domestic consumers, **governments in the past often asked Oil Marketing Companies (OMCs) to avoid charging consumers the full price.**
  - But if oil companies don't get paid, they would become unprofitable. To address this, the **government said it would pay the difference.**
  - If the government paid that amount in cash, it would have been pointless, because then the **government would have had to tax the same people to collect the money to pay the OMCs.** This is where oil bonds come in.
- **An oil bond is an IOU, or a promissory note** issued by the government to the OMCs, in lieu of cash that the **government would have given** them so that these companies don't charge the public the full price of fuel.
  - An **IOU**, a phonetic acronym of the words "I owe you," is a document that acknowledges the existence of a debt.
  - A **promissory note** is a debt instrument that contains a written promise by one party (the note's issuer or maker) to pay another party (the note's payee) a definite sum of money, either on-demand or at a specified future date.
- An oil bond says the government will pay the OMC the sum of, say, Rs 1,000 crore in 10 years. And to compensate the OMC for not having this money straight away, the government will pay it, say, **8% (or Rs 80 crore) each year until the bond matures.**
- Oil bonds do not qualify as **Statutory Liquidity Ratio (SLR)** securities, making them less liquid when compared to other government securities.
  - **SLR:** The share of Net Demand and Time Liabilities that a bank is required to maintain safe and liquid assets, such as government securities, cash, and gold.

### What is the Significance?

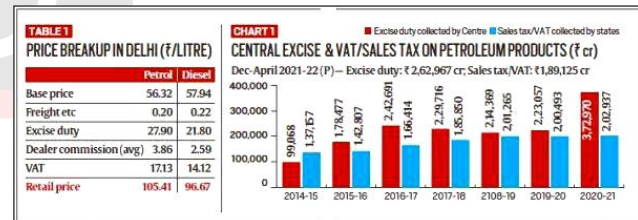
- By issuing such oil bonds, the **government of the day is able to protect/ subsidise the consumers** without either ruining the profitability of the OMC or running a huge budget deficit itself.

## Issue of Petrol and Diesel Pricing in India

### Why in News?

Recently, the Prime Minister urged several **Opposition-ruled states to cut taxes on petrol and diesel** in order to **reduce the economic burden on citizens** and work as a team in this time of global crisis following the spirit of **cooperative federalism**.

- Maharashtra, West Bengal, Telangana, Andhra Pradesh, Tamil Nadu, Kerala, and Jharkhand have not reduced **Value-added tax (VAT)** on Petrol and Diesel.
- VAT is consumption tax which is added to a product at every point of the supply chain where value is added to it.



### What are the Components of Retail Prices of Fuel?

- **Retail prices of petrol and diesel are made up of mainly 3 components:**
  - Base price (reflecting cost of international oil)
  - Central Excise Duty
  - State Tax (VAT)
- **Central and state taxes form a major chunk** of the price of petrol and diesel in India.
- **Excise duty is constant for all over India**, state taxes (sales tax and value added tax) vary depending upon the rates levied by different state governments.
  - These taxes **make fuel even more costly for consumers.**
- In November 2021, the **Centre had reduced excise duties** on both petrol and diesel to bring some relief to end-use customers.

Note:



- Exercise duty was reduced by Rs 5 per liter on petrol and Rs 10 per liter on diesel.
- Fuel prices remained constant after the Centre's exercise duty reduction.
- However, a recent surge in global crude oil prices owing to the war between Russia and Ukraine led to corresponding hikes in the price of petrol and diesel in India too.
- The price reduction varied across states due to differences in VAT rates.
  - States with higher VAT witnessed slightly higher reduction in pump prices.
- Retail rates of petrol and diesel are governed by international prices as India depends on imports for meeting 85% of its oil needs.

### What are the Government Earnings from Fuel Prices?

- Exercise duty and VAT on fuel constitute an important source of revenue for both the Centre and the states.
- As per the Budgets 2020-21, Excise duty on fuel makes up about 18.4% of the Centre's gross tax revenues.
  - Petroleum and alcohol, on average, account for 25-35% of states' own tax revenue.
- Of the revenue receipts of states, central tax transfers comprise 25-29%, and own tax revenues 45-50%.
- During April-December 2021, taxes on crude oil and petroleum products had yielded Rs 3.10 lakh crore to the central exchequer, including Rs 2.63 lakh crore as excise duty, and Rs 11,661 crore as cess on crude oil.
  - For the same period, Rs 2.07 lakh crore accrued to the state's exchequer, of which Rs 1.89 lakh crore was through VAT.

### What are the Constraints of States in Lowering Fuel Taxes?

- Major Source of Revenue:
  - Petroleum and liquor account for roughly a third of states' own tax revenue, making it difficult for states to forgo a part of it.
- Impact of Pandemic:
  - The economic downturn and the pandemic had led to higher spending needs and reduced revenues.
    - States' consolidated fiscal deficit had jumped from 2.6% of Gross Domestic Product (GDP) in FY20 to 4.7% in FY21.

### What are the Options to Cool Inflation?

- As India is heavily dependent on imports for crude, there is no way of cooling energy price inflation other than by lowering taxes on the finished product or by re-introducing subsidies.
- Subsidies enable state-owned fuel retailers to sell at a lower price, while private refiners who do not get subsidy from the government are forced to incur losses.
- Given that higher fuel prices are getting transmitted to prices of other items as transportation becomes costlier, it is believed that monetary tightening would be the right solution.

## World Economic Outlook: IMF

### Why in News?

The latest edition of the International Monetary Fund's (IMF) World Economic Outlook cut its forecast for India's Gross Domestic Product (GDP) growth in FY 2022-23 to 8.2%, making it the fastest-growing major economy in the world, almost twice faster than China's 4.4%.

### What is the IMF's Growth Forecast?

- Indian Scenario:
  - It has also lowered India's growth projection by 0.8% points for 2022-23 from its previous forecast (9%) for the same period in 2021.
    - In 2021, India registered a growth rate of 8.9%.
    - In 2023-24, India is estimated to grow at 6.9%.
  - With import bills rising due to high commodity and fuel prices, the IMF estimates India's current account deficit to widen to 3.1% in FY 2022-23 from 1.6% in FY 2021-22.
  - India was "suffering like many other countries because of the Russia-Ukraine war and negative terms of trade shock "due to higher food and energy prices weighing down trade balances.
  - Additionally, external demand was also softening as the rest of the world's growth was impacted.
- Global Scenario:
  - The IMF has projected global growth at 3.6% in 2022 and 2023, 0.8 and 0.2% lower than in the January 2022 forecast, respectively.

Note:





- A **deceleration in global growth dampens India's growth prospects** especially because it would lead to lower demand for Indian exports.
- The downgrade largely reflects the war's direct impacts on Russia and Ukraine and global spillovers.
- The recent **lockdowns** in key manufacturing and trading hubs such as Shenzhen and Shanghai (China) due to the resurgence of covid **cases would likely compound supply disruptions elsewhere in the region and beyond.**

### What are IMF's Recommendations?

- **Monetary Tightening:**
  - It recommended **monetary tightening by central banks** to keep inflationary expectations in check amid global supply disruptions caused by the war in Ukraine.
    - The IMF warned that the war would "severely set back the global recovery," slow growth and stoke **inflation.**
- **Monitoring of Rising Prices:**
  - Monetary authorities should carefully monitor the **pass-through of rising global prices** to domestic inflation expectations to calibrate their responses.
- **Targeted Income Support to Households:**
  - The IMF report backed **targeted income support by governments** to alleviate stress on household budgets in countries facing large price increases.

### What is the International Monetary Fund?

- **About:**
  - The IMF was set up along with the **World Bank** after the **Second World War** to assist in the reconstruction of war-ravaged countries.
- The two organizations agreed to be set up at a conference in Bretton Woods in the US. Hence, they are known as the **Bretton Woods twins.**
  - Created in 1945, the IMF is governed by and accountable to the 189 countries that make up its near-global membership. **India joined on 27th December 1945.**
  - The IMF's primary purpose is to **ensure the stability of the international monetary system** — the system of exchange rates and international payments that enables countries (and their citizens) to transact with each other.

- The Fund's mandate was updated in 2012 to include all macroeconomic and financial sector issues that bear on global stability.
- **Reports by IMF:**
  - **Global Financial Stability Report.**
  - **World Economic Outlook.**
- **World Economic Outlook**
  - It is a survey by the IMF that is usually published twice a year in the months of April and October.
  - It analyzes and predicts global economic developments during the near and medium term.
  - In response to the growing demand for more frequent forecast updates, the WEO Update is published in January and July, between the two main WEO publications released usually in April and October.

## Vertical Farming

### Why in News?

India is evolving every day with something new. Also, industrialization is increasing dramatically due to which many arable lands are at greater risk. **Vertical farming** in India is the answer to all these problems.

### What is Vertical Farming?

- **Background:**
  - In 1915, **Gilbert Ellis Bailey** coined the term **vertical farming** and he went on to write a namesake book.
  - The modern concept was first proposed in 1999 by professor Dickson Despommier. His concept **centered on the idea that urban areas should grow their own food which can save time and resources** required for transportation.
- **About:**
  - Instead of horizontally on the ground like traditional farming, **vertical farming grows crops in vertical, stacked layers without putting too much impact on land and water resources** which are scarce.
  - It includes **soilless farming techniques**, among others.
  - Vertical farming systems like **aeroponics and hydroponics** come under the broad umbrella ambit of '**protected cultivation**', where one can control and regulate multiple variables like water, soil, temperature, humidity, and so on.

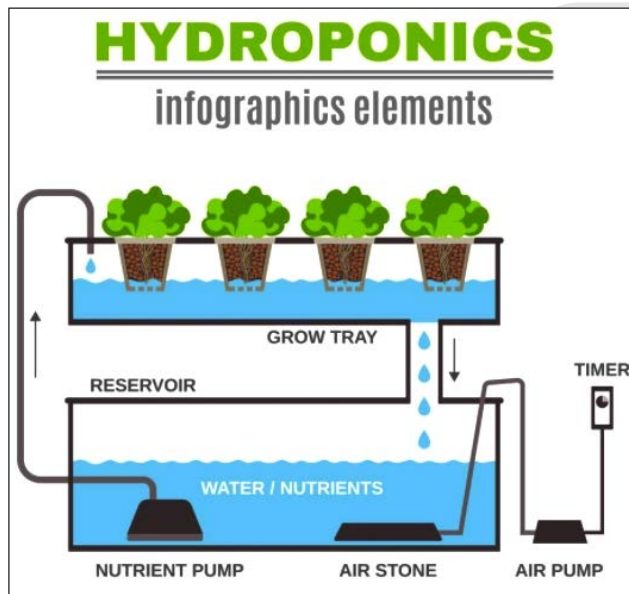
Note:

- Protected cultivation, when practised at scale, offers a massive potential to shorten and optimise our farm-to-plate supply chains by making food available closer to the consumer and thereby can go a long way to improve our nation's GDP (Gross Domestic Product) and reduce imports dependency.

➤ **Types:**

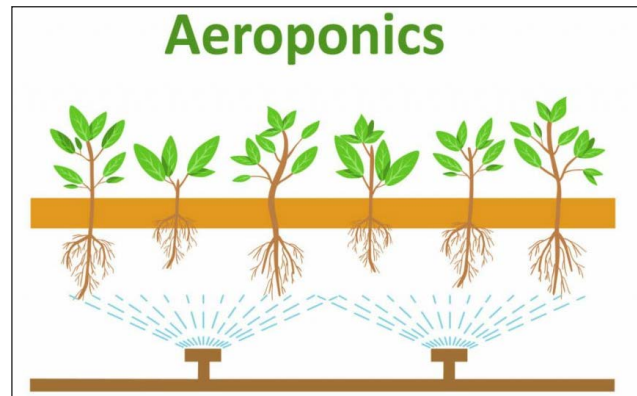
○ **Hydroponics:**

- Hydroponics is a method of growing plants in a water-based, nutrient-rich solution.
- In this method, the root system is supported using an inert medium such as perlite, clay pellets, peat moss or vermiculite.
  - The main purpose is to provide access to oxygen which is essential for proper growth.



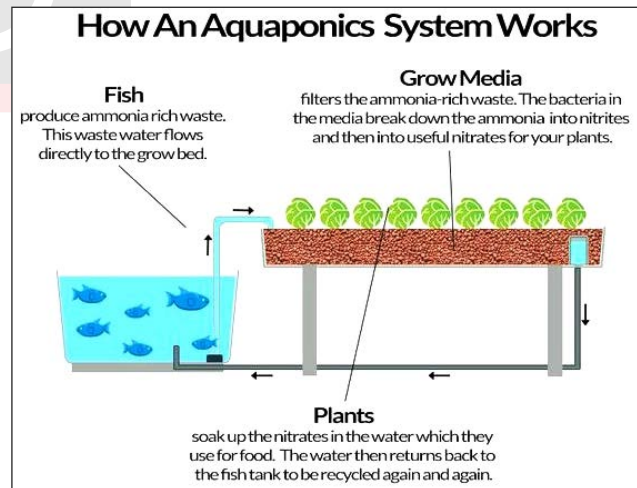
○ **Aeroponics:**

- Aeroponics is an environment-friendly way of farming in which the roots are suspended in the air and plants grow in a humid environment without soil.
- It is a variation of hydroponics where both growing medium and flowing water are absent.
  - The roots of the plants, in this method, are sprayed with water and nutrient solution.
  - This technique enables farmers to control humidity, temperature, pH levels and water conductivity inside a greenhouse.



○ **Aquaponics:**

- Aquaponics is a system that combines hydroponics and aquaculture within a closed system.
- There are three biological components in the aquaponics process: fishes, plants, and bacteria.
  - The system represents a symbiotic relationship between the plants and the fishes; the fish feces is used as fertilizer for the plants, and the plants clean the water for the fish.



**What is the Significance of Vertical Farming?**

➤ **Financial Viability:**

- While the upfront initial capital cost involved in vertical farming is usually higher, if and when the entire crop production design is done properly, it makes absolute sense and financial viability to grow, harvest, and produce a particular crop throughout the year or in a specific season applying vertical farming methods.

Note:

➤ **More Water Efficient:**

- All crops grown via vertical farming methods are usually over 95% water efficient, as compared to crops grown through traditional agricultural practices.

➤ **Water Saving:**

- For a country like India, which consists of only around 4% of the world's water resources, vertical farming-based technologies can not only increase the efficiency and productivity of our food production but can also lead to quantum leap in water savings, which in turn shall support and give impetus to India's ambitious goals of achieving carbon-neutrality within its food production ecosystem.

➤ **Better Public Health:**

- Additionally, as most of the crops are grown "without the use of pesticides", it leads to "a positive contribution towards better public health as well over time"; hence the **consumers can expect zero-pesticide produce**, which is also healthy, fresh, and sustainable for the planet.

➤ **Employment:**

- Lastly, it is important to emphasise that protected cultivation has the potential to create new jobs, skill sets, and economic opportunities for the agriculture students of our country, who are seen to be able to adapt and move forward with the learning curve quickly.

## Formation & Promotion of 10,000 FPOs

### *Why in News?*

Recently, the Ministry of Agriculture & Farmers Welfare has organized the **National Conference of Cluster Based Business Organization's (CBBOs)**, under the **Central Sector Scheme of Formation and Promotion of 10,000 FPOs (Farmer Producer Organization)**.

### *What is the Scheme of Formation & Promotion of 10,000 FPOs?*

➤ **Launch:**

- In **February 2020**, at Chitrakoot (Uttar Pradesh) with a budgetary provision of Rs. 6865 crores.

➤ **About:**

- More than 2200 FPOs produce clusters have been allocated for the formation of FPOs in 2020-21.
- Implementing Agencies (IAs) are engaging **Cluster-Based Business Organizations (CBBOs)** to aggregate, register & provide professional handholding support to each **FPO** for a period of 5 years.
  - CBBOs will be the platform for end-to-end knowledge for all issues related to FPO promotion.

➤ **Financial Assistance:**

- Up to Rs. 18.00 lakh per FPO for a **period of 3 years**.
- Provision has also been made for **matching equity grants up to Rs. 2,000 per farmer member of FPO with a limit of Rs. 15.00 lakh per FPO**.
- Provision of a **credit guarantee facility up to Rs. 2 crores** of project loan per FPO from the eligible lending institution to ensure institutional credit accessibility to FPOs.

➤ **Significance:**

○ **Increase Farmers' Income:**

- It will **promote the selling of farmers' produce** from the farm gate of farmers thereby enhancing farmers' income.
- This will **shorten the supply chain** and accordingly marketing costs will get reduced resulting in better income for farmers.

○ **Create Employment:**

- It will **accelerate more investment in marketing and value addition infrastructure** near to farm gates creating more employment opportunities for rural youth.

○ **Making Farming Viable:**

- It will make farming more viable by aggregating land.

➤ **Progress:**

- More than **5.87 lakh farmers have been mobilized under the Scheme**.
- About **3 lakh farmers have been registered as shareholders** of the FPOs.
- Equity contribution by farmer members amounts to INR 36.82 crores.
- The **total equity base of the FPOs, including the Equity Grant released, amounts to INR 50 crores**.

Note:

**What are the Other Initiatives for Farmers?**

- **National Mission for Sustainable Agriculture.**
- **Pradhan Mantri Krishi Sinchayee Yojana.**
- **Rashtriya Krishi Vikas Yojana (RKVY).**
- **Nutrient Based Subsidy (NBS) Programme.**
- **Rashtriya Gokul Mission.**
- **Pradhan Mantri Fasal Bima Yojana.**
- **Paramparagat Krishi Vikas Yojana.**

**What are FPOs?**

- FPOs are **voluntary organizations controlled by their farmer-members** who actively participate in setting their policies and making decisions.
- They are open to **all people able to use their services and willing to accept the responsibilities of membership**, without gender, social, racial, political or religious discrimination.
- FPOs operatives **provide education and training for their farmer-members, elected representatives, managers, and employees** so that they can contribute effectively to the development of their FPOs.
- FPOs in Gujarat, Maharashtra and Madhya Pradesh, Rajasthan and some other states have shown encouraging results and **have been able to realize higher returns for their produce.**
  - For example, **tribal women in the Pali district of Rajasthan formed a producer company** and they are getting higher prices for custard apples.
- FPOs are generally **mobilized by promoting institutions/resource agencies (RAs).**
  - **Small Farmers' Agribusiness Consortium (SFAC)** is providing support for the promotion of FPOs.
- The resource agencies leverage the support available from governments and agencies like **National Bank for Agriculture and Rural Development (NABARD)** to promote and nurture FPOs.

## Special Purpose Acquisition Companies (SPACs)

**Why in News?**

Considering the recent recommendations of the **Company Law Committee 2022**, the government is looking at putting in place a **regulatory framework for Special Purpose Acquisition Companies (SPAC)** in the statutes

to aid the possible listing of Indian companies in the country through this route.

- The Company Law Committee was **set up in 2019 to make recommendations** to boost **ease of doing business** in India.

**What are SPACs?**

- A **Special Purpose Acquisition Company (SPAC)** is a **corporation formed for the sole purpose of raising investment capital through an Initial Public Offering (IPO)**
  - At the time of their IPOs, SPACs have no existing business operations or even stated targets for acquisition.
- Such a business structure allows investors to contribute money towards a fund, which is then used to acquire one or more unspecified businesses to be identified after the IPO.
  - Therefore, this sort of shell firm structure is often called a **"blank-check company"** in popular media.
- Once the money is **raised from the public**, it is kept in an escrow account, which can be accessed while making the acquisition.
  - If the **acquisition is not made within two years of the IPO**, the SPAC is delisted and the money is returned to the investors.

**What were the Recommendations of the Company Law Committee 2022?**

- It recommends introducing an **enabling framework to recognise SPACs** under the Companies Act, 2013 and allow entrepreneurs to list a SPAC incorporated in India on domestic and global exchanges.
- In order to **align SPACs with the existing scheme of the Act**, the Committee has also recommended that an **exit option should be provided to shareholders** that do not agree with the choice of the target company.
- Further, it also **underscores the need to suitably modify provisions relating to striking off companies** in their application to SPACs, since they do not have any operating business of their own.

**What is the Significance of the SPACs?**

- **Cost Efficient:**
  - A company can go public within months if it merges or is acquired by a SPAC.

Note:



- SPACs particularly position investors as unique opportunities to niche Indian businesses that intend **to get listed on foreign stock exchanges**, without incurring the mammoth costs associated with the process.
  - For instance, the recent listing of Renew Power Private Limited, an Indian renewable energy company, on NASDAQ (an American Stock Market) through an internationally incorporated SPAC in August 2021, speaks to the popularity of SPACs.
- **Minimize Risk and Assure Security:**
  - Listing through SPACs is considered remarkable since the entire process takes place pursuant to a **definitive agreement, with minimum risk and assured certainty.**
- **Provide Safeguard to Dissenting Shareholders:**
  - It also **safeguards the interests of the dissenting SPAC shareholders** as those that vote against the proposed acquisition are allowed to exit by selling their shares to the SPAC promoters.
- **Attractive to Investors:**
  - These are **attractive to investors**, despite them essentially being **shell companies**, as the blank-cheque companies are people sponsoring.
- **Opportunity for Exposure to Countries and Consumer Bases:**
  - For certain businesses, SPACs also **provide an opportunity for exposure to countries and consumer bases** where demand for such niche products exist, consequently allowing such companies to attain higher valuation.

#### Shell Companies

- A shell company is a **firm that does not conduct any operations in the economy**, but it is formally registered, incorporated, or legally organized in the economy.
- These are **sometimes used illegitimately**, such as to disguise business ownership from law enforcement or the public.

#### Initial Public Offering

- IPO is the **selling of securities to the public** in the primary market.
  - Primary market **deals with new securities** being issued for the first time. It is also known as the new issues market.

- It is **different from the Secondary market** where existing securities are bought and sold. It is **also known as the stock market or stock exchange.**
- It is when an unlisted company makes either a fresh issue of securities or an offer for sale of its existing securities or both for the first time to the public.
  - Unlisted companies are companies that are not listed on the stock exchange.

#### Escrow Account

- It is a legal concept describing a financial instrument whereby an asset or escrow money is held by a third party on behalf of two other parties that are in the process of completing a transaction.
- The third-party holds the funds until both parties have fulfilled their contractual requirements.
- Escrow is associated with real estate transactions, but it can apply to any situation where funds will pass from one party to another.

#### What are the Concerns related to SPACs?

- **Can limit the returns for the Retail Investors:**
  - The boom in investor firms going for SPACs and then looking for target companies have tilted the scales in favour of investee firms. This has the potential, theoretically, to limit returns for retail (individual) investors post-merger.
- **Not Every SPACs are able to Attract Targets:**
  - Because the SPACs are **required to begin seeking a target entity after listing**, and the overall transaction is expected to be completed within a strict timeline, many **SPACs are scrambling to find appealing target businesses.**
- **Deal could result in Hasty Decision:**
  - The time-bound hunt – SPACs exist for two years – **for an attractive deal could result in hasty decisions**, thereby inducing dissenting shareholders to exit and reducing overall gains for investors.
- **Disappointing Results could Initiate Investigations:**
  - In multiple cases, **disappointing results have caused shareholders to commence class action suits and initiate investigations** against SPAC sponsors in the US.
    - The U.S. Securities and Exchange Commission has noted the need for more disclosures to investors and called for greater protection against fraud and conflict of interest.

Note:



## Seaweed Farming

### Why in News?

The **Ministry of Fisheries, Animal Husbandry and Dairying** will set up a **seaweed park in Tamil Nadu** to improve the **livelihood of fishermen**.

- Tamil Nadu has been requested to set aside space for a **Special Economic Zone** for seaweed farming.
- In 2021, the Technology Information, Forecasting and Assessment Council (TIFAC) had launched a **Seaweed Mission**.

### What is Seaweed?

#### ➤ About:

- They are the primitive, marine non-flowering marine algae without root, stem and leaves, play a major role in marine ecosystems.
- Large seaweeds **form dense underwater forests known as kelp forests**, which act as underwater nurseries for fish, snails and sea urchins.
- Some species of seaweeds viz. Gelidiella acerosa, Gracilaria edulis, Gracilaria crassa, Gracilaria verrucosa, Sargassum spp. and Turbinaria spp.

#### ➤ Benefits:

- **For Nutrition:**
  - Seaweed is a source of vitamins, minerals, and fiber, and can be tasty.
- **For Medicinal Purpose:**
  - Many seaweeds contain anti-inflammatory and anti-microbial agents. Their known medicinal effects have been legion for thousands of years.
  - Certain seaweeds possess **powerful cancer-fighting agents** that researchers hope will eventually prove effective in the treatment of malignant tumors and leukemia in people.
- **For Economic Growth:**
  - Seaweed has also contributed to economic growth. Among their many uses in manufacturing, they are **effective binding agents (emulsifiers)** in such commercial goods as toothpaste and fruit jelly, and **popular softeners (emollients) in organic cosmetics** and skin-care products.

#### ○ Bioindicator:

- When waste from agriculture, industries, aquaculture and households are let into the ocean, it causes nutrient imbalance leading to **algal blooming**, the sign of marine chemical damage. Seaweeds absorb the excess nutrients and balance out the ecosystem.

#### ○ Iron Sequestrator:

- These aquatic organisms heavily rely on iron for photosynthesis. When the quantity of this mineral exceeds healthy levels and becomes dangerous to marine life, seaweeds trap it and prevent damage. Similarly, most heavy metals found in marine ecosystems are trapped and removed by seaweeds.

#### ○ Oxygen and Nutrient Supplier:

- On their part, the seaweeds derive nutrition through photosynthesis of sunlight and nutrients present in seawater. They release oxygen through every part of their bodies. They also supply organic nutrients to other marine life forms.

### What is Seaweed Farming and its Significance?

#### ➤ Seaweed Farming:

- It is the practice of cultivating and harvesting seaweed.
- In its simplest form, it consists of the management of naturally found batches.
- In its most advanced form, it consists of fully controlling the life cycle of the algae.
- Seaweeds are abundant along the Tamil Nadu and Gujarat coasts and around Lakshadweep and Andaman & Nicobar Islands.

#### ➤ Significance:

- By an estimate, if seaweed cultivation is done in 10 million hectares or 5% of the **Exclusive Economic Zone (EEZ)** area of India, it can
  - Provide employment to 50 million people.
  - Set up a new seaweed industry.
  - Contribute to national **Gross Domestic Product (GDP)**.
  - Enhance ocean productivity.
  - Abate **algal blooms**.
  - Sequester millions of tons CO<sub>2</sub>.
  - Could produce **bioethanol** of 6.6 billion litres.

Note:

## Parboiled Rice

### Why in News?

Recently, the Centre announced to **stop the purchase of excess parboiled rice** after which Telangana Chief Minister and members of his Cabinet staged a dharna demanding a **uniform paddy procurement policy**.

### What is Parboiled Rice?

#### ➤ About:

- The dictionary meaning of 'parboil' is '**partly cooked by boiling**'.
- Thus, the **expression parboiled rice refers to rice that has been partially boiled** at the paddy stage, before milling.
- Parboiling of rice is **not a new practice, and has been followed in India since ancient times**.
- However, **there is no specific definition of parboiled rice** of the **Food Corporation of India** or the Ministry of Consumer Affairs, Food and Public Distribution.

#### ➤ Processes for Parboiling Rice (Examples):

- The **Central Food Technological Research Institute (CFTRI)**, Mysuru, uses a method in which the paddy is soaked in hot water for three hours, in contrast to the more common method in which paddy is soaked for 8 hours.
- The water is then drained and the paddy steamed for 20 minutes. Also, the paddy is dried in the shade in the method used by the CFTRI, but is sun-dried in the common method.
- The **Paddy Processing Research Centre (PPRC)**, Thanjavur follows a method known as the **chromate soaking process**.
- It **uses chromate, a family of salt** in which the anion contains both chromium and oxygen, which removes the odour from the wet rice.

#### ➤ Rice Varieties Suitable for Parboiling:

- Generally, **all varieties can be processed into parboiled rice**, but it is ideal to use long slender varieties to prevent breakage during milling.
- However, **aromatic varieties should not be parboiled** because the process can make it lose its aroma.

### What are the Advantages and Disadvantages?

#### ➤ Advantages:

- Parboiling makes rice tougher which **reduces the chances of the rice kernel breaking** during milling.
- Parboiling also **increases the nutrient value** of the rice.
- Parboiled rice has a **higher resistance to insects and fungi**.

#### ➤ Disadvantages:

- The rice **becomes darker and may smell unpleasant** due to prolonged soaking.
- Besides, setting up a parboiling rice milling unit requires a higher investment than a raw rice milling unit.

### Why has the Government has Decided to Stop Purchases?

➤ According to the government, the **Food Corporation of India** cannot procure surplus parboiled rice **due to sufficient stocks**.

➤ Also, there is no demand for such grain under the **Public Distribution System (PDS)**.

- The Ministry **pegs the parboiled rice demand at 20 LMT** per annum for distribution under the **National Food Security Act, 2013**.

○ According to the Ministry, the **demand for parboiled rice has come down in recent years**.

➤ In the last few years, production in parboiled rice-consuming states such as **Jharkhand, Kerala and Tamil Nadu has increased**, resulting in less movement to the deficit states.

➤ Earlier, the Food Corporation of India used to procure parboiled rice from states such as Telangana to supply to these states. But in recent years, parboiled rice production has increased in these states.

- **Telangana is a surplus parboiled producing region** and does not consume parboiled rice, but only produces which is always surplus and delivered to FCI.

PARBOILED RICE STOCK WITH FCI (LAKH TONNES)	
STATE	STOCKS
Andhra Pradesh	0.66
Telangana	16.52
Chhattisgarh	1.49
Odisha	2.07
Jharkhand	2.98
Kerala	3.00
TamilNadu	12.09
West Bengal	0.43
Karnataka	0.1
Bihar	1.09
Haryana	0.11
Punjab	0.04
<b>TOTAL</b>	<b>40.58</b>

Note:

**What are the Key Highlights about Rice?**

- It is a **kharif crop** which requires high temperature (above 25°C) and high humidity with annual rainfall above 100 cm.
- Rice is **grown in the plains of north and north-eastern India**, coastal areas and the deltaic regions.
- West Bengal tops the list of rice-producing states followed by Uttar Pradesh and Punjab.

## Remission of Duties and Taxes on Export Products Scheme

**Why in News**

Recently, the government had left out sectors such as **iron and steel, chemicals and pharmaceuticals**, from the **Remission of Duties and Taxes on Export Products (RoDTEP) scheme**.

- These sectors were omitted from the scheme, as **iron and steel** were 'already booming' and the **pharma industry's** business had also increased during the **pandemic**.

**What is the RoDTEP Scheme?**➤ **About:**

- The RoDTEP scheme would **refund to exporters the embedded central, state and local duties or taxes that were so far not been rebated or refunded** and were, therefore, placing India's exports at a disadvantage.
- The rebate under the scheme **would not be available** in respect of duties and taxes already exempted or remitted or credited.

➤ **Launch:**

- It was **started in January 2021** as a replacement for the **Merchandise Export from India Scheme (MEIS)**, which was not compliant with the rules of the **World Trade Organisation**.
  - The MEIS scheme provided additional benefits of **2% to 7% on the Freight On Board (FOB) value** of eligible exports.
- For garment exporters, the **Rebate of State and Central Levies and Taxes (RoSCTL) Scheme** has been notified separately.

➤ **Rates:**

- The tax refund rates **range from 0.5% to 4.3%** for various sectors.
- The rebate will have to be claimed as a **percentage of the Freight On Board value of exports**.

➤ **Issuance:**

- Rebates will be issued in the form of a **transferable duty credit/ electronic scrip (e-scrip)** which will be maintained in an electronic ledger by the **Central Board of Indirect Taxes and Customs (CBIC)**.

**What is the Significance of the RoDTEP scheme?**➤ **Enhance India's Competitiveness:**

- The reimbursement of taxes such as duty on power charges, **Value-Added Tax** on fuel in transportation, **Farm Sector** etc. will make Indian products competitive in global markets.
- It is expected to significantly **impact India's competitiveness**, trade flows and export numbers over the next **5-10 years**.

➤ **Par with International Standards:**

- Indian exporters will be able to meet the international standards for exports as **affordable testing and certification will be made available to exporters** within the country instead of relying on international organizations.
- This would **increase the economy of the country and the working capital** for the enterprise.-

➤ **Automated Tax Assessment:**

- Also under it, **tax assessment is set to become fully automatic for exporters**.
- Businesses will get access to their refunds for **GST (Goods and Services Tax)** via an automatic refund route.

**Freight on Board**

- Also called Free on Board (FOB) is a term used to **indicate who is liable for goods damaged or destroyed during shipping**.
  - "**FOB origin**" means the buyer is at risk and takes ownership of goods once the seller ships the product.
  - "**FOB destination**" means the seller retains the risk of loss until the goods reach the buyer.
- The terms of FOB **affect the buyer's inventory cost**; adding liability for shipped goods increases inventory costs and reduces net income.

Note:

## South Asia Economic Focus: World Bank

### Why in News?

Recently, the **World Bank** in its report **South Asia Economic Focus (Bi- Annual)** cut its economic growth forecast for India and the whole South Asian region.

- South Asia Economic Focus describes **recent economic developments, analyses the economic impact on South Asia of the war in Ukraine, presents growth forecasts, provides risk scenarios**, and concludes that reshaping economies goes hand in hand with reshaping norms.

### What are the Gross Domestic Product (GDP) Estimates?

- Lowered **India's growth to 8% from previous estimate of 8.7%** for the current fiscal year 2022-23.
- **Cut by a full percentage (1%)** points the growth outlook for **South Asia**, excluding Afghanistan, to 6.6%.
- **Raised its growth forecast for Pakistan**, the region's second-largest economy, for the current year ending in June, to 4.3% from 3.4% and kept next year's growth outlook unchanged at 4%.

### What are the Factors Responsible for Low GDP Estimates?

- Worsening supply chain and **rising inflation** risks caused by the **Ukraine crisis**.
- In India, household consumption will be constrained by the incomplete recovery of the **labour market** from the **pandemic** and inflationary pressures..
- **High oil and food prices** caused by the war in Ukraine will have a strong negative impact on peoples' real incomes
- The region's dependence on energy imports meant **high crude prices** forced its economies to pivot their **monetary policies** to focus on inflation rather than reviving economic growth after nearly two years of pandemic restrictions.

### What is Gross Domestic Product (GDP)?

- It is a **measure of economic activity** in a country. It is the **total value of a country's annual output** of goods and services. It gives the economic output from the consumers' side.
- **GDP** = Private consumption + Gross investment + Government investment + Government spending + (exports-imports).

### How does the GDP differ with Gross Value Added (GVA)?

- GVA is a **measure of total output and income in the economy**. It provides the rupee value for the number of goods and services produced in an economy after deducting the cost of inputs and raw materials that have gone into the production of those goods and services.
- It also **gives a sector-specific picture like what is the growth in an area, industry or sector of an economy**.
- At the macro level, from a national accounting perspective, GVA is the sum of a country's GDP and net of subsidies and taxes in the economy.
  - **Gross Value Added** = GDP + subsidies on products - taxes on products

### What are the Women Related Findings?

- **Traditional Attitudes:** Traditional attitudes and **deeply rooted social norms towards gender** have persisted or become more conservative over time.
  - They can be a **key obstacle towards gender equality**, the welfare of children as well as broader economic growth.
- **Women Facing Disadvantage:** Women continue to face great disadvantages in accessing economic opportunities in the region, despite decades of economic growth, rising education, and declining fertility.
- **Labour Force Participation:** Many **South Asian countries rank among the lowest in the world in terms of female labour force participation**, as well as other forms of gender disparities, such as freedom of movement, social interactions, asset ownership, and son preference.

Note:



- **Low Economic Activity:** Across the world, at higher levels of development women tend to spend less time doing household chores and more time in paid employment. However, for most South Asian women engagement in **economic activity is lower than what would be expected given the level of development of the region.**
- **Conservative Belief:** With few exceptions, conservative beliefs about household labour division in South Asian countries account for a **large share of these gaps in women's economic engagement.**

### ***What are the Major Suggestions?***

- **Plan Policies:** Governments need to carefully plan monetary and **fiscal policies** to counter external shocks and protect the vulnerable.
- **Interventions for Women:** Countries **need to implement interventions that tackle barriers to women's economic participation**, including norms that are biased against women.
- **Low-Carbon Development:** Countries should also **accelerate the transition to a low-carbon development path** and move towards a greener economy to reduce reliance on fuel imports.



Note:



# International Relations

## Highlights

- Kuril Island Dispute
- Jerusalem's al-Aqsa Mosque
- Colombo Security Conclave
- Designating Russia as a 'State Sponsor of Terrorism'
- Black Sea and Russia
- China's Global Security Initiative
- UK Prime Minister Visit to India
- International Religious Freedom Report 2022
- India-Finland Relations

## Kuril Island Dispute

### Why in News

Recently, Japan **described four islands** whose ownership it disputes with Russia as **illegally occupied** in the latest version of a **diplomatic Bluebook**.

- The use of stronger language underscored the chilled relations between the two sides amid the **Russian invasion of Ukraine**.
- Russia refers to these islands as the **Kuril Islands**, whereas **Japan calls them Northern territories**.
- Japan is also having a similar dispute regarding Northern territories with South Korea. South Korea refers to as Dokdo islands.

### What is Diplomatic Bluebook?

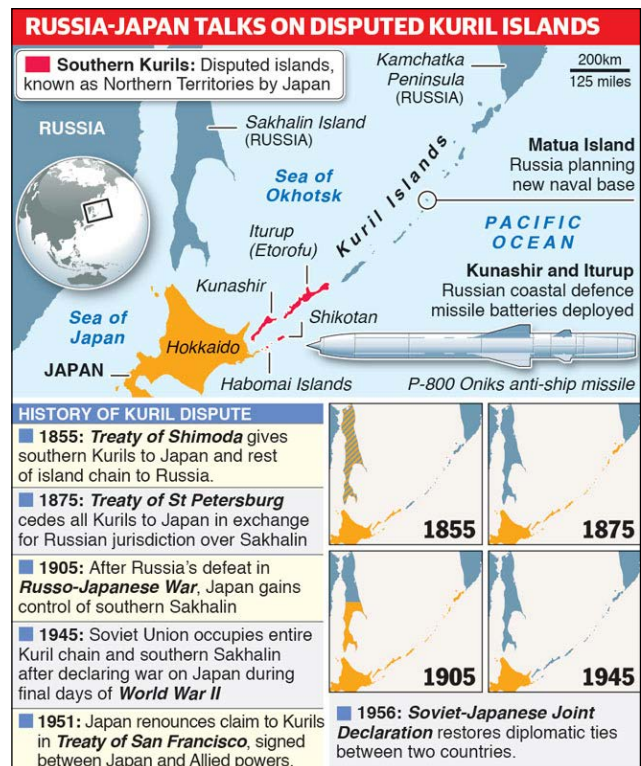
- The Diplomatic Bluebook of Japan is an **annual report on Japan's foreign policy** and international diplomacy published by the Ministry of Foreign Affairs in Japan.
- It has been published every year since its **first issue in September 1957**.

### What is the Geographic Location and Significance of the Kuril Islands?

- **Location:**
  - The Kuril Islands are stretched from the **Japanese island of Hokkaido** to the southern tip of **Russia's Kamchatka Peninsula** separating the **Okhotsk Sea from the North Pacific Ocean**.
  - The chain is part of the belt of **geologic instability circling the Pacific (Ring of Fire)** and contains at least 100 volcanoes, of which **35 are still active, and many hot springs**.

### ➤ Significance:

- **Natural resources:** The islands are **surrounded by rich fishing grounds** and are thought to have offshore reserves of oil and gas.
- **Strategic Importance:** Russia has **deployed missile systems in the region**. Russia also plans a submarine project and intends to prevent any American military use of the islands.
- **Cultural Importance:** The **Japanese people**, especially conservatives in Hokkaido, are **emotionally attached to the islands**.



Note:

### What is the History of the Kuril Islands Dispute?

#### ➤ Background:

- The Kuril Islands dispute between **Japan and Russia** is over the **sovereignty of South Kuril Islands**.
- The South Kuril Islands comprise **Etorofu island, Kunashiri island, Shikotan island and the Habomai island**.
  - These islands are **claimed by Japan** but **occupied by Russia** as the successor state of the Soviet Union.

#### ➤ Treaty of Shimoda (1855):

- In **1855**, Japan and Russia concluded the **Treaty of Shimoda**, which gave control of the four southernmost islands to Japan and the remainder of the chain to Russia.

#### ➤ Treaty of Saint Petersburg (1875):

- In the **Treaty of Saint Petersburg**, signed between the two countries in **1875**, **Russia ceded possession of the Kurils to Japan in exchange for uncontested control of Sakhalin Island**.
- However, these islands were again seized by the Soviet Union at the end of **World War II**.

#### ➤ Yalta Agreement (1945):

- In **1945**, as part of the **Yalta agreements (formalized in the 1951 Treaty of Peace with Japan)**, the islands were ceded to the Soviet Union, and the Japanese population was repatriated and replaced by the Soviets.

#### ➤ San Francisco Peace Treaty (1951):

- The **San Francisco Peace Treaty** signed between the Allies and Japan in 1951, states that Japan must give up “all right, title and claim to the Kuril Islands”, **but it also does not recognize the Soviet Union’s sovereignty over them**.
  - In World War II, the main combatants were:
    - **Axis powers** (Germany, Italy, and Japan)
    - **Allies** (France, Great Britain, the United States, the Soviet Union, and, to a lesser extent, China).

#### ➤ Japan-Soviet Joint Declaration (1956):

- The dispute over the islands has **prevented the conclusion of a peace treaty to end World War II**.

- In 1956, diplomatic ties were restored between Japan and Russia by **Japan-Soviet Joint Declaration**.
- During that time, Russia offered to give away the two islands closest to Japan. But the offer was rejected by Japan as the two islands constituted **only 7% of the land** in question.

### What is the Current Scenario?

- Despite a series of agreements, the dispute continues, and **Japan still claims historical rights to the southernmost islands** and has tried repeatedly to persuade the Soviet Union and, from 1991, Russia to return those islands to Japanese sovereignty.
- In **2018**, the Russian President and the Japanese Prime Minister (PM) met on the sidelines of the **East Asia Summit** and decided to end the territorial dispute by the Japanese PM agreeing to negotiate based on the 1956 declaration.
  - This implicitly showed that Japan has given up the two islands to maintain peace with Russia.
- However, Russia indicated that the joint declaration signed by Japan and the Soviet Union in 1956 **neither mentions a basis for returning Habomai and Shikotan nor clarifies which country has sovereignty over the islands**.
- Further, in **2019**, the Japanese PM made it clear that the country is **not in the favour of withdrawing control over the Islands**.
- Japan also believes that the islands are an inherent part of the nation’s territory.
- Therefore, **Japan mentioned that it aims to sign the peace treaty after the territorial issue is resolved**.

## Jerusalem’s al-Aqsa Mosque

### Why in News

- Recently, tensions flared up again at **Jerusalem’s al-Aqsa Mosque** between the Palestinians and Israeli police.
- Over the decades, this site in **Jerusalem’s Old City** has frequently been a **flashpoint for violence between Palestinians and Israeli forces** and hardline groups and is at the **heart of competing for historical claims**.
  - These recurring clashes are part of the ongoing **Israeli–Palestinian conflict**.

Note:



### What is al-Aqsa Mosque & Associated Conflict?

- The al-Aqsa Mosque is **one of Jerusalem's most recognized monuments**.
- The site is part of the **Old City of Jerusalem, sacred to Christians, Jews and Muslims**.
  - The **United Nations Educational, Scientific and Cultural Organization (UNESCO)** has classified the Old City of Jerusalem and its walls as a **World Heritage Site**.
- The mosque's complex is the reason for the conflict **between Israel & Palestine (Islam & Judaism)**.
  - **Al-Aqsa Mosque is one of Islam's most revered locations**, and the **Temple Mount is the holiest site in Judaism**.
- The Temple Mount is a walled compound inside the Old City in Jerusalem, and is the site of two structures:
  - The **Dome of the Rock to the north and the Al-Aqsa Mosque to the south**.
  - To the **southwest of the Temple Mount, is the Western Wall**, a remnant of the Second Temple and the **holiest site in Judaism**.

- **In Islam**, the **Dome of the Rock** is a seventh-century structure, **an important Islamic shrine**, believed to be where the Prophet Muhammad ascended to heaven.
  - Before modern borders were drawn up in the region, **pilgrims to the Muslim holy cities of Mecca and Medina** would stop over in Jerusalem to pray at this mosque.
- **In Judaism**, it is believed to be the site where **God gathered dust to create Adam**.
  - According to the Bible, in **1000 BC King Solomon built the First Temple** of the Jews on this mountain, which **Babylonian troops** tore down some 400 years on the orders of the **Babylonian king Nebuchadnezzar**.
  - In the first century BC, Jews returned from their banishment and **built the Second Temple**.

### What are the Geopolitics of Conflict over Jerusalem?

- Jerusalem has been at the center of the **Israeli-Palestinian conflict**.
- According to the original 1947 **United Nations (UN) partition plan**, Jerusalem was proposed to be an **international city**.
- However, in the first **Arab Israel war of 1948**, the Israelis captured the western half of the city, and Jordan took the eastern part, including the Old City that houses Haram al-Sharif.
- Following the **Six-Day War in 1967**, an armed conflict between Israel and a coalition of Arab states primarily comprising Jordan, Syria and Egypt, the Waqf Ministry of Jordan that had till then held control of the al-Aqsa Mosque, **ceased to oversee the mosque**.
  - Israel captured East Jerusalem from Jordan in the **Six-Day War 1967** and annexed it later.
- Since its annexation, Israel has **expanded settlements in East Jerusalem**.
  - Israel sees the whole city as its **"unified, eternal capital"**, whereas the Palestinian leadership across the political spectrum have maintained that they would not accept any compromise formula for the future Palestinian state unless East Jerusalem is its capital.

Note:

## Colombo Security Conclave

### Why in News?

Recently, the **Colombo Security Conclave (CSC) Virtual Conference** was organized by the **National Investigation Agency of India**.

- The participants discussed various challenges **related to terrorism** in their respective countries and shared experiences in the **prosecution of terrorism cases**, strategies to deal with foreign fighters and **countering the misuse of the internet and social media**.

### What is Colombo Security Conclave?

- **About:** The CSC, was formed in 2011 as a trilateral maritime security grouping of **India, Sri Lanka and the Maldives**.
  - It welcomed **Mauritius as a fourth member** at the fifth meeting of national security advisers.
  - **Bangladesh and Seychelles** attended as **observers** and have been invited to join the group.
- **Envisaged Goal:** The fifth meeting of national security advisers of the CSC identified **key areas of cooperation to enhance and strengthen regional security** in the following **five pillars**:
  - Maritime Safety and Security
  - Countering Terrorism and Radicalization
  - Combating Trafficking and Transnational Organized Crime
  - Cyber Security, Protection of Critical Infrastructure and Technology
  - Humanitarian Assistance and Disaster Relief
- **Significance:** CSC is being seen as India's outreach to the Indian Ocean to underline regional co-operation and shared security objectives.
  - **Countering China:** The CSC hopes to restrict China's influence in an area of strategic importance and to reduce the Chinese footprint in the member countries.
  - **Maritime Security:** India has a large coastline of nearly 7500 Km along with islands of strategic chokepoints. This makes maritime security a priority for the country, in which CSC plays a vital role.
  - **Synergy With SAGAR Vision:** The grouping is also in line with India's vision of **"SAGAR: Security and Growth for all in the Region"** and India being a member of **QUAD grouping**.

- **Emerging Sub-regionalism:** The coming together of the 6 Indian Ocean region countries indicate the development of sub-regionalism on a common maritime and security platform and is significant in a wider global context as well.

- **Associated Challenge:** Even though the strategic interests of the six countries are aligned in the **Indian Ocean Region (IOR)**, an attempt to mold the CSC into an institution to counter China's influence would meet the fate of the **South Asian Association of Regional Cooperation (SAARC)**, widely regarded as a failure.

## Designating Russia as a 'State Sponsor of Terrorism'

### Why in News?

Recently, Ukraine has requested US to **designate Russia as a "state sponsor of terrorism"**.

- The designation would **activate perhaps the harshest suite of sanctions available with the US** against Russia.



### What is Terrorist Designation?

- **About:**
  - The US Secretary of State (the minister primarily in charge of foreign relations) has the power to designate countries that **"have repeatedly provided support for acts of international terrorism"** as **"State Sponsors of Terrorism"**.
  - The US can **place four categories of sanctions on countries** that are on this list:
    - Restrictions on US foreign assistance
    - A ban on defence exports and sales
    - Certain controls over exports of dual use items
    - Miscellaneous financial and other restrictions

Note:





- Sanctions can **also be placed on countries and persons** that engage in certain trade with designated countries.
- **Countries on the List:**
  - As of now, there are **four countries on the list** of state sponsors of terrorism.
    - **Syria** (Designated on 29<sup>th</sup> December 1979)
    - **Iran** (Designated on 19<sup>th</sup> January 1984),
    - **North Korea** (Designated on 20<sup>th</sup> November 2017).
    - **Cuba was re-designated** as a state sponsor of terrorism on 12<sup>th</sup> January 2021

### What are the Statutes which authorise Designation?

- There are currently **three statutes that authorise the Secretary of State to designate a foreign government** for repeatedly providing support for acts of international terrorism:
  - **Foreign Assistance Act of 1961:** It prohibits the transfer of most aid;
  - **Arms Export Control Act (AECA):** It prohibits exports, credits, guarantees, other financial assistance, and export licensing overseen by the State Department; and
  - Export Controls Act of 2018
- Of these three statutes, **only the AECA identifies objectionable activities** as part of the definition while none of the three Acts defines the overarching term “international terrorism.

### What has been India's Stand on Russia - Ukraine Conflict?

- Initially, India **abstained** on a US-sponsored **United Nations Security Council (UNSC)** resolution that deplores in the strongest terms Russia's aggression against Ukraine.
- India again **abstained** from voting at the UNSC on the Russia drafted resolution on the Humanitarian situation in Ukraine which demanded that calling for a negotiated ceasefire for enabling safe, rapid, voluntary and unhindered evacuation of civilians.
  - Unlike during the past abstentions relating to Ukraine, it was the **first time that India sided with the West in this conflict (even if by an abstention).**

- India **abstained on a vote at the UN Human Rights Council** in Geneva. The Council moved the resolution to set up an international commission of enquiry into Russia's actions in Ukraine.
- India, China and 33 other nations recently abstained from a **United Nations General Assembly** resolution that censured Russia for its military actions in Ukraine.
- India also abstained from the **International Atomic Energy Agency (IAEA)** resolution that was related to safety at four nuclear power stations and a number of nuclear waste sites including **Chernobyl**, as the Russians seized control of them.

## Black Sea and Russia

### Why in News?

Recently, the sinking of the **warship Moskva, flagship of the Russian Black Sea Fleet** — whether due to a **Ukrainian missile strike** or, as **Russia claims, a fire on board** — is a serious setback for **Russia in the War against Ukraine.**

### What is the Black Sea's Geography?

- **Littoral Geography:** The Black Sea is bordered by **Ukraine** to the north and northwest, **Russia and Georgia** to the east, **Turkey** to the south, and **Bulgaria and Romania** to the west.
- **Maritime Geography:** It links to the **Sea of Marmara** through the **Bosphorus Strait** and then to the **Aegean Sea** through the **Dardanelles strait.**



### What is the Importance of Black Sea to Russia?

- **Strategic Importance:** Domination of the **Black Sea region is a geostrategic imperative for Russia**, both to project Russian power in the Mediterranean and to secure the economic gateway to key markets in southern Europe.

Note:



- **Gateway to Mediterranean Sea:** It has traditionally been Russia's warm water gateway to Europe.
- **Strategic Buffer:** It is a strategic buffer between the **North Atlantic Treaty Organisation (NATO)** and itself.
- **Black Sea Fleet:** In this context, Russia has been making efforts to gain complete control over the Black Sea since the **Crimean crisis of 2014**.
  - Thus, Russia has stationed its **Black Sea naval fleet in the Black Sea**.
  - **Black Sea Fleet:** The Black Sea Fleet has a long history and is considered to have been **founded back in 1783**.
    - It comprises warships of the Russian Navy in the **Black Sea, Sea of Azov, and the eastern Mediterranean**, and is headquartered at **Sevastopol**, the major port on the **Crimean peninsula**.

### **What is Russia Doing in the Black Sea?**

- During the ongoing invasion, the **domination of the Black Sea has been a major Russian objective**, along with the land bridge to connect Russia and Crimea.
- **Capturing Mariupol:** There have been intense efforts to capture Mariupol, the Sea of Azov port in the breakaway eastern **Ukrainian oblast of Donetsk**.
- **Capturing Odessa:** Russia was also expected to focus its military efforts on Odessa, to the west of Crimea.
  - If the Odessa region were to fall as well, **Ukraine would lose access to its entire Black Sea coastline** and would in effect be reduced to a **landlocked country**.
  - It is also the largest region in Ukraine which serves as an **important energy and transport corridor with abundant natural resources**.
  - The **Rhine-Main-Danube canal** connects the **Black Sea to the Atlantic Ocean and the port of Odessa** serves as a vital link between Ukraine and the outside world.

### **What are Russia's Prospects?**

- The loss of the warship Moskva is expected to **put brakes on an anticipated amphibious assault on Odessa**.
- This incident means Russia has now suffered damage to two key naval assets since invading Ukraine, the first being **Russia's Alligator class landing ship Saratov** in March 2022.

- Both events will likely lead Russia to review its **maritime posture in the Black Sea**.



## **China's Global Security Initiative**

### **Why in News**

Recently, a new **Global Security Initiative (GSI)** was put forward by Chinese President. The GSI looks to counter the US **Indo-Pacific strategy** and the **Quad (India, US, Australia, Japan grouping)**.

- However, China did not provide much clarity or details about the proposed global security initiative.

### **What is GSI, as Envisaged by China?**

- **Principle of Indivisible Security:** With growing threats posed by **unilateralism, hegemony and power politics**, and **increasing deficits in peace, security, trust and governance**, mankind is facing more and more intractable problems and security threats.
  - Thus, China held that the Global security initiative is envisaged to uphold the **principle of "indivisible security"**.
  - The principle of "indivisible security" means that **no country can strengthen its own security at the expense of others**.
- **Asian Security Model:** GSI calls for a "**common, comprehensive, cooperative and sustainable**" security and building an Asian security model of mutual respect, openness and integration".

Note:

- **Opposing Sanctions:** This would oppose the use of unilateral sanctions and long-arm jurisdiction, appearing to refer to Western sanctions.
- **Tackling New Cold War:** Indo-Pacific' strategy to divide the region and create a 'new **Cold War**', and the use of military alliances to put together an '**Asian version of North Atlantic Treaty Organization (NATO)**'.
  - According China, the Quad grouping was equivalent to the "**Five Eyes**" intelligence alliance involving Australia, New Zealand, Canada, the U.S. and U.K. and the **AUKUS pact**, as a key element in what he called U.S. plans to build an "Asian NATO".

### What are Reactions of Quad Members?

- **Quad is not a Military Alliance:** The members of the Quad have **rejected the notion that it is an Asian NATO or a military alliance**, and pointed to its broad-based cooperation, including on vaccines and technology.
- **Double Standards of China:** Chinese criticism of unilateralism, hegemony and double standards is usually aimed at the US.
- **Impact of Russia-Ukraine War:** China's new advances in the Pacific could be related to the stagnation of the **Belt and Road Initiative**, due to the **Ukraine war**.

### What are Events Signaling a New Cold War?

- **China's Development:** For several decades, **China's aggressive development** under the relatively enlightened authoritarianism of Deng Xiaoping and his successors was seen positively in the United States.
  - However, under Xi Jinping (President), China has evolved from a **soft to a hard authoritarianism**.
  - There is now a president-for-life with a **budding personality cult**.
- **US' Counter:** In order to contain rising China's assertiveness, the US under its '**pivot to Asia policy**' Has launched a **Quad initiative & Indo pacific narrative**.
  - Most recently, the US proposed to **expand G7 to G-11 without including China in it**.
- **China's Stance on South China Sea:** China's actions in the **South China Sea**, first by land reclamation and then constructing artificial islands for extending extra-territorial claim, has seen sharp criticism from the US and its allies.
- **Challenging Economic Hegemony:** China has come out with alternative governance mechanisms to the U.S.-dominated **International Monetary Fund, World**

**Bank and World Trade Organization** with its all-encompassing **Belt and Road Initiative** and institutions like **Asia infrastructure investment bank**, Contingency Reserve Agreement (CRA) of **New Development Bank**.

### What Should be Role of India?

- India is a rising global power and citing its importance both the US and China sought to attract India in its camp. **Foreign policy experts in the US argue India is a Natural US Ally in the New Cold War**.
- On the other hand, Chinese's Ambassador in India has suggested writing "**together a new chapter**" with "**a shared future for mankind**". In this context:
  - India can promote new **multilateralism** under the aegis of **Vasudhaiva Kutumbakam**- which relies on restructuring both the economic order and societal behavior for equitable sustainable development.
  - India must take up **intensified diplomacy with global powers so that Asian Century** can be defined in terms of peaceful co-existence and global interest.
  - Apart from it, India should acknowledge that **national security now relies on technological superiority in Artificial Intelligence (AI), cyber and space, and not expensive capital equipment**.
    - Thus, India should become self-sufficient in the domain of **critical technologies**.

## UK Prime Minister Visit to India

### Why in News?

Recently, the **UK Prime Minister (PM) visited India**. In this visit, both the countries agreed on a joint statement titled 'Towards shared security and prosperity through national resilience'.



Note:

### What are the Highlights of the Visit?

- **Respecting India-Russia Relations:** In the context of **Ukraine Crisis** and India's neutral stance, UK PM asserted that India's position on Russia is 'well known' and is not going to change.
  - India has historic relationship with Russian and everybody respects it.
- **Cooperation on Indo-Pacific:** The two countries had a shared interest in keeping the Indo-Pacific region free and open, particularly in the face of growing threats of Chinese coercion in **South China Sea**.
  - Recently, the UK and India have agreed to strengthen their cooperation in the maritime domain as the **UK will join India's Indo-Pacific Oceans Initiative** and become a major partner on maritime security issues in Southeast Asia.
  - India's **Indo-Pacific Oceans Initiative (IPOI)** is an **open, non-treaty-based initiative** for countries to work together for cooperative and collaborative solutions to common challenges in the region.
- **Tackling Extremism:** They agreed to constitute a sub-group on **countering extremism** to further enhance cooperation between India and the UK in ensuring that all possible actions are taken against groups and individuals based in or operating out of either country.
- **Extraditing Economic Fugitives:** India conveyed to the UK, that bringing back **economic fugitives** to face justice was a "high priority" for the government.
  - Britain responded that it is concerned about this and doesn't welcome people who want to use its legal system to evade the Indian laws.
- **Discussion on FTA:** Both leaders committed that **Free Trade Agreements** negotiations will conclude by the end of 2022.
- **Defence Cooperation:** They discussed the next generation of defence and security collaborations across five domains — land, sea, air, space and cyber.

### What are the Recent Developments on India's Relations with the UK?

- Despite the challenge posed by the **Ukraine crisis**, the India-UK relationship has been on an **upward trajectory**, exemplified by the conclusion of a **Comprehensive Strategic Partnership in 2021**.

- The agreement also established a **2030 Roadmap for India-UK relations**, which primarily outlines the partnership plans for the bilateral relationship.
- Additionally, In January 2022, India and the UK managed to **conclude the first round of talks for an India-UK Free Trade Agreement**.
  - The negotiations reflected shared ambitions to secure a comprehensive deal between the **fifth (UK) and sixth (India) largest economies in the world** as technical experts from both sides covered over 32 sessions encompassing 26 policy areas.

## International Religious Freedom Report 2022

### Why in News?

Recently, the **US Commission on International Religious Freedom (USCIRF)** has recommended for the **second year in the row to put India on a list (Countries of Particular Concern or CPCs)** for the worst violations of religious freedoms in 2021.

- Earlier, the US State Department released a **strong and critical report on human rights in India in 2021**.

### What is USCIRF?

- USCIRF is an **independent, bipartisan US federal government commission**, dedicated to defending the universal right to freedom of religion or belief abroad.
- It is an **advisory body to the US Congress**.
- USCIRF's 2022 Annual Report **provides recommendations to enhance the U.S. government's promotion** of freedom of religion or belief abroad.
- It is **Headquartered in Washington DC**.
- Established by the US government in 1998 after the inaction of the International Religious Freedom Act, **recommendations of USCIRF are non-binding on the state department**.
  - Traditionally, India does not recognize the view of USCIRF.

### What are the Key Highlights of the Report?

- The Report's primary focus is on **two groups of countries**:

Note:

- **Country of Particular Concern (CPC):** It is a designation by the **US Secretary of State of a nation engaged in severe violations** of religious freedom under IRFA (**International Religious Freedom Act of 1998**).
- **Special Watch List:** A “**Special Watch List**” country is one that is deemed not to meet all the CPC criteria but engages in or tolerates severe violations of **religious freedom**.
- The Report also **includes USCIRF’s recommendations of violent nonstate actors** for designation by the US State Department as **Entities of Particular Concern (EPCs), under International Review of Financial Analysis (IRFA)**.
- The report also **highlights important global developments and trends related to religious freedom** during 2021—including in countries that do not meet the criteria for CPC or SWL recommendations.
  - These include the **Covid-19 pandemic** and religious freedom, blasphemy and **hate speech law enforcement**, transnational repression, religious intolerance in Europe, deteriorating religious freedom conditions in South Asia, and political upheaval that raises religious freedom concerns.

### **What are the Latest Recommendations of USCIRF?**

- **For the CPC List:**
  - Other than India, countries recommended for the CPC designation are **Afghanistan, Nigeria, Syria, and Vietnam**.
  - Countries recommended **for redesignating include Myanmar, China, Eritrea, Iran, North Korea, Pakistan, Russia, Saudi Arabia, Tajikistan, and Turkmenistan** as CPCs.
- **For A Special Watch List:**
  - Algeria, Cuba, and Nicaragua were **placed in 2021**.
  - **Others include** Azerbaijan, CAR, Egypt, Indonesia, Iraq, Kazakhstan, Malaysia, Turkey, and Uzbekistan.
- **For EPCs:**
  - Al-Shabaab, Boko Haram, the Houthis, Hay’at Tahrir al-Sham (HTS), Islamic State in the Greater Sahara (ISGS), Islamic State in West Africa Province (ISWAP or ISIS-West Africa), and Jamaat Nasr al-Islam Wal Muslimin (JNIM).

### **What are the Concerns Raised about India?**

- The report highlighted that the government had “**repressed critical voices**”, especially minority communities and individuals reporting on them.
  - It mentions the **arrest of rights activist Khuran Pervez in Kashmir**, and the July 2021 death of octogenarian Father Stan Swamy, arrested in October 2020 under the **Unlawful Activities Prevention Act 1967 (UAPA)**.
- The report also touches on challenges faced by **Non Governmental Organisations (NGOs)**, especially about foreign funding.
- It also highlights **anti-conversion laws**. In October 2021, **Karnataka’s government ordered a survey of churches and priests** in the state and authorized police to conduct a door-to-door inspection to find Hindus who have converted to Christianity.

### **What is the State of Freedom of Religion in India?**

- **Freedom of religion in India is a fundamental right** guaranteed by **Article 25-28** of the Constitution of India.
  - **Article 25** (Freedom of conscience and free profession, practice and propagation of religion).
  - **Article 26** (Freedom to manage religious affairs).
  - **Article 27** (Freedom as to payment of taxes for promotion of any religion).
  - **Article 28** (Freedom as to attendance at religious instruction or religious worship in certain educational institutions).
- Further, **Article 29 and 30 of the Constitution deal** with the protection of interests of minorities.

## **India-Finland Relations**

### **Why in News**

- Recently, **Finland’s Minister of Economic Affairs** met **India’s Union Minister of State Science & Technology**.
- They announced the decision to establish an **Indo-Finnish Virtual Network Centre on Quantum Computing**.

Note:





- The Indian side has identified three premier institutes viz IIT Madras, IISER Pune and **Centre for Development of Advanced Computing (C-DAC) Pune** for Virtual Network Centre on Quantum Computing.

### What are the Highlights of the Meeting?

- India is keen to develop research collaborations with **Finnish R&D institutions and technology** collaboration with Finnish Industry especially focusing on the following technology domains and **application of Quantum Computing in areas such as:**
  - **Sustainable Energy Technologies** (generation, conversion, storage and conservation), Environment and Clean Technologies,
  - **Biobased Economy, BioBanks** and Biobased materials for different applications,
  - **Water and Marine Technologies,**
  - **Food & Agri Technologies,**
  - **Affordable Healthcare** (including, Pharmaceuticals and Biomedical Instrumentation),
  - **Technologies for Advanced Manufacturing,** Integration of **Artificial Intelligence and Machine Learning** in all domains.
- The **Department of Science & Technology** has initiated **several new mission mode programs** like **Electric Vehicles, Cyber-Physical System, Quantum Technologies, Future Manufacturing, Green Hydrogen Fuel** etc and sought joint collaboration with Finland in solving issues of societal challenges.
- The visiting Finnish Minister assured that Finnish companies will partner with India for Carbon-neutral technologies and enhance **cooperation for Sustainability in Climate Change.**

- The Finnish Minister also invited India to explore the possibility of deeper cooperation in **Finland's Biobank project** to mediate **high-quality human samples** for medical research to promote the development of new products and services that promote public health.

### What is the History of India-Finland Relations?

- **Background:** Finland and India have traditionally **enjoyed warm and friendly relations.**
  - In recent years, bilateral relations have **acquired diversity with collaboration in research, innovation, and investments by both sides.**
  - **2019 marked 70 years of diplomatic relations** between the two countries.
- **Each Other's Importance:** Finland sees India as a **market** for its products and a favourable investment destination for its high technology industries.
  - India views Finland as an important member of the **European Union** and a **repository of modern technology.**
- **S&T Collaboration:** India and Finland have strong bonding in **Science, Technology and Innovation.**
  - Both India and Finland are consultative members of the **Antarctic Treaty** and have active stations in Antarctica.
    - Finland would be hosting the **Antarctic Treaty Consultative Meeting (ATCM)** in 2023 and India in 2024.
  - **India Meteorological Department (IMD) and the Finnish Meteorological Institute (FMI)** have been cooperating in the **field of Atmospheric Environment** since 2014.
    - Under this collaboration, **Air Quality Forecasting models** developed by FMI are customised for the Indian region resulting in the enhanced capability to forecast pollution events from microscale to regional scale so that pollution control authorities can take appropriate action.
  - Finland is a leader in **5G/6G technology** and Top Indian IT companies are looking to collaborate in this sector.
- **Economic and Commercial Relations:**
  - In 2020, India's total trade (goods and services) with Finland was **USD 2.3 billion which is in India's favour.**

Note:

- Trade-in goods in 2020 were approximately USD 950 mn and were in Finland's favour by approximately USD 134 million.
- **Finland's top imported goods from India (Jan-Dec 2020):**
  - Medicinal, pharmaceutical products
  - Articles of apparel and clothing accessories
  - Textile yarn, fabrics, made-up articles
  - Manufactures of metals
  - Electric machinery and parts
- **India's top imported goods from Finland (Jan-Dec 2020):**
  - Machinery for special industries

- Electric machinery and parts
- Paper, paperboard and articles thereof
- Metalliferous ores and metal scrap
- General industrial machinery

➤ **Cultural Relations:**

- Finland is very **receptive to Indian culture.**
- There are several **Indian dance schools and Yoga schools.**
- Cultural events are organised regularly by Indian Associations and other cultural organisations promoting **Indian dance and music (both classical as well as contemporary).**
- **Finnish India Society has been active since 1956.**



Note:

# Social Issues

## Highlights

- World Immunization Week 2022
- World Haemophilia Day
- Child and Adolescent Healthcare Systems of the World
- World Malaria Day 2022
- Paper on India's Poverty: World Bank
- Polio

## World Immunization Week 2022

### Why in News?

Recently, **World Immunization Week 2022** was celebrated from **24<sup>th</sup> to 30<sup>th</sup> April 2022**.

- The theme of 2022 is **Long Life for All** and it aims to **unify people around the idea that vaccines make it possible** for us to follow our dreams, protect our loved ones and live a long, healthy life.

### What is World Immunization Week?

- World Immunization Week is a health campaign coordinated by the **World Health Organization (WHO)** and celebrated in the **last week of April, every year**.
- It aims to promote the use of vaccines to protect people of all ages against disease.
- Immunization saves millions of **lives and is widely recognized as one of the world's most successful and cost-effective health interventions**.
- Yet, there are still nearly **20 million unvaccinated** and under-vaccinated children in the world today.



National Immunization Awareness Week  
April 23-April 30, 2022

### Why Does Immunization Matter Now More Than Ever?

- For over 200 years, vaccines have protected **us against diseases that threaten lives and prohibit our development**.
  - For more than two centuries, vaccines have helped keep people healthy—from the very **first vaccine**

**developed to protect against smallpox** to the newest **vaccines used to prevent severe cases of Covid-19**.

- With their help, we can progress without the burden of diseases like smallpox and **polio**, which cost humanity hundreds of millions of lives.
  - Vaccines themselves continue to advance, bringing us closer to a world free from the likes of **tuberculosis and cervical cancer**, and ending suffering from childhood diseases like tetanus and measles.

### How does Vaccine Work?

- Vaccines train the immune system to **create antibodies**, just as it does when it's exposed to a disease.
  - This is because vaccines contain **only killed or weakened forms of germs**, they do not cause the disease or put you at risk of its complications.
- Vaccines are **given at different ages, from birth to childhood** and to maintain this record a vaccination card is given.
  - It is important to make sure that all these vaccines are up to date.
- **Children can safely be given combined vaccinations** (e.g., for diphtheria, pertussis and tetanus) — it means fewer injections and reduced discomfort for the child.
- **Vaccines can cause mild side effects**, such as a low-grade fever, pain or redness at the injection site. Mild reactions go away within a few days on their own.
  - Severe or long-lasting side effects are extremely rare.
- Vaccines can safely be given during any mild illnesses. But children with moderate or severe illness with or without fever may **need to wait** until they are better to get the dose.

Note:



**What are recent Immunization Initiatives in India?**

- **Universal Immunization Programme**
- **Intensified Mission Indradhanush (IMI) 3.0 scheme**
- **Pulse polio programme**

## World Haemophilia Day

### Why in News?

**World Haemophilia day** is celebrated on **17<sup>th</sup> April every year**, aiming to increase awareness about haemophilia and other inherited bleeding disorders.

- The day is **celebrated in the honour of Frank Schnabel**, founder of the World Federation of Haemophilia (WHF).
- This **year's (2022) theme** is "Access for All: Partnership. Policy. Progress. Engaging your government, integrating inherited bleeding disorders into national policy".

### What is Haemophilia?

#### ➤ About:

- Haemophilia is a medical condition, **mostly inherited, in which the ability of blood to clot is severely reduced**, so that even a **minor injury can cause severe bleeding**.
  - Haemophilia is caused by a mutation or change, in one of the genes, that provides instructions for making the clotting factor proteins needed to form a blood clot.
  - This change or mutation can prevent the clotting protein from working properly or to be missing altogether. These genes are **located on the X chromosome**.
- Because of the genetics involved in the way the sex of a child is determined, **men are more vulnerable** to haemophilia than women.
- It is quite a rare disease, about 1 in 10,000 people are born with it.

#### ➤ Types:

- The most common type of Haemophilia is **called Haemophilia A**. This means the person does not have enough **clotting factor VIII (factor eight)**.
- **Haemophilia B is less common**. A person with Haemophilia B does not have enough **factor IX (factor nine)**.

- Haemophilia A, occurs in about 1 in 5,000 births, while Haemophilia B is even rarer at about 1 in about 20,000 births.

#### ➤ Symptoms:

- Big bruises.
- Bleeding into muscles and joints.
- Spontaneous bleeding (sudden bleeding inside the body for no clear reason).
- Prolonged bleeding after getting a cut, removing a tooth, or having surgery.

#### ➤ Treatment:

- The main treatment for Haemophilia is **Replacement Therapy**.
- Concentrates of clotting factor VIII (for Haemophilia A) or clotting factor IX (for Haemophilia B) are slowly dripped or injected into a vein. These infusions help replace the clotting factor that is missing or low.

### What is the Indian Scenario of Haemophilia?

- According to the World Federation of Haemophilia's Annual Global Survey 2017, there were over **1.96 lakh persons living with haemophilia across the world in 2017**.
- In the country-wise data, **India emerges with the highest count at nearly 19,000**.
- It is estimated that 80% cases go unregistered, so that the actual count is close to 2 lakh.

#### REGISTERED CASES

India	18,966
US	17,750
China	14,390
Brazil	12,432
France	7,524
World	1,96,706

### What is the World Federation of Haemophilia (WFH)?

- It is an international not-for-profit organization that was established in 1963.
- It is a global network of patient organizations in 140 countries and has official recognition from the World Health Organization.
- Its mission is to improve and sustain care for people with inherited bleeding disorders around the world.

Note:



## Child and Adolescent Healthcare Systems of the World

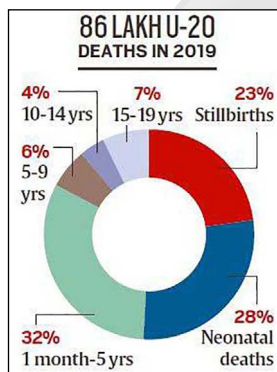
### Why in News?

Recently, a series on Child and Adolescent Healthcare Systems of the World was published in the Lancet Global Health Journal.

- A series of four papers set out the current position, with the gains that have been made globally, which points out the stark variations in the global scenario, with some nations showing more marked improvements than others.

### What are the Major Findings of the Series?

- According to estimate, over **8.62 million deaths** occurred between 28 weeks of gestation and 20 years of age in 2019.
  - **Stillbirths (23%) and neonatal deaths (28%)** together accounted for over half these deaths, while **another one-third (32%)** of the deaths occurred in children between one month and five years of age.
- It records the advancements as contributing to a fall in **child mortality** and morbidity.
  - However, **there are huge inequities**, and several children and adolescents do not thrive or survive because low-cost interventions are not deployed to their benefit.



### What about the impact of Pandemic?

- The **Covid-19 pandemic** showed the **devastating effects** that **gaps in care and education** can have on children.
  - **Health and social systems must be better equipped to work together** to address the emerging needs of children and families as part of the effort to rebuild equitable and resilient services.

- The **challenges faced in responding to the needs of children and families** during the **Covid-19 pandemic** should serve as a wake-up call to the global community, underlining the urgent need to transform the child and adolescent health agenda on a global scale.

### What are the Recommendations?

- **Piecemeal Approach is Needed:**
  - The series, while **calling for efforts to reimagine the delivery of services** that will help children thrive, **mentions that a piecemeal approach**, catering only to certain age groups may not be the best way to handle the crises.
- **Comprehensive Care is Needed:**
  - The authors **call for comprehensive care that spans nutrition, preventive health**, education, economic, and community support across age groups from preconception through the age of 20.
    - The **close involvement of families**, particularly in offering support right from the stage of pregnancy, continuing through the relevant years allowing the child to bloom, is also recommended strongly.
- **Evidence-based Interventions are Needed:**
  - While **calling for scaling-up of evidence-based interventions** for children under five years,
  - The authors **highlighted interventions for school-going children** and the period of transition from childhood to adolescence.
    - This **includes recommendations to support mental health**, address unintentional injuries, **non-communicable diseases**, and **neglected tropical diseases**.

### What are the Related Initiatives taken by India?

- **National Health Mission (NHM)**
- **Mid Day Meal Scheme**
- **Anemia Mukt Bharat Abhiyan**
- **PM Poshan**
- **The National Food Security Act (NFSA), 2013**
- **Pradhan Mantri Matru Vandana Yojana (PMMVY)**
- **Integrated Child Development Scheme**

Note:

## World Malaria Day 2022

### Why in News?

**World Malaria Day** is observed on 25<sup>th</sup> April every year to spread awareness of the global effort to control and ultimately eradicate malaria.

- World Malaria Day was first held in 2008. It was **developed from Africa Malaria Day**, which was an event that had been observed since 2001 by African governments.
- The theme 2022 is **“Harness innovation to reduce the malaria disease burden and save lives.”**

### What is Malaria?

#### ➤ About:

- **Malaria** is a life-threatening **mosquito borne blood disease caused by plasmodium parasites**. It is predominantly found in the **tropical and subtropical areas of Africa, South America as well as Asia**.
- The parasites spread through the bites of infected female **Anopheles mosquitoes**.
  - After entering the human body, parasites initially multiply within the liver cells and then attack the Red Blood Cells (RBCs) resulting in their rupture.
- There are **5 parasite species that cause malaria in humans**, and 2 of these species – **Plasmodium falciparum and Plasmodium vivax** – pose the greatest threat.
- **Symptoms** of malaria include fever and flu-like illness, including shaking chills, headache, muscle aches, and tiredness.
- It is **preventable as well as curable**.
- **Malaria Vaccine:**
  - Known by its lab initials as **RTS, S** but branded as **Mosquirix**, the vaccine has passed lengthy scientific trials that found it to be safe and reducing the risk of malaria by nearly **40%**, the best recorded.
  - It was developed by GlaxoSmithKline (GSK) company and approved by the **European Medicines Agency in 2015**.

- The RTS, S vaccine **trains the immune system to attack the malaria parasite** (*Plasmodium (P.) falciparum*, the deadliest species of the malaria parasite).

#### ➤ India's Scenario:

- Malaria Burden: The **World Malaria Report (WMR) 2020** released by **World Health Organization (WHO)**, which gives the estimated cases for malaria across the world, indicates that India has made considerable progress in reducing its malaria burden.
  - India is the only high endemic country which has reported a decline of 17.6% in 2019 as compared to 2018.

#### What are the Initiatives to Curb Malaria?

- The **WHO** has also identified 25 countries with the potential to eradicate malaria by 2025 under its **‘E-2025 Initiative’**.
- **In India, malaria elimination efforts were initiated in 2015** and were intensified after the launch of the National Framework for Malaria Elimination (NFME) in 2016 by the Ministry of Health and Family Welfare.
  - NFME is in line with WHO's Global Technical Strategy for Malaria, 2016-2030, which guides the **WHO Global Malaria Programme (GMP)**, responsible for coordinating WHO's global efforts to control and eliminate malaria.
- The **National Strategic Plan for Malaria Elimination (2017-22)** was launched in July 2017 which laid down strategies for the following five years.
  - It gives year-wise elimination targets in various parts of the country depending upon the endemicity of malaria.
- Implementation of the **High Burden to High Impact (HBHI) initiative** was started in four states (West Bengal, Jharkhand, Chhattisgarh and Madhya Pradesh) in July 2019.
- **Distribution of Long Lasting Insecticidal Nets (LLINs)** to high burden areas has led to a reduction in endemicity in these otherwise very high endemic states.
- **The Indian Council of Medical Research (ICMR)** has established Malaria Elimination Research Alliance-India (MERA-India) which is a conglomeration of partners working on malaria control.

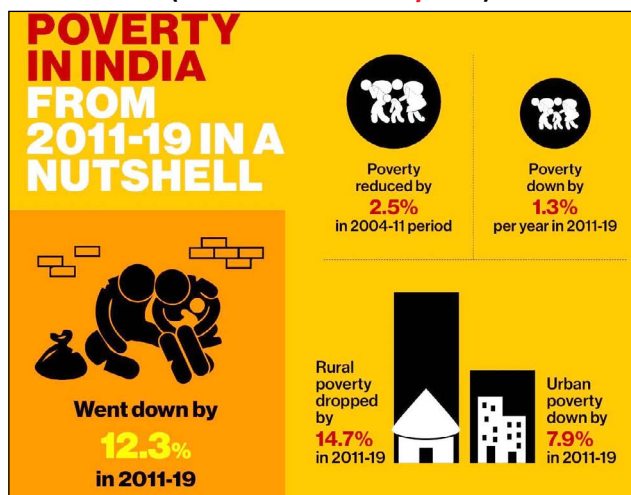
Note:

## Paper on India's Poverty: World Bank

### Why in News?

Recently, the **World Bank** published the paper titled 'Poverty has Declined over the Last Decade But Not As Much As Previously Thought'.

- The paper came close on the heels of a working paper published by the **International Monetary Fund (IMF)** saying India has almost eradicated extreme **poverty** and brought down consumption inequality to its **lowest levels in 40 years** through **state-funded food handouts (Public Distribution System)**.



### What are the Key Highlights of the Report?

- **Decline in Extreme Poverty:** Extreme poverty in India was **12.3% points lower in 2019 compared with 2011**, as poverty headcount rate declined from 22.5% in 2011 to 10.2% in 2019, with a comparatively sharper decline in rural areas.
  - Slight moderation in consumption inequality since 2011, but by a **margin smaller than what is reported in the unreleased National Sample Survey -2017**.
  - The extent of poverty reduction during 2015-2019 is estimated to be notably lower than earlier projections based on growth in private final consumption expenditure reported in national account statistics.
  - The World Bank defines "extreme poverty" as living on less than **USD 1.90 per person per day**.

- **Rural vs Urban Poverty:** Poverty reduction was **higher in rural areas compared with urban India** as rural poverty declined from 26.3% in 2011 to 11.6% in 2019, while in urban areas the decline was from 14.2% to 6.3% in the corresponding period.
  - Rural and urban poverty dropped by **14.7 and 7.9% points during 2011-2019**.
  - Urban poverty in India rose by 2% in 2016, coinciding with the **demonetisation**, and rural poverty rose by 10% in 2019.
- **Small Farmers:** Smallholder farmers have **experienced higher income growth**. Real incomes for farmers with the smallest landholdings have grown by 10% in annualized terms between the two survey rounds (2013 and 2019) compared to a 2% growth for farmers with the largest landholding.
  - The growth in incomes of smallest landholders in rural areas provides more evidence of moderation in income disparity in rural areas.
  - **Smallest landholders comprise a larger share of the poor population**. This income includes wages, net receipt from crop production, net receipt from farming of animal farming and net receipt from non-farm business. Income from leasing out land has been exempted.

### What is the significance of the Report?

- The World Bank's paper is significant as **India has no official estimation of recent periods**. The last expenditure survey was released in 2011 by the **National Sample Survey Organisation (NSSO)**, when the country had also released official estimates of poverty and inequality.
- It sheds light on **how poverty and inequality have evolved since 2011 using a new household panel survey, the Consumer Pyramids Household Survey** conducted by **Centre for Monitoring the Indian Economy (CMIE)**.

### What are the Major Poverty Alleviation Programs of India?

- **Integrated Rural Development Programme (IRDP)**
- **Pradhan Mantri Awaas Yojana**
- **National Old Age Pension Scheme**
- **Annapurna Scheme**
- **Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) 2005**

Note:



- **Deendayal Antyodaya Yojana - National Rural Livelihood Mission (DAY-NRLM)**
- **National Urban Livelihood Mission**
- **Pradhan Mantri Kaushal Vikas Yojana**
- **Pradhan Mantri Jan Dhan Yojana**

### What is the World Bank?

- **About:**
  - It was created in 1944, as the **International Bank for Reconstruction and Development (IBRD)** along with the **International Monetary Fund (IMF)**. The IBRD later became the World Bank.
  - The **World Bank Group is a unique global partnership of five institutions** working for sustainable solutions that reduce poverty and build shared prosperity in developing countries.
- **Members:**
  - It has 189 member countries.
  - India is also a member country.
- **Major reports:**
  - **Ease of Doing Business** (Stopped publishing recently).
  - **Human Capital Index.**
  - **World Development Report.**
- **Its Five development institutions:**
  - International Bank for Reconstruction and Development (IBRD)
  - International Development Association (IDA)
  - International Finance Corporation (IFC).
  - Multilateral Guarantee Agency (MIGA)
  - International Centre for the Settlement of Investment Disputes (ICSID)
    - **India is not a member of this.**

## Polio

### Why in News?

With the possibility of a new **Covid-19 variant** triggering a fresh surge in cases, the Centre has told the states to send sewage samples to all sentinel sites that currently carry out surveillance of **Poliovirus**.

- **Sentinel surveillance** is the “monitoring of rate of occurrence of specific diseases/conditions through a voluntary network of doctors, laboratories and

public health departments with a view to assess the stability or change in health levels of a population”.

### What is Polio?

- **About:**
  - Polio is a **crippling and potentially deadly viral infectious disease** that affects the nervous system.
  - There are **three individual and immunologically distinct wild poliovirus strains:**
    - Wild Poliovirus **type 1** (WPV1)
    - Wild Poliovirus **type 2** (WPV2)
    - Wild Poliovirus **type 3** (WPV3)
  - Symptomatically, all three strains are identical, in that they cause irreversible paralysis or even death.
  - However, there are **genetic and virological differences**, which make these three strains separate viruses which must each be eradicated individually.
- **Spread:**
  - The virus is **transmitted by person-to-person mainly through the faecal-oral route** or, less frequently, by a common vehicle (for example, through contaminated water or food).
  - It largely affects children under 5 years of age. The virus multiplies in the intestine, from where it can invade the nervous system and can cause paralysis.
- **Symptoms:**
  - Most people with polio do not feel sick. Some people have only minor symptoms, such as **fever, tiredness, nausea, headache, pain in the arms and legs, etc.**
  - In rare cases, polio infection causes permanent loss of muscle function (paralysis).
  - Polio can be fatal if the muscles used for breathing are paralysed or if there is an infection of the brain.
- **Prevention and Cure:**
  - There is no cure, but it can be prevented through **Immunisation.**
- **Vaccines:**
  - **Oral Polio Vaccine (OPV):** It is given orally as a birth dose for institutional deliveries, then primary three doses at 6, 10 and 14 weeks and one booster dose at 16-24 months of age.
  - **Injectable Polio Vaccine (IPV):** It is introduced as an additional dose along with the 3rd dose of **DPT (Diphtheria, Pertussis and Tetanus)** under the **Universal Immunisation Programme (UIP).**

Note:

➤ **Recent Outbreaks:**

- In **2019, polio outbreaks were recorded in the Philippines, Malaysia, Ghana, Myanmar, China, Cameroon, Indonesia and Iran**, which were mostly vaccine-derived in which a rare strain of the virus genetically mutated from the strain in the vaccine.
  - According to the **WHO (World Health Organisation)**, if the oral vaccine-virus is excreted and allowed to circulate in an unimmunised or under-immunised population for at least 12 months, it can mutate to cause infections.

➤ **India & Polio:**

- India received polio-free certification by the WHO in 2014, after three years of zero cases.
  - This achievement has been spurred by the successful **Pulse Polio Campaign** in which all children were administered polio drops.
  - The last case due to wild poliovirus in the country was detected on 13th January 2011.

**What are the Polio Eradication Measures?**

➤ **Global:**

○ **Global Polio Eradication Initiative:**

- It was **launched in 1988** by the Global Polio Eradication Initiative (GPEI), by national governments and **World Health Organization (WHO)**. Presently, 80% of the world's population is now living in certified polio-free regions.

- An estimated 1.5 million childhood deaths have been prevented, through the systemic administration of **vitamin A** during polio immunisation activities.

○ **World Polio Day:**

- It is observed every year on **24<sup>th</sup> October** in order to call on countries to stay vigilant in their fight against the disease.

➤ **Indian:**

○ **Pulse Polio Programme:**

- It was started with an objective of achieving hundred percent coverage under Oral Polio Vaccine.

○ **Intensified Mission Indradhanush 2.0:**

- It was a nationwide immunisation drive to mark the 25 years of **Pulse polio programme (2019-20)**.

○ **Universal Immunization Programme (UIP):**

- It was launched in 1985 with the modification to **'Expanded Programme of Immunization (EPI)**.
- The objectives of the Programme include: Rapidly increasing immunisation coverage, Improving the quality of services, Establishing a reliable cold chain system to the health facility level, Introducing a district-wise system for monitoring of performance, Achieving self-sufficiency in vaccine production.



Note:



drishti



# Science & Technology

## Highlights

- GPS Aided GEO Augmented Navigation
- First Human Case of H3N8 Bird Flu
- Blue Straggler Stars
- Bernardinelli-Bernstein Comet
- Jupiter's Moon Europa
- Mysterious Liver Disease
- Perseverance Rover Captures Eclipse on Mars
- Genetically Modified Mosquitoes
- National Cyber Security Strategy

## GPS Aided GEO Augmented Navigation

### Why in News?

Recently, **Airports Authority of India (AAI)** Successfully conducted a light trial using **GAGAN {GPS (Global Positioning System) Aided GEO Augmented Navigation}** based LPV (Localizer Performance with Vertical Guidance) Approach Procedures.

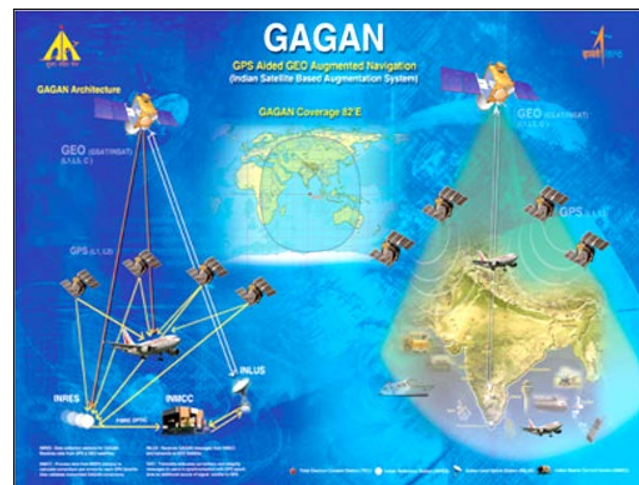
- Many airports including the ones under **Regional Connectivity Scheme** are being surveyed for the development of **GAGAN-based LPV Instrument Approach Procedures**.
- This is being done so that **suitably equipped aircraft can derive maximum benefit** in terms of improved safety during landing, reduction in delays, diversions and cancellations, reduction in fuel consumption, etc.

### What is LPV?

- LPV is a **Satellite Based Procedure** which has been used by aircraft **for landing purposes**.
- LPV approaches make aircraft possible **to land at airports not equipped with expensive Instrument Landing Systems**, which includes many small regional and local airports.
- Lowering the decision height up to 250 ft provides a **substantial operational benefit in poor weather and low visibility conditions**.
- Thus, any airport which hitherto would require higher visibility minima, will be able to accept aircraft benefiting remote airports which are devoid of precision approach capability equipment.

### What is GAGAN?

- **About:**
  - It is a **Space Based Augmentation System (SBAS)** jointly developed by **ISRO (Indian Space Research Organisation)** and AAI to provide the best possible navigational services over Indian FIR (Flight Information Region) with the capability of expanding to neighboring FIRs.
  - GAGAN is a **system of satellites and ground stations that provide GPS signal corrections**, giving you better position accuracy.
  - It is the **first such system developed for India and neighboring countries in the equatorial region**.



- GAGAN System was **certified by DGCA (Directorate General of Civil Aviation)** in 2015 for **Approach with Vertical Guidance (APV 1)** and **en-route (RNP 0.1)** operations.

Note:

- There are only four Space-Based augmentation systems available in the world namely **India** (GAGAN), **US**(WAAS) **Europe** (EGNOS) and **Japan** (MSAS).
- **Services Offered:**
  - Aviation, Forest management, Railways signaling, Scientific Research for Atmospheric Studies, Natural Resource and Land Management, Location based services, Mobile, Tourism.
- **Coverage Area:**
  - GAGAN GEO footprint **expands from Africa to Australia and GAGAN system has capability to cater 45 reference stations** for expansion to neighboring countries.
  - GAGAN provides a **civil aeronautical navigation signal consistent with International Civil Aviation Organization (ICAO) Standards and Recommended Practices (SARPs)** as established by the Global Navigation Satellite System (GNSS) Panel.

#### What is a Global Positioning System?

- GPS is a **satellite navigation system, used to determine the ground position of an object.** It is a U.S.-owned utility that provides users with Positioning, Navigation, and Timing (PNT) services.
- It is a **network 24 satellite** which provides service to civilian and military users. The civilian service is freely available to all users on a continuous, worldwide basis. The military service is available to U.S. and allied armed forces as well as approved Government agencies.

## First Human Case of H3N8 Bird Flu

### Why in News

China's National Health Commission (NHC) announced that a four-year-old boy was found to have been infected with the **H3N8 variant of Bird Flu** after developing several symptoms, including fever.

- H3N8 variant has previously been detected elsewhere in the world in **horses, dogs, birds and seals.**
- However, before this no human cases of **H3N8 have been reported.**

### What is Bird Flue?

- Avian influenza—known informally as **avian flu or bird flu**—refers to **“influenza caused by viruses adapted to birds”.**
  - Most avian influenza viruses do not infect humans; however, some, such as **A(H5N1) and A(H7N9), have caused serious infections in people.**
- There is **no vaccine** against H5N1.
- **Most avian influenza viruses do not infect humans,** however some, such as A(H5N1) and A(H7N9), cross the species barrier and cause disease or subclinical infections in humans and other mammals as well.
- The Avian (H5N1) virus subtype, a highly pathogenic virus, **first infected humans in 1997 during a poultry epidemic outbreak in Hong Kong SAR, China.**

### What are Types of Influenza Virus?

- There are four types of influenza viruses: **influenza A, B, C, and D.**
- Influenza A and B are the two types of influenza that cause **epidemic seasonal infections nearly every year.**
  - Avian influenza Type A viruses
    - **Type A viruses are classified based on two proteins on their surfaces – Hemagglutinin (HA) and Neuraminidase (NA).**
    - There are about 18 HA subtypes and 11 NA subtypes.
    - Several combinations of these two proteins are possible e.g., **H5N1, H7N2, H9N6, H17N10, H18N11 etc.**
- **Influenza C mainly occurs in humans,** but has been known to also occur in dogs and pigs.
- **Influenza D is found mainly in cattle.** It's not known to infect or cause illness in humans yet.

### Why are Bird Flu Viruses a Cause of Concern?

- Speculation about the origin of the **SARS-CoV-2** has heightened worries **about animal- and bird-borne viruses.**
- The emergence of new strains, particularly among domesticated animals and birds, is a **story of evolution and inevitability, and sporadic reports of new viruses infecting humans abound.**

Note:

- As long as avian **influenza viruses circulate in poultry**, sporadic infection of avian influenza in humans is not surprising, which is a **vivid reminder that the threat of influenza pandemic is persistent**

### **How Does it Spread to Humans?**

- Several subtypes and strains of avian influenza viruses are now found around the world, some of them capable of **causing death among humans and others inflicting serious losses on poultry farmers**.
- Though **Human to Human transmission** — which takes place mostly after intimate and constant physical contact — is rare, the infection is virulent and, in an **estimated 60% of cases, fatal**.
- There are no known instances of the **flu spreading through ingestion of the bird**, even though people do contract it while **plucking or culling an infected bird without proper protection**, or if they are in a water body that has the droppings of an infected bird.
- In humans, the symptoms of bird infection are the same as that of any other seasonal flu — **fever, body ache, sore throat, runny nose, headache, fatigue, etc.**; however, it can turn **serious very quickly, and lead to respiratory distress**.

### **How to Counter the Bird Flu Threat?**

- As a major agricultural nation with a **large poultry industry**, India has implemented an action plan formulated by the **Centre's Department of Animal Husbandry, Dairying and Fisheries** to deal with avian influenza.
  - It incorporates a clear protocol for **preventive checks and testing**, for reporting an outbreak, removing farm birds from an affected area and compensating farmers.
  - It relies on a **broad-based periodic testing system** for farm birds and wet markets, and upgrading of apex scientific institutions such as the **National Institute of High Security Animal Diseases, Bhopal**.
  - The **early detection and identification** of the virus subtypes helps in launching containment measures.
- **Public health messaging**, with advice on poultry consumption during a suspected outbreak, is essential to contain the outbreak as well as **curtailing rumor mongering**.

- The efficacy of the measures naturally depends on the alacrity with which the animal husbandry apparatus at the **State level collects samples and sounds the alarm when a disease outbreak is imminent**.

## **Blue Straggler Stars**

### **Why in the News?**

Recently, Scientists at **Indian Institute of Astrophysics, Bengaluru**, have found support for one way to understand peculiarity about Blue Straggler Star.

- The researchers made use of the observations by the **UVIT instrument (Ultraviolet Imaging Telescope) of Astrosat**, India's first science observatory in space.
- Earlier in September 2021, in the first-ever comprehensive analysis of **blue stragglers**, Indian researchers had proposed a hypothesis for the evolution of blue straggler stars.

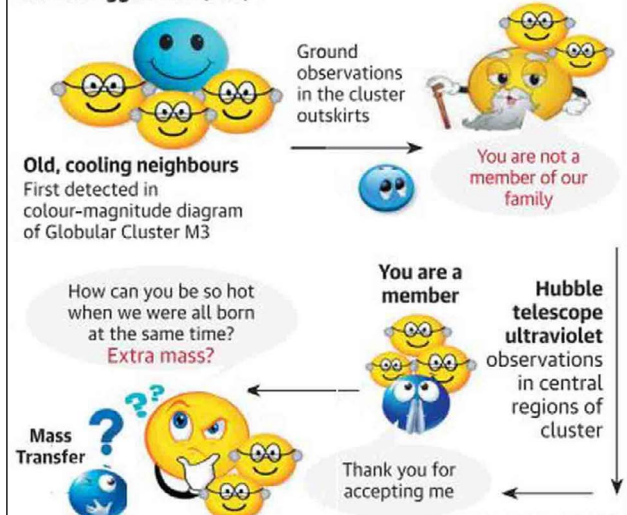
### **What are Blue Stragglers and How are they Different?**

- Blue Straggler Star are hot, blue, massive stars and seem to have a **different trajectory of evolution from the norm**.
- There are a few stars that, when they are expected to start expanding in size and cooling down, **do just the opposite**.
- They **grow brighter and hotter** as indicated by their **blue color**.
  - Thus, standing out from the cooler red stars in their vicinity in the color-magnitude diagram.
- Since they lag their peers in evolution, they are called **stragglers**, more specifically, blue stragglers, because of their hot, blue color.
- **Allan Sandage** (an astronomer with Carnegie Observatories in Pasadena, California) discovered blue stragglers in the globular cluster M3 in **1952-53**.
- Most are located at least several thousand light-years away from the sun, and most are around 12 billion years old or more.
- The Milky Way's largest and **brightest globular is Omega Centauri**.

Note:

## The puzzle posed by blue stragglers

Blue straggler star (BSS)



### What are Possible Reasons for this peculiarity?

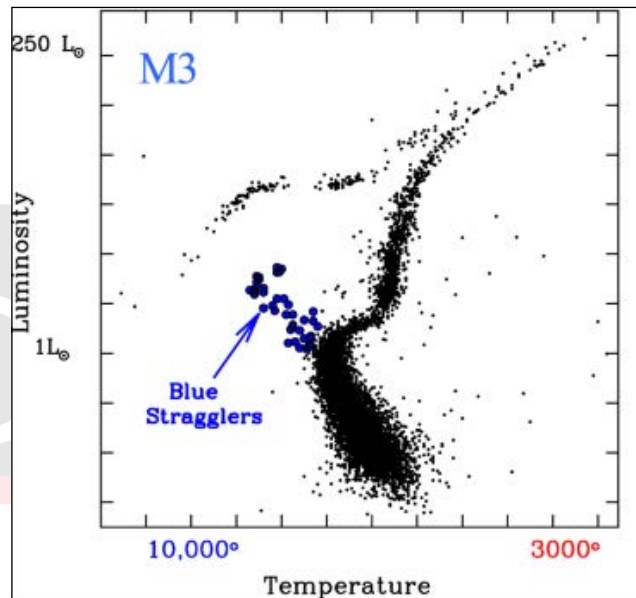
- **Possibility 1:** These do not belong to the family of stars in the cluster, and hence not expected to have the group properties.
- **Possibility 2:** if they belong to the group, the evasive behavior is due to these stars gaining mass from a binary companion.
  - In this second scenario, the straggler draws matter from the giant companion star and grows more massive, hot and blue, and the red giant ends up as a normal or smaller white dwarf.
  - In the research, the scientists found conclusive evidence of white dwarf companions to blue stragglers.
- **Possibility 3:** Straggler draws matter from a companion star, but there is a third star that facilitates this process.

### How is the Age or Evolution of a Star Studied?

- To study the behavior of the star, a graph of the color of a star against its magnitude is plotted.
  - This gives an indication of star's surface temperature, which is related to the total energy given off by it.
  - If all the stars are done in a globular cluster, many stars are seen to find a place within a band known as the main sequence.
  - This graph is called the Hertzsprung-Russell diagram.
    - This diagram plots the temperature of stars against their luminosity or the color of stars against their absolute magnitude.

- It shows a group of stars in various stages of their evolution.

- For example, our Sun is what is called a main sequence star.
  - Given its mass and age, it is expected that once it has converted all its hydrogen into helium, its core will get denser, while outer layers expand.
    - So, it will bloat into a red giant.
  - After this phase, its fuel is spent, it will shrink, becoming a smaller, cooling star called a white dwarf star at the end of its life.



### What is Indian Institute of Astrophysics?

- The IIA with its headquarters in Bengaluru is an autonomous Research Institute wholly financed by the Department of Science and Technology, Government of India.
- IIA conducts research primarily in the areas of astronomy, astrophysics and related fields.
- It was established in 1971.

## Bernardinelli-Bernstein Comet

### Why in News?

Recently, the National Aeronautics and Space Administration's (NASA) Hubble Space Telescope has confirmed that the huge Bernardinelli-Bernstein comet is indeed the largest icy comet nucleus ever seen by astronomers.

Note:



- The nucleus is called the **C/2014 UN271** which has an estimated **diameter of almost 129 kilometres**.
- The nucleus is **around 50 times larger** than that of most known comets, and its mass is estimated to be around 500 trillion tonnes.

#### What is the Hubble Space Telescope?

- It was launched by **NASA in 1990** and is named in honour of Edwin Hubble, a revered American astronomer of the early 20<sup>th</sup> century.
- The telescope is a **space-based observatory** and has **made significant observations** related to interstellar objects, including **moons around Pluto** and **a comet crashing into Jupiter**.
- The telescope has now been in operation for over thirty years.
- In December 2021, NASA's **James Webb Space Telescope**, a revolutionary instrument built to peer the farthest yet into the cosmos, was launched.
  - It is also considered a **successor of the Hubble Telescope** and will extend and complement its discoveries.

#### What is the Bernardinelli-Berstein Comet?

- The **comet** was **discovered by astronomers Pedro Bernardinelli and Gary Bernstein** in archival images from the Dark Energy Survey at an astronomical observatory in Chile.
  - It was **discovered in November 2010** and has been intensively studied since.
- The comet **has been travelling towards the sun for over a million years** and it is believed to have originated in the **Oort Cloud**.
  - Oort Cloud is a **distant region of the solar system** that is predicted to be the source of most comets.
  - The Oort Cloud is **still only a theoretical concept** as the comets that constitute it are too faint and distant to be directly observed. It was **first hypothesised** by Dutch astronomer Jan Oort in **1950**.
- The Bernardinelli-Berstein comet **follows a 3-million-year-long elliptical orbit** and has an **estimated temperature of minus 348 degrees Fahrenheit**.
  - It is **warm enough to sublimate carbon monoxide (CO)** from the surface to produce the dusty coma.

#### What are the Key Highlights about CO?

- **Carbon monoxide (CO)** is a colourless, odourless, tasteless and highly toxic gas that is slightly less dense than air.
- It is **short-lived** (stay only a few months) in the atmosphere.
- It is **produced from the exhaust of internal combustion engines** and incomplete combustion of various other fuels.

#### What is a Comet?

- Comets are **large objects made of dust and ice** that orbit the Sun.
  - The word comet comes from the **Latin word 'Cometa'** which means 'long-haired'.
- The earliest known record of a comet sighting was made by an **astrologer in 1059 BC**.
- **Comets or 'dirty snowballs'** are mostly made of dust, rocks and ice and can range in their width from a few miles to tens of miles wide.
- **When they orbit closer to the sun**, they heat up and **release debris of dust and gases**.
  - The **solid portions of comets** consisting mostly of water, ice and embedded dust particles are inactive when far away from the sun.
  - When near the sun, **the icy cometary surfaces vaporize** and throw off large quantities of gas and dust thus forming the enormous atmosphere and tails.
  - The released **gases form a glowing head that can often be larger than a planet** and the debris forms a tail that can stretch out to millions of miles.
  - Each time a comet passes the sun, it loses some of its material and it will eventually disappear completely as a result.
  - **Comets may be occasionally pushed into orbits closer to the Sun** and the Earth's neighbourhood due to forces of gravity.

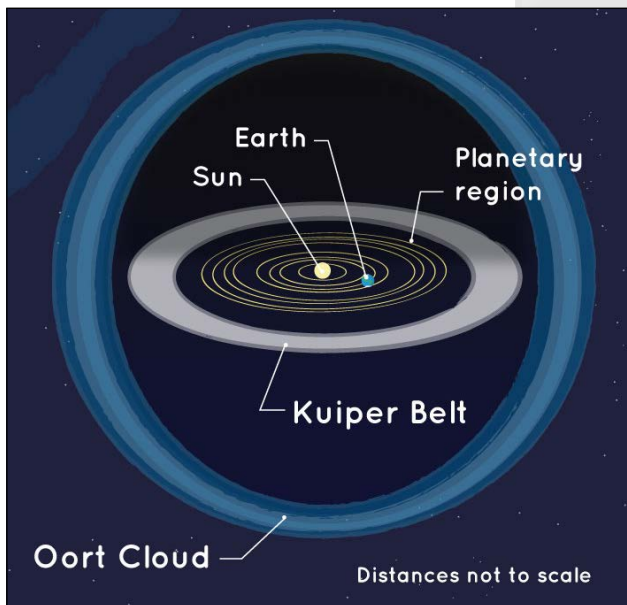
#### Where do Comets Come From?

- According to NASA, while **there are millions of comets orbiting the sun**, there are more than 3,650 known comets as of now.
  - **Predictable Comets:**

Note:



- The predictable comets are the **short-period comets** which take less than 200 years to orbit around the sun.
  - These can be found in the **Kuiper belt**, where many comets orbit the sun in the realm of Pluto.
  - One of the **most famous short-period comets** is called **Halley's Comet** that reappears every 76 years. Halley's will be **sighted next in 2062**.
- **Less Predictable Comets:**
  - The **less-predictable comets** can be found in the **Oort cloud** that is about 100,000 AU (Astronomical Unit which is the distance between the Earth and the Sun and is roughly 150 million km) from the sun or 100,000 times the distance between the Earth and the sun.
  - **Comets in this cloud can take as long as 30 million years** to complete one rotation around the sun.



## Jupiter's Moon Europa

### Why in News?

A team of researchers from Stanford University have found the possibility of **water on one of Jupiter's moons Europa**, a prime candidate for life in the solar system.

- Earlier, **NASA's (National Aeronautics and Space Administration) Dawn spacecraft, dwarf planet Ceres** reportedly found **salty water underground**.

- **Earlier, Scientists also found signatures of water vapor in the atmosphere of K2-18b.**

### What is Europa?

- Europa is **slightly smaller than Earth's moon** and its diameter is about one-quarter that of the Earth.
- Even though Europa has a **very thin oxygen atmosphere**, **it is considered one of the most promising places in the solar system** to find present-day environments that are suitable for life beyond the Earth.
- It is also believed that underneath **Europa's icy surface the amount of water is twice that on Earth**.
- Scientists believe **Europa's ice shell is 15-25 km thick and is floating on an ocean, which is estimated to be between 60-150 km deep**.
- Interestingly, while its diameter is less than the Earth's, **Europa probably contains twice the amount of the water in all of the Earth's oceans**.
- **NASA** is expected to launch its **Europa Clipper in 2024**.
  - The module will **orbit Jupiter and conduct multiple close flybys to Europa to gather data on the moon's atmosphere, surface and its interior**.

### What are the Findings?

- Europa's surface is mostly solid water ice and **contains water beneath it**.
- The double ridges – the **formations which are most common on Europa's surface and are like those seen on Earth's Greenland ice sheet**.
- Double Ridges of the moon are **formed over shallow pockets of water**.

### What are the Implications of the recent findings?

- The double ridges of Europa **increase the potential habitability of the moon**.
- The ice shell, which is potentially miles thick, has been a difficult prospect for scientists to sample. But according to the new evidence gathered by the Stanford team, **the ice shell is believed to be less of a barrier and more of a dynamic system**.
  - This means that the **ice shell does not behave like an inert block of ice, but rather undergoes a variety of geological and hydrological processes**.
  - There is a **possibility that life has a shot if there are pockets of water in the shell**.

Note:

- If the mechanism seen in Greenland is how these things happen on Europa, **it suggests there's water everywhere.**

#### What is Jupiter?

- Fifth in line from the Sun, Jupiter is, by far, the **largest planet in the solar system** – more than twice as massive as all the other planets combined.
  - Jupiter, Saturn, Uranus and Neptune are called **Jovian or Gas Giant Planets**. These have thick atmosphere, **mostly of helium and hydrogen.**
- Jupiter's iconic **Great Red Spot** is a giant storm bigger than Earth that has raged for hundreds of years.
- Jupiter **rotates once about every 10 hours** (a Jovian day), but takes about **12 Earth years** to complete **one orbit of the Sun** (a Jovian year).
- Jupiter has **more than 75 moons**.
  - The planet Jupiter's **four largest moons are called the Galilean satellites** after Italian astronomer Galileo Galilei, who first observed them in 1610.
  - These large moons, named **Io, Europa, Ganymede, and Callisto**, are each distinctive world.
- In 1979, the **Voyager mission** discovered Jupiter's faint **ring system**.
- **Nine spacecraft** have visited Jupiter. Seven flew by and two have orbited the gas giant. **Juno**, the most recent, arrived at Jupiter in 2016.

## Mysterious Liver Disease

### Why in News?

Recently, some Cases of a **Mysterious Liver Disease** have been reported in Spain, Denmark and the Netherlands, besides the US and UK.

### What is this Mysterious Disease?

- **About:**
  - Children between the **age of 1 to 6 years old** have been the target of the disease.
  - According to reports, the disease might be related to **virus usually associated with colds.**
  - The disease has been reported to be severe so far. Though **no children died** so far in the US, UK, six children needed liver transplants.

### Symptoms:

- The symptoms are general liver diseases like **hepatitis** or liver inflammation but the cause remains unknown.
- **Jaundice, diarrhoea** and **abdominal pain** has been reported.

### Probable Causes:

- Laboratory testing has ruled out the **hepatitis** type A, B, C and E viruses that usually cause such illnesses. The role of international travel, if any, is not yet known.
- Maybe a group of viruses called **adenoviruses, which cause common respiratory illnesses** such as the common cold.
- Some of the European children tested positive for **adenovirus**, and some tested positive for **Covid-19.**
- Adenoviruses are preferred for vaccines because their **DNA (DeoxyRiboNucleic Acid)** is double stranded which makes them genetically more stable and the chances of them changing after injection are lower.
  - As per their analyses, **there could be a possible association of hepatitis with Adenovirus 41.**

## Perseverance Rover Captures Eclipse on Mars

### Why in News?

Recently, **NASA's (National Aeronautics and Space Administration) Perseverance Rover** has captured a **solar eclipse** on **Mars**.

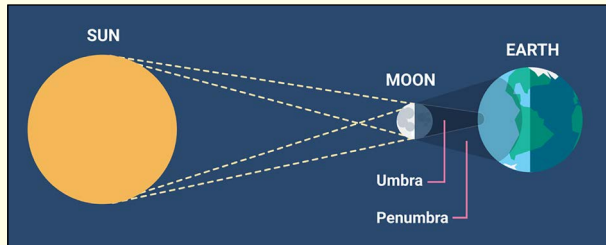
- Perseverance Mars rover captured an eclipse featuring Phobos, one of Mars' two moons. Phobos is moving very slowly towards Mars, and millions of years from now, they will collide.
- These observations can help **scientists better understand the moon's orbit and how its gravity pulls on the Martian surface**, ultimately shaping the Red Planet's crust and mantle.

### What is Solar Eclipse?

- A **solar eclipse** is a phenomenon that occurs when the moon comes in the way of the sun's light. The moon's shadow casts itself on Earth, blocking out the sun's light (as seen from Earth).

Note:

- The moon's shadow has **two parts: a central region (umbra) and an outer region (penumbra)**. Depending upon which part of the shadow passes over the Earth, one of **three types** of solar eclipses could be observed
  - **Total Solar Eclipse**- The entire central portion of the sun is blocked out by the moon.
  - **Partial Solar Eclipse**- Only part of the sun's surface is blocked out.
  - **Annular Solar Eclipse**- The sun is covered in such a way that only a small ring-like sliver of light is seen from the sun's disc. This ring is known as the ring of fire.
    - An annular eclipse happens when the moon is farthest from Earth. As the moon is farther away from Earth, it seems smaller and is unable to block the entire view of the sun, because of which the ring-like structure could be observed.



### What is Perseverance Rover?

- **About:**
  - Perseverance is the most advanced, most expensive and most sophisticated **mobile laboratory sent to Mars**.
  - It is different from previous missions because it is capable of drilling and collecting core samples of the most promising rocks and soils and setting them aside in a "cache" on the surface of Mars.
  - It is the centerpiece of **NASA's Mars 2020 mission** which also included the small robotic and coaxial helicopter Ingenuity.
- **Launch:** 30th July 2020
- **Landing:** 18th February 2021
- **Power Source:**
  - A **Multi-Mission Radioisotope Thermoelectric Generator (MMRTG)** which converts heat from the natural radioactive decay of plutonium (Plutonium Dioxide) into electricity.

- **Objectives:**
  - Perseverance's primary objective is **looking for signs of ancient microbial life**.
  - The rover is **studying and analyzing the Red Planet's regolith, rock and dust, and is the first rover to collect and cache samples**.

### What is Mars?

- **Size and Distance:**
  - It is the **fourth planet from the Sun** and the second-smallest planet in the Solar System.
  - Mars is about **half the size of Earth**.
- **Similarity to the Earth (Orbit and Rotation):**
  - As Mars orbits the Sun, it completes one **rotation every 24.6 hours**, which is very similar to one day on Earth (23.9 hours).
  - Mars' **axis of rotation is tilted 25 degrees** with respect to the plane of its orbit around the Sun. This is similar with Earth, which has an axial tilt of 23.4 degrees.
  - Like Earth, **Mars has distinct seasons**, but they last longer than seasons on Earth since Mars takes longer to orbit the Sun (because it's farther away).
  - **Martian days are called sols**—short for 'solar day'.
- **Surface:**
  - It has colors such as brown, gold and tan. **The reason Mars looks reddish is due to oxidation or rusting of iron in the rocks, and dust of Mars**. Hence it is also called Red Planet.
  - Mars has the **largest volcano in the solar system i.e. Olympus Mons**. It's three times taller than Earth's Mt. Everest with a base the size of the state of New Mexico.
- **Atmosphere:**
  - Mars has a thin atmosphere made up mostly of **carbon dioxide, nitrogen and argon gases**.
- **Magnetosphere:**
  - Mars has no magnetic field till date, but areas of the Martian crust in the southern hemisphere are highly magnetized, indicating traces of a magnetic field.
- **Moons:**
  - Mars has **two small moons, Phobos and Deimos**, that may be captured asteroids.

Note:

### What are the other Mars Missions?

- **ExoMars rover (2021):**
  - The European Space Agency and Russian space agency planned to send a joint mission to Mars in September 2022.
    - It has since been suspended after Russia's invasion of Ukraine.
- **Tianwen-1: China's Mars Mission (2021):**
  - China's first Mars mission will search for pockets of water beneath the surface that could host life.
- **UAE's Hope Mars Mission (UAE's first-ever interplanetary mission) (2021):**
  - The UAE Hope Mars Mission is building a complete picture of Mars' climate.
- **India's Mars Orbiter Mission (MOM) or Mangalyaan (2013):**
  - Mangalyaan is India's Mars orbiter that has been observing the planet since September 2014.
- **Mars 2 and Mars 3 (1971):**
  - The identical Soviet Mars 2 and Mars 3 spacecraft, launched in 1971, each released descent craft 4.5 hours prior to their arrivals at Mars. But the landers had the misfortune of arriving at Mars during one of the greatest dust storms in recorded history.

## Genetically Modified Mosquitoes

### Why in News?

Recently, the US conducted an **open-air study of genetically engineered mosquitoes** which shows promising results.

- The aim of the study is **to reduce the population of wild Aedes aegypti mosquitoes** that are a **vector for viruses** such as chikungunya, **dengue, zika and yellow fever**.
- The mosquitoes had **already been field-tested in Brazil, Panama, the Cayman Islands, and Malaysia**, but no such study was conducted in the United States.

Vector	Disease caused	Type of pathogen	
Mosquito	Aedes	Chikungunya	Virus
		Dengue	Virus
		Lymphatic filariasis	Parasite
		Rift Valley fever	Virus
		Yellow Fever	Virus
		Zika	Virus
Anopheles		Lymphatic filariasis	Parasite
		Malaria	Parasite
Culex		Japanese encephalitis	Virus
		Lymphatic filariasis	Parasite
		West Nile fever	Virus

### What are Genetically Modified Mosquitoes?

- **GM mosquitoes are mass-produced in a laboratory to carry two types of genes:**
  - A **self-limiting gene** that prevents female mosquito offspring from surviving to adulthood.
  - A **fluorescent marker gene** that glows under a special red light. This allows researchers to identify GM mosquitoes in the wild.
- GM mosquitoes produced in the laboratory lay eggs. These eggs carry the self-limiting and fluorescent marker genes.
- GM mosquito eggs that carry the self-limiting gene are released into an area. Once they have hatched and develop through to the adult stage, **they are available to mate with wild females**. The genes are passed on to offspring.
  - The male mosquitoes have a protein (the tTAV-OX5034 protein) that prevents female offspring from surviving when male OX5034 mosquitoes mate with wild female mosquitoes.
- The **female offspring die before they become adults**. The expected result is that the number of Aedes aegypti mosquitoes in the area decreases.

### What are the Related Concerns?

- Genetically modifying insects to control their population to curb the spread of a disease is **not a novel idea**. Similar efforts began a decade ago, with scientists now attempting to engineer **ticks** to prevent diseases.
- The concerns **ranged from the modified mosquitoes harming people**, its impact on mosquito-eating species and other unintended consequences such as the emergence of a deadly virus.
- Experts also believe that **reducing the population of the virus-spreading mosquito is not enough** to curb a potential outbreak.

Note:



### Zika Virus

- Zika virus is a **mosquito-borne flavivirus** that was first identified in Uganda in 1947 in monkeys.
- It was **later identified in humans in 1952** in Uganda and the United Republic of Tanzania. Outbreaks of Zika virus disease have been recorded in Africa, the Americas, Asia, and the Pacific.
- Zika virus disease is **caused by a virus transmitted primarily by Aedes mosquitoes** and can be passed from a pregnant woman to her foetus.
- Sexual transmission of Zika virus is also possible.
- There is **no vaccine or medicine for Zika**. Instead, the focus is on relieving symptoms and includes rest, rehydration and acetaminophen for fever and pain.

### Dengue

- Dengue is **transmitted by several species of mosquito** within the genus Aedes.
- Symptoms include fever, headache, muscle, and joint pains, and a characteristic skin rash that is similar to measles.
- The **dengue vaccine CYD-TDV or Dengvaxia** has been approved in about 20 countries.

### Chikungunya

- Chikungunya is caused by a **mosquito-borne virus**.
- It is transmitted by **Aedes aegypti and Aedes albopictus mosquitoes**.
- Its symptoms are characterized by abrupt fever and severe joint pain, often in hands and feet, and may include headache, muscle pain, joint swelling or rash.
- There is **no specific antiviral drug treatment** for chikungunya.
- There is **no commercial chikungunya vaccine**.

### Yellow Fever

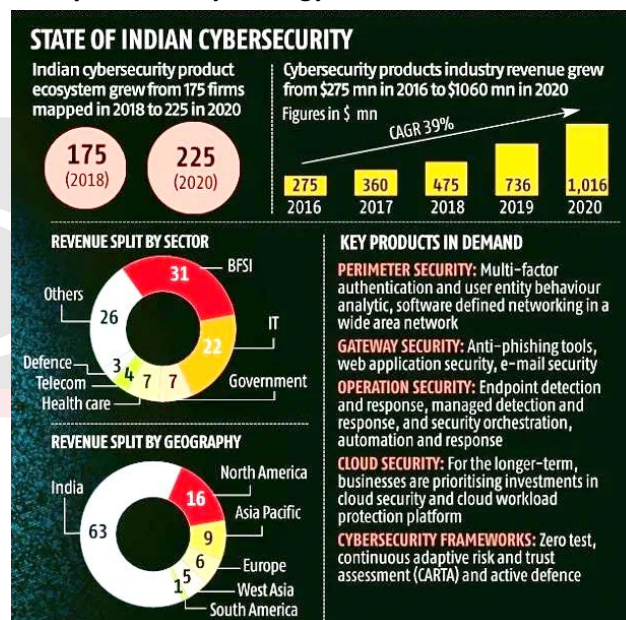
- It is an **acute viral haemorrhagic disease** transmitted by infected mosquitoes. The “yellow” in the name refers to the jaundice that affects some patients.
- Symptoms of yellow fever include fever, headache, jaundice, muscle pain, nausea, vomiting and fatigue.
- **Yellow fever vaccine which is known as 17D** and according to the **World Health Organization (WHO)** also, it is safe and affordable. However, there are reports of multisystem organ failure following vaccination.

## National Cyber Security Strategy

### Why in News

In 2020, the **National Cyber Security Strategy** was conceptualised by the **Data Security Council of India (DSCI)** headed by **Lt General Rajesh Pant**. The report focused on 21 areas to ensure a safe, secure, trusted, resilient, and vibrant cyberspace for India.

- However, amid a surge in **cyberattacks on India's networks**, the Centre is yet to implement the **National Cyber Security Strategy**.



### What is the Need for a National Cyber Security Strategy?

- **Increasing Number Of Cyber Attacks:** As per American cybersecurity firm Palo Alto Networks' 2021 report, **Maharashtra** was the **most targeted state in India** — facing 42% of all ransomware attacks.
  - The report stated that India is among the more **economically profitable regions for hacker groups** and hence these hackers ask Indian firms to pay a ransom, usually using cryptocurrencies, in order to regain access to the data.
  - **One in four Indian organisations suffered a ransomware attack in 2021** — higher than the global average of 21%.

Note:



### ➤ **Cyber Warfare Offensives:**

- The **US** is just one of many countries that have invested significant amounts of money in developing not just defences against attack, but the ability to mount **damaging cyber warfare offensives**.
- The countries which are believed to have the most developed cyber warfare capabilities are the **US, China, Russia, Israel and the United Kingdom**.

### ➤ **Increased Digital usage Post-Covid:**

- Critical infrastructure is getting **digitised in a very fast way** — this includes financial services, banks, power, manufacturing, nuclear power plants, etc.

### ➤ **For Protecting Critical Sectors:**

- It is particularly significant given the increasing interconnectedness of sectors and proliferation of entry points into the internet, which could further grow with the **adoption of 5G**.
- There were **6.97 lakh cyber security incidents** reported in the first eight months of 2020, nearly equivalent to the previous four years combined, according to information reported to and tracked by the **Indian Computer Emergency Response Team (CERT-In)**.

### ➤ **Recent Cyber Attacks:**

- There has been a steep rise in the use of resources like **malware** by a Chinese group called **Red Echo to target “a large swathe” of India’s power sector**.
- Red Echo used malware called **ShadowPad, which involves the use of a backdoor to access servers**.
- The Chinese hacker group known as **Stone Panda had “identified gaps and vulnerabilities** in the IT infrastructure and supply chain software of Bharat Biotech and the Serum Institute of India.

### ➤ **For Government:**

- A local, state or central government maintains a huge amount of confidential data related to the **country (geographical, military-strategic assets etc.)** and citizens.

### ➤ **For Individuals:**

- Photos, videos and other personal information shared by an individual on social networking sites can be inappropriately used by others, leading to serious and even life-threatening incidents.

### ➤ **For Businesses:**

- Companies have a lot of data and information on their systems.

- A cyber attack may lead to loss of **competitive information** (such as patents or original work), and loss of employees/customers’ private data resulting in complete loss of public trust in the integrity of the organisation.

### ***What are the Main Components of the National Cyber Security Strategy?***

- **Large Scale Digitisation of Public Services:** Focus on security in the early stages of design in all digitisation initiatives.

- **Developing institutional capability** for assessment, evaluation, certification, and rating of the core devices
- Timely reporting of vulnerabilities and incidents.

- **Supply Chain Security:** Monitoring and mapping of the supply chain of the **Integrated Circuits (ICT)** and electronics products.

- Leveraging the country’s **semiconductor** design capabilities globally at strategic, tactical and technical levels.

- **Critical Information Infrastructure Protection:** Integrating **Supervisory Control And Data Acquisition (SCADA)** security

- Maintaining a repository of vulnerabilities.
- Preparing an aggregate level **security baseline of the sector** and tracking its controls.
- Devising **audit parameters for threat preparedness** and developing cyber-insurance products.

- **Digital Payments:** Mapping and modelling of devices and platforms deployed, supply chain, transacting entities, payment flows, **interfaces and data exchange**.

- **State-Level Cyber Security:** Developing state-level cybersecurity policies,

- Allocation of dedicated funds,
- Critical scrutiny of digitization plans,
- Guidelines for security architecture, operations, and governance.

- **Security of Small And Medium Businesses:** Policy intervention in cybersecurity granting incentives for a higher level of cybersecurity preparedness.

- Developing security standards, frameworks, and architectures for the adoption of the **Internet of Things (IoT)** and **industrialisation**.

Note:

### What steps does the report suggest?

- **Budgetary Provisions:** A minimum allocation of **0.25% of the annual budget**, which can be **raised upto 1%** has been recommended to be set aside for cyber security.
  - In terms of separate ministries and agencies, **15-20% of the IT/technology expenditure should be earmarked for cybersecurity.**
  - It also suggests setting up a **Fund of Funds for cybersecurity** and providing Central funding to States to build capabilities in the same field.
- **Research, Innovation, Skill-Building And Technology Development:** The report suggests investing in modernisation and **digitisation of ICT**, setting up a short and long term agenda for cyber security via outcome-based programs and providing investments in deep-tech **cyber security innovation.**
  - DSCI further recommends creating a '**cyber security services**' with cadres chosen from the **Indian Engineering Services.**
- **Crisis Management:** For adequate preparation to handle a crisis, DSCI recommends **holding cybersecurity drills** which include real-life scenarios with their ramifications.
- **Cyber Insurance:** Cyber insurance being a yet to be researched field, must have an actuarial science to **address cybersecurity risks in business and technology scenarios** as well as calculate threat exposures.
- **Cyber Diplomacy:** Cyber diplomacy plays a huge role in **shaping India's global relations.** Hence cyber security

preparedness of key regional blocks like **Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC)** and **Shanghai Cooperation Organisation (SCO)** must be ensured via programs, exchanges and industrial support.

- To further better diplomacy, the government should promote brand India as a responsible player in cyber security and also create '**Cyber envoys**' for the key countries/regions
- **Cybercrime Investigation:** With the increase in cybercrime across the world, the report recommends unburdening the judicial system by creating laws to resolve spamming and fake news.
  - It also suggests charting a **5-year roadmap factoring possible technology transformation**, setting up exclusive courts to deal with cybercrimes and removing the backlog of cybercrime.
  - Moreover, DSCI suggests advanced forensic training for agencies to keep up in the age of AI/ML, **Blockchain**, IoT, Cloud, Automation.

#### What are Present Government Initiatives for Cyber Security?

- Cyber Surakshit Bharat Initiative.
- Cyber Swachhta Kendra.
- Online cybercrime reporting portal.
- Indian Cyber Crime Coordination Centre (I4C).
- National Critical Information Infrastructure Protection Centre (NCIIPC).
- Information Technology Act, 2000.



Note:



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# Environment & Ecology

## Highlights

- *Wild Life (Protection) Amendment Bill, 2021*
- *Earth Day*
- *Mugger Crocodile*
- *Blue Blob*
- *Forest Fires Reducing Solar Power Production*
- *Imbalance in Nitrogen Availability*

## Wild Life (Protection) Amendment Bill, 2021

### Why in News

Recently, the **Parliamentary Standing Committee on Science and Technology, Environment, Forests and Climate Change** submitted its report on the proposed the **Wild Life (Protection) Amendment Bill, 2021**.

- The standing committee has found that **some species were excluded from various schedules of wildlife and plants** that have been proposed by the **Environment Ministry** and has recommended a revised listing of schedules to include these species.

### What is Wild Life (Protection) Act, 1972?

- **Wild Life (Protection) Act, 1972** provides a legal framework for the protection of various species of wild animals and plants, the management of their habitats, and the regulation and control of trade in wild animals, plants and products made from them.
- The Act also lists **schedules of plants and animals** that are afforded various degrees of protection and monitoring by the government.
- The Act has been amended several times, with the **last amendment having been made in 2006**.

### What are Key features of the Bill?

- **Implementing Provision of CITES:** The Bill seeks to implement provisions of **Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)**. The Bill provides for the central government to designate a:
  - **Management Authority**, which grants export or import permits for trade of specimens.

- Every person engaging in trade of a scheduled specimen must report the details of the transaction to the Management Authority.
- As per CITES, the Management Authority may use an identification mark for a specimen.
- The Bill prohibits any person from modifying or removing the identification mark of the specimen.
- Additionally, every person possessing live specimens of scheduled animals must obtain a registration certificate from the Management Authority.
  - **Scientific Authority**, which gives advice on aspects related to impact on the survival of the specimens being traded.
- **Rationalizing Schedules:** Currently, the Act has six schedules for specially protected plants (one), specially protected animals (four), and vermin species (one). The Bill **reduces the total number of schedules to four** by:
  - **Schedule I** for species that will enjoy the highest level of protection,
  - **Schedule II** for species that will be subject to a lesser degree of protection and
  - **Schedule III** that covers plants.
  - It **removes the schedule for vermin species**. Vermin refers to small animals that carry diseases and destroy food.
  - It **inserts a new schedule for specimens listed in the Appendices under CITES (scheduled specimens)**.
- **Invasive Alien Species:** The Bills empowers the central government to **regulate or prohibit the import, trade, possession or proliferation of invasive alien species**.

Note:



- Invasive alien species refers to plant or animal species which are **not native to India and whose introduction may adversely impact wild life or its habitat.**
- The central government may authorize an officer to seize and dispose the invasive species.
- **Control of Sanctuaries:** The Act entrusts the **Chief Wild Life Warden** to control, manage and maintain all sanctuaries in a state.
  - The Chief Wild Life Warden is **appointed by the state government.**
  - The Bill specifies that the actions of the **Chief Warden must be in accordance with the management plans for the sanctuary.**
  - For sanctuaries falling under special areas, the management plan must be prepared after due consultation with the Gram Sabha concerned.
  - Special areas include a Scheduled Area or areas where the **Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006** is applicable.
  - Scheduled Areas are economically backward areas with a predominantly tribal population, notified under the **Fifth Schedule to the Constitution.**
- **Conservation Reserves:** Under the Act, state governments may declare areas adjacent to national parks and sanctuaries as a **conservation reserve**, for protecting flora and fauna, and their habitat.
  - The Bill empowers the central government to also **notify a conservation reserve.**
- **Surrender of Captive Animals:** The Bill provides for any person to voluntarily surrender any captive animals or animal products to the **Chief Wild Life Warden.**
  - No compensation will be paid to the person for surrendering such items.
  - The surrendered items become property of the state government.
- **Penalties:** The Act prescribes imprisonment terms and fines for violating the provisions of the Act. The Bill increases these fines.

Type of Violation	1972 Act	2021 Bill
General violation	Up to Rs 25,000	Up to Rs 1,00,000
Specially protected animals	At least Rs 10,000	At least Rs 25,000

## Earth Day

### Why in News

- On 22nd April 2022, the **52nd anniversary of Earth Day** was celebrated. Earth Day is an international event celebrated around the **world to pledge support for environmental protection.**
- The **theme for Earth Day 2022** is “Invest In our Planet”.

### What is Earth Day?

- **Background:** Earth Day was first observed in 1970 when 20 million took to the streets to protest environmental degradation on the call of US Senator Gaylord Nelson.
  - The event was triggered by the **1969 Santa Barbara oil spill**, as well as other issues such as smog and polluted rivers.
  - In 2009, the United Nations designated 22nd April as **‘International Mother Earth Day.**
- **About:** Earth Day is now globally coordinated by **EARTHDAY.ORG**, which is a non-profit organization. It was formerly known as **Earth Day Network.**
  - It aims to **“build the world’s largest environmental movement to drive transformative change for people and the planet.”**
  - It recognizes a collective responsibility, as called for in the **1992 Rio Declaration (Earth Summit)**, to promote harmony with nature and the Earth to achieve a just balance among the economic, social and environmental needs of present and future generations of humanity.
  - The landmark **Paris Agreement**, which brings almost 200 countries together in setting a common target to reduce global greenhouse emissions, was also signed on Earth Day 2016.

### What are some Other Important Days?

- 22nd March: **World Water Day**
- 22nd April: Earth Day
- 22nd May: **World Biodiversity Day**
- 5th June: **World Environment Day**
- **Earth Overshoot Day**

### What is Earth Hour?

- **Earth Hour** is the **World Wildlife Fund for Nature (WWF)**’s annual initiative that began in 2007. It is held every year on the last Saturday of March.

Note:



- It encourages people from more than 180 countries to switch off the lights from 8.30 pm to 9.30 pm as per their local time.
- It seeks to raise awareness about **climate change** and the need to save the environment.

## Mugger Crocodile

### Why in News?

Recently, the Indian Railways has delivered water to Pali district in western Rajasthan to ensure survival of **Mugger Crocodile or Marsh Crocodile** as the region's water bodies have dried up due to a hot March.

### What is Mugger or Marsh Crocodile?

- **Scientific Name:** *Crocodylus palustris*
- **Description:**
  - An egg-laying and hole-nesting species, also known to be dangerous.
- **Habitat:**
  - Mainly restricted to the Indian subcontinent where it may be found in a number of freshwater habitat types and also in coastal saltwater lagoons and estuaries.
  - It is already extinct in Bhutan and Myanmar.



- **Threats:**
  - Habitat destruction, fragmentation, and transformation, fishing activities and use of crocodile parts for medicinal purposes.
- **Protection Status:**
  - **IUCN List of Threatened Species:** Vulnerable
  - **CITES:** Appendix I
  - **Wildlife Protection Act, 1972:** Schedule I

### What are the Other Species of Crocodilian?

- **Estuarine or Saltwater Crocodile:**
  - Considered as the Earth's largest living crocodile species, infamous globally as a known man-eater.
  - Found in Odisha's **Bhitarkanika National Park**, the **Sundarbans** in West Bengal and the **Andamans and Nicobar Islands**.
    - Also found across Southeast Asia and northern Australia.
  - **Protection Status:**
    - **IUCN List of Threatened Species:** Least Concern
    - **CITES :** Appendix I (except the populations of Australia, Indonesia and Papua New Guinea, which are included in Appendix II).
    - **Wildlife Protection Act, 1972 :** Schedule I
- **Gharial:**
  - Sometimes called gavials, are a type of Asian crocodilian distinguished by their long, thin snouts which resembles a pot (ghara in Hindi).
  - Mostly found in **fresh waters of the himalayan rivers**.
  - The **Chambal river** in the northern slopes of the Vindhya mountains (Madhya Pradesh) is known as the **primary habitat** of gharials.
  - Other himalayan rivers like **Ghagra**, Gandak river, Girwa river, Ramganga river and the Sone river are **secondary habitats**.
  - **Protection Status:**
    - **IUCN List of Threatened Species:** Critically Endangered
    - **CITES:** Appendix I
    - **Wildlife Protection Act, 1972:** Schedule I
  - **Odisha** has announced a **cash award of Rs. 1,000** to conserve gharials in **Mahanadi River Basin**.

## Blue Blob

### Why in News?

According to a recent Research, a region of cooling water in the North **Atlantic Ocean** near Iceland, **nicknamed the "Blue blob"** may have helped temporarily stall the melting of **Arctic sea ice**.

- However, the study has also stated that the effects of **climate change** will catch up to the massive ice chunks if temperatures are not kept in check.

Note:

### What is Blue Blob and its role in Slowing Down of Glacier Melting?

- It is a **cold patch located south of Iceland and Greenland** and little is known about it.
- The cold patch was **most prominent during the winter of 2014-2015** when the sea surface temperature was about **1.4 degrees Celsius** colder than normal.
- The Arctic region is **reportedly warming four times faster** than the global average and Iceland's glaciers steadily shrank from 1995 to 2010, losing an average of 11 billion tons of ice per year.
- Starting in 2011, **however, the speed of Iceland's melting slowed**, resulting in about half as much ice loss annually and the **Blue Blob has been linked to cooler air** temperatures over Iceland's glaciers and cooler waters.
  - This **trend was not seen in nearby**, larger glaciers across **Greenland and Svalbard**.
- Before the Blue Blob, a long-term cooling trend in the same region, called the **Atlantic Warming Hole**, reduced sea surface temperatures by about **0.4 to 0.8 degrees Celsius** during the last century and may continue to cool the region in the future.
  - A possible cause of the Warming Hole is a slowdown of the **Atlantic Meridional Overturning Circulation (AMOC)**.
    - AMOC is an **ocean current that brings warm water up** from the tropics to the Arctic, thus reducing the amount of heat delivered to the region.

### What is the Arctic?

- The Arctic is a **polar region** located at the **northernmost part of Earth**.
- Land within the Arctic region has seasonally varying snow and ice cover.
- It consists of the **Arctic Ocean**, adjacent seas, and parts of Alaska (United States), Canada, Finland, Greenland (Denmark), Iceland, Norway, Russia, and Sweden.
- Since 2013, **India has had observer status in the Arctic Council**, which is the predominant inter-governmental forum for cooperation on the environmental and development aspects of the Arctic.
  - The Arctic Council is the **leading intergovernmental forum** promoting cooperation, coordination

and interaction among the Arctic States, Arctic indigenous communities and other Arctic inhabitants on common Arctic issues, in particular on issues of sustainable development and environmental protection in the Arctic.

- **Members of the Arctic Council:** Ottawa Declaration declares Canada, the Kingdom of Denmark, Finland, Iceland, Norway, the Russian Federation, Sweden and the United States of America as a member of the Arctic Council.



### What is the Relevance of Arctic for India?

- The Arctic region is **significant due to the shipping routes** that run through it.
- According to an analysis published by the Manohar Parrikar Institute for Defense Studies and Analyses, the adverse effects of the Arctic are not just impacting the availability of mineral and **hydrocarbon** resources, but also transforming global shipping routes.
- According to the Ministry of External Affairs, **India can play a constructive role in securing a stable Arctic**.
- The region **holds immense geopolitical importance** as the **Arctic is projected to be ice-free by 2050** and world powers making a beeline to exploit the region rich in natural resources.
- In March 2022, **India's Arctic Policy**, titled 'India and the Arctic: building a partnership for sustainable development' was unveiled.

Note:

## Forest Fires Reducing Solar Power Production

### Why in News?

A new study by Aryabhata Research Institute of Observational Sciences (ARIES) and National Observatory of Athens (NOA), Greece has found that **Forest Fires can reduce solar power production in India.**

- The scientists used remote sensing data for the research and studied the impact of aerosols and clouds on the solar energy potential over the Indian region with extensive analysis and model simulations.
- Large-scale development of a solar energy system requires proper planning, and there is a need to estimate the solar potential.
- ARIES is an autonomous institute under the Department of Science & Technology and is located in Nainital (Uttarakhand).

### What are the Forest Fires?

- Also called **bush or vegetation fire or wildfire**, it can be described as any uncontrolled and non-prescribed combustion or burning of plants in a natural setting such as a forest, grassland, brush land or tundra, which consumes the natural fuels and spreads based on environmental conditions (e.g., wind, topography).
- Forest Fires can be incited by human actions, such as land clearing, extreme drought or in rare cases by **lightning**.
- There are three conditions that need to be present in order for a wildfire to burn: fuel, oxygen, and a heat source.

### What are the Findings?

- Several factors like clouds, aerosols, and pollution generated from various sources **limit the solar irradiance causing performance issues in the photovoltaic and concentrated solar power plant installations.**
- Apart from clouds and aerosols, forest fires play a very crucial role in reducing solar energy production.

- The findings of the present study will drastically increase the awareness among decision-makers about the effect of forest fires on energy management and planning at a country level.
- In addition, this research **can support the mitigation processes and policies for climate change and its direct and indirect impacts on sustainable development.**
- Such analysis of the energy and financial losses due to the direct and indirect effects of forest fires on the production of solar plants can help grid operators to plan and schedule power generation, as also the distribution, supply, security, and overall stability of power production.

## Imbalance in Nitrogen Availability

### Why in News?

According to a new report, an **imbalance in nitrogen availability has been reported** across the globe, with some places having an excess and others a shortage of the element.

### What are the Reasons Causing the Decline?

- **Rising carbon dioxide levels** and other global changes **have increased demand for nitrogen** by plants and microbes.
  - Plants grow quickly when **exposed to high carbon dioxide (CO<sub>2</sub>)** concentrations.
  - The presence of high CO<sub>2</sub> levels dilutes the availability of nitrogen in Plants, thus, their demand for nitrogen goes up.
- Other factors contributing to nitrogen decline include **warming and disturbances, including wildfire.**
  - Many areas of the world, where people do not contribute excessive amounts of nitrogen to the soil, long-term records demonstrate that nitrogen availability is declining, with important consequences for plant and animal growth.
  - **Burning fossil fuels, application of nitrogen-based fertilizers**, and other activities can dramatically increase the amount of biologically available nitrogen in an ecosystem.

Note:



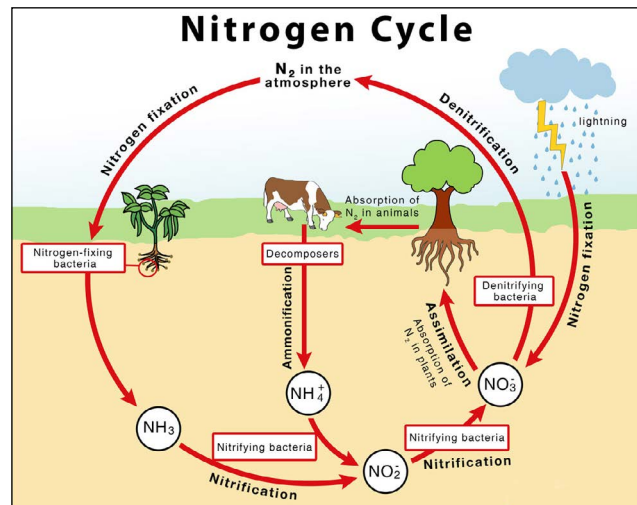
### What are the Consequences of Nitrogen Imbalance?

- **Low Nitrogen:**
  - Declining nitrogen availability can be **linked to insect apocalypse**.
  - **Climate change, insecticides, herbicides, light pollution, invasive species** and changes in agriculture and land use are **causing Earth to lose about 1-2% of its insects each year**. This is being termed as **"Insect Apocalypse"**.
    - It **can encourage swarming in some species of locusts**.
    - Further, low nitrogen availability **could limit plants' ability to capture CO<sub>2</sub>** from the atmosphere.
- **High Nitrogen:**
  - When excessive nitrogen accumulates in the streams, inland lakes and coastal bodies of water, it could sometimes result in **eutrophication**, leading to harmful algal blooms, dead zones and fish kills.
  - **Eutrophication:** When a water body becomes overly enriched with minerals and nutrients which induce excessive growth of algae or algal bloom. This process also results in oxygen depletion of the water body.
  - In humans, high levels of nitrogen in the groundwater are **linked to intestinal cancers and miscarriages** and can be fatal for infants.

### What are the Key Highlights about Nitrogen?

- Nitrogen is **one of the primary nutrients** critical for the survival of all living organisms.
- Nitrogen gas **makes up 78% of our atmosphere** and nitrogen is also a **part of many molecules essential to life** like proteins, nucleic acids (**DNA and RNA**) and some vitamins.
- **Nitrogen is found in other biologically important compounds** such as alkaloids and urea too.
- Nitrogen is thus an essential nutrient for all life-forms and life would be simple if all these life-forms could use the atmospheric nitrogen directly.

- Although **nitrogen is abundant in the atmosphere** as Nitrogen gas (N<sub>2</sub>), it is largely inaccessible in this form to most organisms, making nitrogen a scarce resource and often limiting primary productivity in many ecosystems.
- Only **when nitrogen is converted from Nitrogen gas into ammonia (NH<sub>3</sub>)** does it become available to primary producers, such as plants.
- The major transformations of nitrogen gas are through the process of:
  - Nitrogen fixation (nitrogen gas to ammonia),
  - Nitrification (ammonia to nitrite and nitrate),
  - Denitrification (nitrate to nitrogen gases)
- The **process of converting Nitrogen gas (N<sub>2</sub>) into biologically available nitrogen**, that is ammonia, by nitrogen fixing microorganisms, is called **nitrogen fixation**.
  - Some **nitrogen-fixing organisms are free-living**, while others are symbiotic nitrogen-fixers, which require a close association with the host to carry out the process.
  - Some of these bacteria are aerobic, others are anaerobic; some are phototrophic, others are chemotrophic (use chemicals as their energy source instead of light).
  - They all have a similar enzyme complex called nitrogenase that **catalyzes the reduction of N<sub>2</sub> to NH<sub>3</sub> (ammonia)**.



Note:

# History

## Highlights

- Malcha Mahal
- Guru Tegh Bahadur

## Malcha Mahal

### Why in News?

The Delhi government is about to renovate the 14<sup>th</sup> century monument Malcha Mahal.



### What is Malcha Mahal?

- It was built in 1325 by the then Sultan Firoz Shah Tughlaq and was, for a long time, used as a hunting lodge.
- It later became the residence of the descendants of the Nawab of Awadh.
- It is said that it came to be known as 'Wilayat Mahal' after Begum Wilayat Mahal of Awadh, who claimed that she was a member of the royal family of Oudh. She was given the palace by the government in 1985.
- When she died by suicide in 1993, it came into the ownership of her daughter Sakina Mahal, and son Prince Ali Raza (Cyrus), who died in 2017; his sister passed away some years before that.

### Who was Feroz Shah Tughlaq?

- He was born in 1309 and ascended the throne of Delhi after the demise of his cousin Muhammad-bin-Tughlaq.

- He was the third ruler of the Tughlaq dynasty that ruled over Delhi from 1320 to 1412 AD. Tughlaq was in power from 1351 to 1388 AD.
- He was the one who started the imposition of Jaziya.
  - Jaziya' or 'Jizya' implies a per capita yearly taxation historically levied in the form of financial charge on permanent non-Muslim subjects of a state governed by Islamic law to fund public expenditures of the state.
- He provided the principle of inheritance to the armed forces where the officers were permitted to rest and send their children to the army in their place. However, they were not paid in real money but by land.
- The British called him the 'father of the irrigation department' because of the many gardens and canals that he built.

### What are the Key Points of Tughlaq Dynasty?

- The Tughlaqs were a Muslim family of Turkic origin. The dynasty reached its zenith point between AD 1330 and 1335 when Muhammad Bin Tughlaq led military campaign.
- Its rule was marked by torture, cruelty and rebellions, resulting in the rapid disintegration of the dynasty's territorial reach after 1335 AD.
- The Tughlaq's provided three competent rulers – Ghiyasuddin Tughlaq (AD 1320-1325), Muhammad-bin-Tughluq (AD 1325-1351) and Firuz Shah Tughluq (1351 to 1388 AD).
- Ghiyasuddin Tughlaq was the founder of the dynasty.

## Guru Tegh Bahadur

### Why in News?

The Prime Minister will give an address from the Red Fort to mark the 401st birth anniversary of Guru Tegh Bahadur (1621-1675).

Note:

### Who was Guru Teg Bahadur?

- Tegh Bahadur was born in Amritsar on 21<sup>st</sup> April 1621 to Mata Nanki and Guru Hargobind, the sixth Sikh guru, who raised an army against the Mughals and introduced the concept of warrior saints.
- As a boy, Tegh Bahadur was called **Tyag Mal** because of his ascetic nature. He spent his early childhood in Amritsar under the tutelage of Bhai Gurdas, who taught him Gurmukhi, Hindi, Sanskrit, and Indian religious philosophy, while Baba Budha trained him in swordsmanship, archery, and horse-riding.
- He was only 13 when he distinguished himself in a battle against a Mughal chieftain.
- His writings are housed in the sacred text, 'Guru Granth Sahib,' in the form of 116 poetic hymns.
- He was also an avid traveler and played a key role in setting up preaching centers throughout the Indian subcontinent.
- During one such mission, he founded the town of Chak-Nanki in Punjab, which later became a part of Punjab's Anandpur Sahib.
- In the year 1675, Guru Tegh Bahadur was executed in Delhi under the orders of the Mughal Emperor Aurangzeb.

### What is Sikhism?

- The word 'Sikh' in the Punjabi language means 'disciple'. Sikhs are the disciples of God who follow the writings and teachings of the Ten Sikh Gurus.
- Sikhs believe in one God (Ek Onkar). They believe they should remember God in everything they do. This is called Simran.
- The Sikhs call their faith Gurmat (Punjabi: "the Way of the Guru"). According to Sikh tradition, Sikhism was established by Guru Nanak (1469–1539) and subsequently led by a succession of nine other Gurus.
- The development of Sikhism was influenced by the Bhakti movement and Vaishnava Hinduism.
- The Khalsa upholds the highest Sikh virtues of commitment, dedication and a social conscience.
  - The Khalsa are men and women who have undergone the Sikh baptism ceremony and who strictly follow the Sikh Code of Conduct and Conventions.

- They wear the prescribed physical articles of the faith (5K's: Kesh (uncut hair), Kangha (a wooden comb), Kara (an iron bracelet), Kachera (cotton underpants) and Kirpan (an iron dagger).
- Sikhism condemns blind rituals such as fasting, visiting places of pilgrimage, superstitions, worship of the dead, idol worship etc.
- It preaches that people of different races, religions, or sex are all equal in the eyes of God.
- The Sikh Literature:
  - The Adi Granth is believed by Sikhs to be the abode of the eternal Guru, and for that reason it is known to all Sikhs as the Guru Granth Sahib.
  - The Dasam Granth is controversial in the Panth because of questions concerning its authorship and composition.
- Shiromani Gurdwara Parbandhak Committee:
  - Shiromani Gurdwara Parbandhak Committee, Amritsar, Punjab (India), an apex democratically elected body of Sikhs residing all over the world was established under a special Act of Parliament in 1925 to look after the religious affairs, cultural and historical monuments.

#### Ten Gurus of Sikh Religion

Guru Nanak Dev (1469-1539)	<ul style="list-style-type: none"> <li>➤ He was the first guru of Sikh and the founder of Sikh religion.</li> <li>➤ He started the GURU KA LANGAR.</li> <li>➤ He was a contemporary of Babur.</li> <li>➤ Kartarpur corridor was commemorated on the 550<sup>th</sup> birth anniversary of Guru Nanak Dev.</li> </ul>
Guru Angad (1504-1552)	<ul style="list-style-type: none"> <li>➤ He invented the new script called Guru-Mukhi and popularized and expanded the system of Guru ka Langar.</li> </ul>
Guru Amar Das (1479-1574)	<ul style="list-style-type: none"> <li>➤ He introduced the ceremony of the Anand Karaj Marriage.</li> <li>➤ He abolished the custom of Sati and Purdah system among the Sikhs.</li> <li>➤ He was a contemporary of Akbar.</li> </ul>

Note:

<b>Guru Ram Das (1534-1581)</b>	<ul style="list-style-type: none"> <li>➤ He <b>founded Amritsar in 1577</b> on the land granted by Akbar.</li> <li>➤ He <b>started the construction of Golden Temple/Swarna mandir</b> at Amritsar.</li> </ul>	<b>Guru Har Rai (1630-1661)</b>	<ul style="list-style-type: none"> <li>➤ He was a man of peace thus devoted most of his life in maintaining peace with Aurangzeb and doing missionary work.</li> </ul>
<b>Guru Arjun Dev (1563-1606)</b>	<ul style="list-style-type: none"> <li>➤ He <b>composed the Adi Granth</b> in 1604.</li> <li>➤ He led to the <b>completion of construction of Golden temple.</b></li> <li>➤ He was acclaimed as <b>Shaheeden-de-Sartaj.</b></li> <li>➤ He was <b>executed by Jahangir</b> on charges of helping prince Khusrau.</li> </ul>	<b>Guru Har Krishan 1656-1664)</b>	<ul style="list-style-type: none"> <li>➤ He was the youngest guru of all and was given the title of Guru at a very early age of 5.</li> <li>➤ He was summoned by Aurangzeb against anti-Islamic blasphemy.</li> </ul>
<b>Guru Hargobind (1594-1644)</b>	<ul style="list-style-type: none"> <li>➤ He led to the transformation of the Sikh Community into a Military community. He is known as <b>"Soldier Saint"</b>.</li> <li>➤ He led to the establishment of <b>Akal Takht</b> and fortified the Amritsar City.</li> <li>➤ He <b>waged wars against Jahangir and Shah Jahan.</b></li> </ul>	<b>Guru Teg Bahadur (1621-1675)</b>	<ul style="list-style-type: none"> <li>➤ He <b>founded Anandpur Sahib.</b></li> </ul>
		<b>Guru Gobind Singh (1666-1708)</b>	<ul style="list-style-type: none"> <li>➤ He founded a warrior community known as <b>Khalsa</b> in 1699.</li> <li>➤ He introduced a new rite "Pahul".</li> <li>➤ He joined Bahadur Shah's as a noble.</li> <li>➤ He was the last Sikh Guru in human form, and he passed the Guruship of Sikhs to the Guru Granth Sahib.</li> </ul>

Note:



# Geography

## Highlights

- Kwar Hydroelectric Project
- Seafloor Spreading
- Western Disturbances
- Pre-Eruption Warning Signals at Volcanoes

## Kwar Hydroelectric Project

### Why in News?

The Cabinet Committee on Economic Affairs (CCEA) has approved the **540-megawatt Kwar hydroelectric project on the Chenab in Kishtwar district of Jammu and Kashmir.**

### What is the Kwar Project?

- This is part of the **Indus basin** and would be one of at least four projects coming up in the district, including the 1,000 MWs **Pakal Dul hydroelectric project** and 624 MWs run-of-the-river **Kiru hydroelectric project.**
- Under the 1960 vintage **Indus Water Treaty (IWT)** between India and Pakistan, the two countries share the waters of six rivers in the Indus basin that flow through India towards Pakistan.
  - Of these, India has complete rights over three eastern rivers - Sutlej, Beas and Ravi, while Pakistan has rights over the western rivers - Chenab, Jhelum, and Indus.
- The Kwar project will be implemented by Chenab Valley Power Projects Private Ltd (CVPPPL), a joint venture company between NHPC Ltd and Jammu & Kashmir State Power Development Corporation (JKSPDC).
- The project is expected to generate 1975.54 million units in a 90% dependable year.
- The construction activities of the Project would result in direct and indirect employment of about 2,500 people.

### What are the Key Points of Chenab River?

- **Source:** It rises in the upper Himalayas in the Lahaul and Spiti district of Himachal Pradesh state.
  - The river is formed by the confluence of two rivers, Chandra and Bhaga, at Tandi, 8 km southwest of Keylong, in the Lahaul and Spiti district.

- The Bhaga river originates from Surya taal lake, which is situated a few kilometers west of the Bara-lacha la pass in Himachal Pradesh.
- The Chandra river originates from glaciers east of the same pass (near Chandra Taal).
- **Flows Through:** It flows through the Jammu region of Jammu and Kashmir into the plains of Punjab, Pakistan, before flowing into the Indus River.
- **Some of the important projects/dams on Chenab:**
  - **Ratle Hydro Electric Project**
  - Salal Dam- hydroelectric power project near Reasi
  - Dul Hasti Hydroelectric Plant- power project in Kishtwar District
  - Pakal Dul Dam (under construction)- on a tributary Marusadar River in Kishtwar District.
  - Kiru Hydroelectric Project (Kishtwar District)



Note:

## Seafloor Spreading

### Why in News?

According to a study that analyzed data from the last 19 million years, **Seafloor spreading rates have slowed down by roughly 35% globally.**

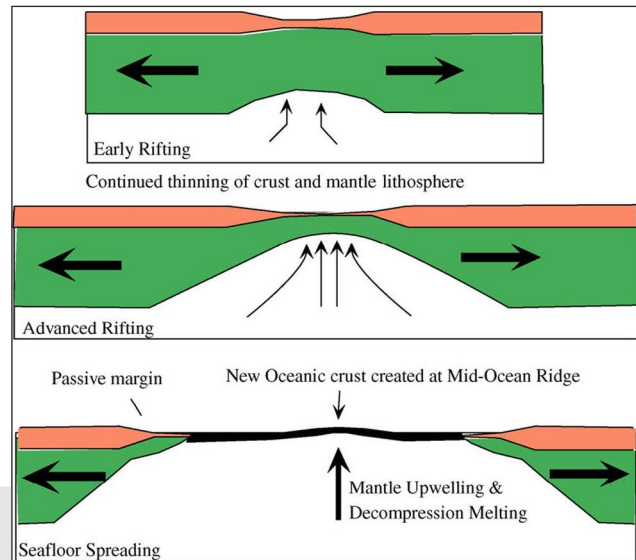
### What are the Highlights of the Study?

- For this study, researchers **selected 18 of the world's largest spreading ridges** (mid-ocean ridges).
  - A ridge or a mountain ridge is a **geographical feature consisting of a chain of mountains or hills** that form a continuous elevated crest for an extended distance.
- By **studying magnetic records in the rocks on the oceanic crust**, they calculated how much oceanic crust had formed over the last 19 million years.
  - **Basalt rocks** on the oceanic crust contain magnetic properties.
  - Their **magnetism is influenced by the Earth's magnetic field** when the magma reaches the surface and begins cooling to form the crust.
- But the records are incomplete **because the crusts get destroyed at subduction zones.**
  - **Subduction zone is a point where two tectonic plates collide**, causing one of them to sink into the Earth's mantle beneath the other plate.

### What is Seafloor Spreading?

- The seafloor spreading hypothesis was proposed by the **American geophysicist Harry H. Hess in 1960.**
- Seafloor spreading is the **process of magma welling up in the rift** as the old crust pulls itself in opposite directions. **Cold seawater cools the magma**, creating a new crust.
- The **upward movement and eventual cooling of this magma** has created high ridges on the ocean floor over millions of years.
  - However, the seafloor is destroyed in subduction zones, where oceanic crust slides under continents and sinks back into the mantle, and is reformed at seafloor spreading ridges.
- The **East Pacific Rise is a site of major seafloor spreading** in the **Ring of Fire.**

- It is located on the **divergent boundary of the Pacific Plate, the Cocos Plate** (west of Central America), the Nazca Plate (west of South America), the North-American Plate and the Antarctic Plate.



### What are the Reasons behind the Decline of Seafloor Spreading?

- **Growing mountains on the continents** might be one of the factors driving the slowdown (as it causes resistance to seafloor spreading).
  - About 200 million years ago, when the **supercontinent Pangea start breaking**, there weren't any major plate collisions or related mountain chains.
  - The continents were fairly flat back then.
- **Mature Stage of the Supercontinent Breakup:** As **Pangea progressively broke apart**, new ocean basins formed and eventually, the widely fragmented continents started running into each other.
  - This happened, for instance, **between India and Eurasia**, the Arabian Peninsula and Eurasia as well as Africa and Eurasia.
    - This is a **natural consequence of a 'mature' stage** of supercontinent breakup and dispersal.
- **Changes in mantle convection** could also be playing a role as **mantle convection transports heat** from the earth's interior to the surface.
  - A mantle is a **layer inside a planetary body** bounded below by a **core and above by a crust.**
  - Mantle convection describes the **movement of the mantle as it transfers heat** from the white-hot core to the brittle lithosphere.

Note:

- The mantle is heated from below, cooled from above, and its overall temperature decreases over long periods of time.

### What can be the Impact of Seafloor Spreading?

- Seafloor spreading influences sea level and carbon cycle.
  - Seal Level:
    - Increasing the rate of seafloor spreading inflates the ridge. Hot, young lithosphere is forming and moving away from the ridge at a faster rate and moving a greater distance from the ridge before it cools and contracts. So sea level rises.
  - Carbon Cycle:
    - Faster rates mean more volcanic activity, which injects greenhouse gases into the atmosphere.

## Western Disturbances

### Why in News?

Variations in the intensity and locations of the **Western Disturbances** have brought heavy rainfall to Delhi during some months and kept the city dry and in the grip of a heat wave at other times.



### What are Western Disturbances?

- Western disturbances are storms that originate in the Caspian or Mediterranean Sea, and bring non-monsoonal rainfall to northwest India, according to the **India Meteorological Department (IMD)**.
- They are labelled as an **extra-tropical storm** originating in the Mediterranean, is an area of low pressure that brings sudden showers, snow and fog in northwest India.
- The meaning of WD lies in its name.
  - The disturbance travels from the “western” to the eastern direction.

- These travel eastwards on high-altitude **westerly jet streams** - massive ribbons of fast winds traversing the earth from west to east.
- Disturbance means an area of “disturbed” or reduced air pressure.
  - Equilibrium exists in nature due to which the air in a region tries to normalise its pressure.
- In the term “**extra-tropical storm**”, storm refers to low pressure. “Extra-tropical” means outside the tropics. **As the WD originates outside the tropical region, the word “extra-tropical” has been associated with them.**
- A WD is associated with rainfall, snowfall and fog in northern India. It arrives with rain and snow in Pakistan and northern India. The moisture which WDs carry with them **comes from the Mediterranean Sea and/or from the Atlantic Ocean.**
- WD brings winter and pre-monsoon rain and is important for the development of the **Rabi crop** in the Northern subcontinent.
- The WDs are not always the harbingers of good weather. Sometimes WDs can cause extreme weather events like floods, **flash floods, landslides**, dust storms, hail storms and **cold waves** killing people, destroying infrastructure and impacting livelihoods.

### What is the Variation in Western Disturbances?

- In 2021, Delhi witnessed the **rainiest October in 65 years**, with the Safdarjung weather observatory recording 122.5 mm of rainfall against a normal of 28 mm, on account of western disturbances.
- Excess rainfall was also recorded in January and February this year. In contrast, there was no rainfall in November 2021 and March 2022, and the summer saw an unusually early start with heat waves setting in at the end of March 2022.
- Multiple western disturbances that brought cloud cover had also **kept the maximum temperature low in February 2022**, when the **lowest maximum temperature in 19 years** was recorded.
- Active western disturbances eluded northwest India in March 2022, and absence of cloud cover and rain allowed temperatures to remain high.

### What is the Probable Cause of the Variation?

- The **frequency** of western disturbances has **increased**, but **not the precipitation** associated with them, partly due to a warming atmosphere (**Global Warming**).

Note:

- Western disturbances are low-pressure areas. If it is a feeble western disturbance, it will not have moisture to precipitate.
- For precipitation, you need moisture, and **by virtue of a warming atmosphere, there is less amount of moisture available to precipitate.**
- Simultaneously, **because of warming in the atmosphere, western disturbances are going higher in elevation.** In general, they move in subtropical westerly jet, now they are becoming lighter and moving higher, above 200 hectopascals.
- Variations will **have to be monitored over the next few years** to determine what climate change impact might be.

## Pre-Eruption Warning Signals at Volcanoes

### Why in News?

Recently, new research detected pre-eruption warning signals at Whakaari White Island and other active **volcanoes**, majorly from New Zealand.

### What is the New Research about?

- Every volcano behaves differently: some have crater lakes while others are “dry”, they have diverse magmas and rise to different elevations.
- Despite these differences volcanoes such as **Whakaari, Ruapehu and Tongariro in New Zealand could be driven to eruption by common processes** in the shallow subsurface below their craters.
- In the new research, **machine learning** was used to sift through 40 years of seismic data from the New Zealand volcanoes and three others around the world, listening for frequencies that track the depth **where gas, magma or water are moving or building up.**
- Researchers **saw one pattern repeatedly in the days before all the known Whakaari eruptions over the past decade**, and most Ruapehu and Tongariro ones.
- This pattern is a slow strengthening of a quantity called **Displacement Seismic Amplitude Ratio (DSAR)**, which peaks a few days before each event.
  - **DSAR is a ratio that compares the “activity” of fluids (gas, hot water, steam) at the volcano’s**

**surface to those several hundred metres deep.** When DSAR increases, surface fluids are quiet, but deep ones are still actively moving and circulating vigorously below ground.

- **Seismic waves** are the waves of energy caused by earthquakes or an explosion. They are the energy that travels through the earth and is recorded on seismographs.
- This type of analysis is so new that the researchers have not had many chances to **test how reliable the DSAR and other automated measures are for forecasting.**

### What are Whakaari and Ruapehu?

- **Whakaari:**
  - Whakaari/White Island is in the **Bay of Plenty**, 43 miles west of **Cape Runaway**, eastern North Island, New Zealand is an active volcano.



Note:



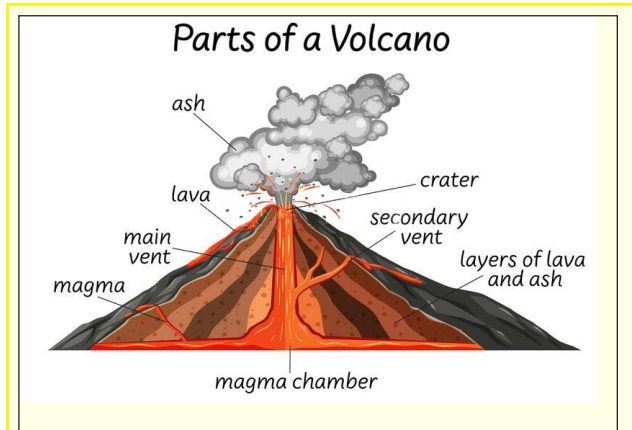
- It is the **top of a submarine vent at the northern end of the Taupō-Rotorua Volcanic Zone**. With a total land area of about 1,000 acres, it rises to 1,053 feet at Mount Gisborne. Scrub vegetation is common on much of the island.
- The island was sighted and named by Capt. James Cook in 1769. It has numerous hot springs, geysers, and fumaroles; **its last eruption, which took place in December 2019**.

➤ **Ruapehu:**

- Mount Ruapehu is **2800m stratovolcano in New Zealand's central North Island**.
- It is also **capped by a hydrothermal system and a warm crater lake** (Te Wai a Moe).
- The volcano is forested below its line of permanent snow cover. Above the line, glaciers flow from the peak. **Within the crater lies a lake**, which is drained by the **Whangaehu River**.
- The temperature and level of its lake is known to vary in cycles, responding to changes in gas released into its base, local weather or the occasional formation of a gas seal.
- The lake is so large it hides the surface activity that is useful for diagnosing volcanoes like Whakaari.

**What is a Volcano?**

- A **volcano is an opening on the surface of a planet or moon** that allows material warmer than its surroundings to escape from its interior.
- When this material escapes, it causes an eruption. **An eruption can be explosive, sending material high into the sky. Or it can be calmer**, with gentle flows of material.



- On Earth, the erupted material can be liquid **rock** ("lava" when it's on the surface, "magma" when it's underground), **ash, cinders, and/or gas**.
- There are **three reasons why magma might rise** and cause eruptions onto Earth's surface
  - Magma can rise when pieces of **Earth's crust called tectonic plates slowly move away from each other**. The magma rises to fill in the space. When this happens, underwater volcanoes can form.
  - Magma also rises when these **tectonic plates move toward each other**. When this happens, part of Earth's crust can be forced deep into its interior. The high heat and pressure cause the crust to melt and rise as magma.
  - The final way that magma rises is over hot spots. **Hot spots are the hot areas inside of Earth**. These areas heat up magma. The magma becomes less dense. When it is less dense it rises. Each of the reasons for rising magma are a bit different, but each can form volcanoes.



Note:



# Security

## Highlights

- Anti-Ship Version of Brahmos Missile
- Naga Ceasefire Agreements Extended
- Military Spending of the Countries

## Anti-Ship Version of Brahmos Missile

### Why in News?

Recently, an anti-ship version of the **BrahMos supersonic cruise missile** was successfully test-fired jointly by the **Indian Navy and the Andaman and Nicobar Command**.

- The Andaman and Nicobar Command is the **only tri-services command of the Indian armed forces**.



### What is BrahMos?

- BrahMos is a joint venture between the **Defence Research and Development Organisation of India (DRDO)** and the NPOM of Russia.
  - BrahMos is named on the rivers **Brahmaputra and Moskva**.
- It is a **two-stage (solid propellant engine in the first stage and liquid ramjet in second) missile**.
- It is a **multiplatform missile** i.e it can be launched from **land, air, and sea and multi capability missile** with pinpoint accuracy that works in both day and night irrespective of the weather conditions.
- It operates on the **"Fire and Forgets" principle** i.e., it does not require further guidance after launch.

- BrahMos is one of the fastest cruise missiles currently operationally deployed with speed of **Mach 2.8**, which is nearly 3 times more than the speed of sound.
- Earlier, the **Indian Air Force (IAF)** successfully test-fired the BrahMos missile from a **Sukhoi fighter jet**.
- Recently, the Indian Navy also successfully test-fired an **advanced version of the Brahmos missile** from a stealth destroyer in the Indian Ocean.
  - Following **India's entry into the MTCR (Missile Technology Control Regime) club in June 2016**, the range is planned to be extended to 450 km and to 600km at a later stage.
  - The BrahMos missile was **initially developed with a range capped at 290 km**.

### What Defense Equipment does India procure From Russia?

- **Submarines:** Six **Air Independent Propulsion (AIP-powered) conventional submarines** under the **P75-I project**.
  - Negotiations for leasing two nuclear-ballistic submarines.
- **Frigates & Guided-missile Destroyers:** Four of the Navy's 10 guided-missile destroyers are Russian Kashin class, and 6 of its 17 frigates are **Russian Talwar class**.
- **Aircraft Carrier:** The only aircraft carrier in service with India, **INS Vikramaditya** is a Soviet-made Kiev-class vessel that came into service for the **Indian Navy** in 2013.
- **Fighter Aircraft:** Russia has also been one of main exporters of fighter aircraft to India, including hundreds of **Sukhoi and MiG jets**.
  - All six of the service's air tankers are Russian-made Il-78s.
- **Tanks:** Indian **Army's main battle tank force** is composed predominantly of Russian T-72M1 (66%) and T-90S (30%).

Note:

- **Missile Defense System: S-400 anti-missile system..**

## Naga Ceasefire Agreements Extended

### **Why in News?**

Recently, the centre has **extended the ceasefire agreements** between the Central government and three Naga groups by a year which was signed on 19th April 2022.

### **What are the Naga Ceasefire Agreements?**

- The Naga groups include National Socialist Council of Nagaland-NK (NSCN-NK), National Socialist Council of Nagaland-Reformation (NSCN-R) and National Socialist Council of Nagaland-K-Khango (NSCN-K-Khango).
  - All these groups are breakaway factions of National Socialist Council of Nagaland (NSCN-IM) and National Socialist Council of Nagaland-Khaphlang (NSCN-K).
- This agreement is a **significant boost to the Naga peace process** and in line with Prime Minister of India's vision of 'insurgency free, prosperous North East'.
- In September 2021, the Centre had **entered into a one-year ceasefire agreement** with the National Socialist Council of Nagaland (K) Niki Group.
- The Centre had earlier signed a "**Framework Agreement**" with the NSCN (IM) in August 2015.

### **THE NAGA STRUGGLE**

1918: Naga Club formed. Seeds of Naga nationalism sown	Agreement interpreted as offer for sovereignty by NNC
1946: Naga National Council (NNC) born under the leadership of A.Z. Phizo	1955: NNC begins armed insurgency. Delhi imposes Assam Disturbed Areas' Act
August 14, 1947: NNC declares independence	1958: AFSPA comes into force
June 1947: Haidari	1963: Nagaland born
1964: Nagaland Peace Mission created, ceasefire signed	
1975: Shillong Accord signed, calls for unconditional ceasefire, termed a 'complete sellout'	
1980: National Socialist Council of Nagalim (NSCN) formed	
1988: NSCN splits into NSCN (K) and NSCN (I-M)	
1997: NSCN (I-M) signs ceasefire	
2001: NSCN (K) signs ceasefire	
March 2015: NSCN (K) breaks ceasefire	
August 2015: Naga peace accord signed	



A.Z. Phizo

### **What is the Naga Peace Process?**

- After India became independent in 1947, the **Naga territory initially remained a part of Assam.**
- In 1957, after an agreement was reached between Naga leaders and the Indian government, the Naga Hills region of Assam and the Tuensang frontier division to the northeast were brought together under a single unit directly administered by the Indian government.
- **Nagaland achieved statehood** in 1963, however, rebel activity continued.

### **What is the Vision of Insurgency Free, Prosperous North East?**

- Recognises that the **North East is very important for the country** from the aspects of security.
- Thus, the **aim is to end all disputes in the Northeast by 2022** and usher in a new era of peace and development in the Northeast in 2023.
- Under this, the **Government is enriching the dignity, culture, language, literature and music** of the Northeast.
- Over the years, the government has also signed several peace agreements with military outfits in northeast India. For example,
  - **Karbi Anglong Agreement, 2021:** It involved a **tripartite agreement** signed among five insurgent groups of Assam, the Centre and the state government of Assam.
  - **Bru Accord, 2020:** Under the Bru accord, the permanent settlement of 6959 Bru families in Tripura with a financial package has been agreed between the Government of India, Tripura and Mizoram with representatives of Bru migrants.
  - **Bodo Peace Accord, 2020:** In 2020, the Government of India, Government of Assam and representatives of Bodo groups signed an agreement, wherein more autonomy is provided to **Bodoland Territorial Region (BTR)**, in Assam.
  - Peace agreement with various military outfits which are involved in **Naga Insurgency** like NSCN(NK), NSCN(R), and NSCN(K)-Khango, NSCN(IM).

### **What is the Status of Conflicts in Northeast India?**

- **National Conflicts:** Involving the concept of a **distinct 'homeland'** as a separate nation.

Note:

- **Nagaland: Naga insurgency** originated from the demand of independence.
  - Although the demand for independence has majorly subsided, the lingering issue of a final political settlement including the demand for 'greater Nagaland' or 'Nagalim' remains.
- **Ethnic Conflicts:** Involving assertion of numerically smaller and less dominant tribal groups against the political and cultural hold of the dominant tribal group.
- **Tripura:** The State's demographic profile has been altered since 1947 when mass migrations from the newly emerged East Pakistan converted it from a largely tribal area to one with a majority of Bengali speaking people.
  - Tribals were **deprived of their agricultural lands** at throw-away prices and driven to the forests.
  - The resultant tensions caused major violence and widespread terror.
- **Sub-regional Conflicts:** Involving movements which ask for recognition of sub-regional aspirations and often come in direct conflict with the State Governments or even the autonomous Councils.
- **Mizoram:** The State with its history of violent insurgency and its subsequent return to peace is an example to all other violence affected States.
  - Following an '**Mizo Peace accord**' between the Union Government and the Mizo National Front in 1986 and conferment of statehood the next year, complete peace and harmony prevails in Mizoram.
- Further, the **boundary issue between Assam and Mizoram** has existed since the formation of Mizoram.
- **Other Reasons: Sponsored terrorism, conflicts generated** as a result of continuous **inflow of migrants** from across the borders, criminal enterprise aimed at expanding and consolidating control over critical economic resources, have also result into clashes.
- **Assam:** The major ethnic conflict in the State is the grievance against the perceived influx of 'foreigners' i.e. people with a language and culture substantially different from the Assamese from across the border (i.e. Bangladesh).
  - The recent tension in Assam emanates from the **Citizenship (Amendment) Act, 2019** and **National Register of Citizens** debate.

### What are the Different Modes of Conflict Resolution?

- Strengthening security forces/'police action'.
- More local autonomy through mechanisms such as conferment of Statehood, the **Sixth Schedule**, Special Provisions under PART XXI of the Constitution.
- Negotiations with insurgent outfits.
- Development activities including special economic packages.



## Military Spending of the Countries

### Why in News?

According to the latest data published by **Stockholm International Peace Research Institute (SIPRI)**, world military spending continued to grow in 2021, **reaching an all-time high of USD 2.1 trillion** despite the economic fallout of the **pandemic**.

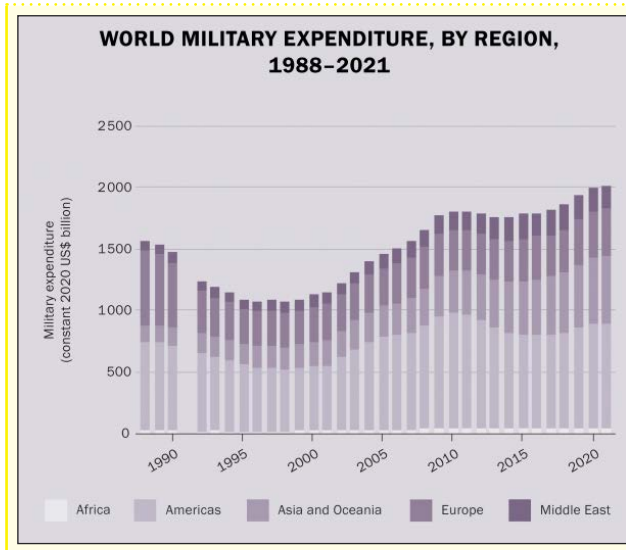
- As a result of a sharp economic recovery in 2021, the global military burden—world military expenditure as a share of world **Gross Domestic Product (GDP)**—fell by 0.1 percentage points, from 2.3% in 2020 to 2.2% in 2021.

### What is SIPRI?

- The SIPRI is an **independent international institute** dedicated to research into conflict, armaments, arms control and disarmament.
- It was **established in 1966 in Stockholm (Sweden)**

Note:





### What is the Scenario of the World?

- **Top Spenders:**
  - The **five largest spenders in 2021** were the US, China, India, the UK and Russia.
  - They accounted together for **62% of expenditure** and the **US and China alone accounted for 52%**.
- **Asia and Oceania:**
  - The military spending in **Asia and Oceania totaled USD586 billion in 2021**.
    - Spending in the region was **3.5% higher than in 2020**, continuing an uninterrupted upward trend **dating back to at least 1989**.
    - The increase in 2021 was **due primarily to growth in Chinese and Indian military spending**.



- Together, the two countries accounted for **63% of total military expenditure** in the region in 2021.

#### ➤ **Increased Spending in Russia:**

- Russia increased its **military expenditure by 2.9% in 2021**, to USD65.9 billion, at a time when it was building up its forces along the Ukrainian border.

#### ➤ **NATO Members Spending:**

- **Eight European North Atlantic Treaty Organization (NATO) members** reached the **Alliance's target of spending 2% or more of GDP** on their armed forces in 2021.
  - This is **one fewer than in 2020** but up from two in 2014.

### What are the Highlights about India?

- India's military spending of **USD76.6 billion** ranked **third highest in the world**.
  - This was up by **0.9% from 2020** and by **33% from 2012**.
- Amid **ongoing tensions and border disputes with China and Pakistan** that occasionally spill over into armed clashes, India has **prioritized the modernization of its armed forces and self-reliance** in arms production.
- In a drive to strengthen the indigenous arms industry, **64% of capital outlays in the 2021 Indian military budget were earmarked** for acquisitions of domestically produced arms.

Note:



# Miscellaneous

## Highlights

- PM gets Lata Deenanath Mangeshkar Award
- IDEX and Defence India Start-Up Challenge
- East Timor
- Hattis of Himachal Pradesh
- Museums Grant Scheme
- Kisan Bhagidari Prathamika Hamari campaign
- Submarine Vagsheer
- Alluri Sitarama Raju
- NCX India
- 40<sup>th</sup> Hunar Haat
- World Heritage Day
- Veer Kunwar Singh
- UGC Norms for Dual & Joint Degrees

## PM gets Lata Deenanath Mangeshkar Award

### Why in News?

Recently, Prime Minister Narendra Modi received the first **Lata Deenanath Mangeshkar Award**.

- He got the award for his selfless service to the country and society at the **80th annual Master Deenanath Mangeshkar Awards ceremony held in Mumbai**.

### What is the Lata Deenanath Mangeshkar Award?

- The **Lata Deenanath Mangeshkar Award** was instituted in the memory and honor of legendary singer **Lata Mangeshkar**, who had passed away at the age of 92 in February 2022.
- The award will be given **every year to only one individual** who has made **path-breaking, spectacular and exemplary contributions to the nation**, its people, and the society, as per the statement by the **Master Deenanath Mangeshkar Smruti Pratishthan Charitable Trust**.

### Who was Lata Mangeshkar?

- Lata Mangeshkar, also known as the '**Nightingale of India**', was one of the most versatile singers of India.
- She lent her voice to over **5,000 songs in over a thousand Hindi and 36 regional films**.

- In 1974, she became the **first Indian to perform at the Royal Albert Hall (U.K)**. She is the recipient of **three National Film Awards**, 15 Bengal Film Journalists' Association Awards, four Filmfare Best Female Playback Awards, two Filmfare Special Awards, Filmfare Lifetime Achievement Award and many more.
- Lata Mangeshkar was bestowed with the **Dadasaheb Phalke Award in 1989**. In 2001, she was awarded the **Bharat Ratna**, India's highest civilian honour.
- The government of **France conferred on her its highest civilian award (Officer of the Legion of Honour) in 2007**.
- Along with these, Lata Mangeshkar held the distinction of being the **most recorded artist in the history of Indian music in the Guinness Record in 1974**.
- The Indian government honored her with the **Daughter of the Nation award on her 90th birthday in September 2019**.



### What are the Other Awards Won by the PM?

- **Bhutan's Highest Civilian Award (2021)**: He was conferred by Bhutan's highest civilian award, '**Order of the Druk Gyalpo**' also known as "**Ngadag Pelgi Khorlo**".
- **Global Energy and Environment Leadership Award (2021)**: Awarded by the Cambridge Energy Research Associates CERA for commitment of leadership towards the future of global energy and the environment.

Note:

- **Legion of Merit by the US Government (2020):** The United States Armed Forces award given for exceptionally meritorious conduct in the performance of outstanding services and achievements.
- **First Philip Kotler Presidential award (2019):** Offered to the leader of a nation.
- **Global Goalkeeper Award:** Honour by Bill and Melinda Gates Foundation for **Swachh Bharat Abhiyan (2019)**
- **Order of Zayed Award (2019):** The highest civilian honour of the United Arab Emirates.
- **Order of St. Andrew award (2019):** The highest civilian honour of Russia
- **Order of the Distinguished Rule of Nishan Izzuddin (2019)** The highest honour of the Maldives awarded to foreign dignitaries.
- **King Hamad Order of the Renaissance - First Class (2019):** Bahrain's top honour.
- **Grand Collar of the State of Palestine Award (2018):** The highest honour of Palestine awarded to foreign dignitaries.
- **Seoul Peace Prize (2018):** Seoul Peace Prize Cultural Foundation's biennial award (South Korea) to those individuals who have made their mark through contributions to the harmony of mankind, reconciliation between nations and world peace.
- **Champions of The Earth Award (2018):** The **United Nation's** highest environmental honour.
- **Order of Abdulaziz Al Saud (2016):** The highest honour of Saudi Arabia awarded to non-muslim dignitaries.
- **State Order of Ghazi Amir Amanullah Khan (2016):** The highest civilian honour of Afghanistan.

## IDEX and Defence India Start-Up Challenge

### Why in the News?

Recently, the **Ministry of Defence** has launched **Innovations for Defence Excellence (iDEX) Prime** and the sixth **Defence India Start-up Challenge (DISC 6)** during **DefConnect 2.0** in New Delhi.

- DefConnect 2.0 is a one-day event to bring together start-ups, big companies and armed forces personnel to boost indigenous innovation in the defence sector.

### What is Innovation for Defence Ecosystem (iDEX)?

- iDEX, **launched in 2018**, is an ecosystem to foster innovation & technology development in Defence and Aerospace by engaging innovators & entrepreneurs to deliver technologically advanced solutions for modernizing the Indian Military.
- **Core Objectives:**
  - **Indigenization:** Rapid development of new, indigenized and innovative technology.
  - **Innovation:** Creates a culture of engagement with innovative startups to encourage co-creation.
- It provides funding/grants to MSMEs, start-ups, individual innovators, R&D institutes and academia to carry out research and development.
- The iDEX-Prime aims to support projects requiring support beyond Rs 1.5 crore up to Rs 10 crore, to help ever-growing start-ups in the defence sector.
- iDEX is funded and managed by "**Defence Innovation Organisation**".
- iDEX portal was launched to provide wider publicity and better visibility of iDEX activities and enable more efficient running of future challenges through better information management.

### Defence Innovation Organisation (DIO)

- DIO is a not for profit organisation formed under section 8 of the Companies Act 2013.
- It is funded by Hindustan Aeronautics Limited (HAL) and Bharat Electronics Limited (BEL).
- It provides high-level policy guidance to iDEX.

### What is Defence India Start-up Challenge?

- DISC aims at supporting **Startups/MSMEs** (Micro Small and Medium Enterprises)/Innovators to create prototypes and/or commercialize products/solutions in National Defence and Security.
- The **First Defence India Startup Challenge (DISC)** was launched on **4th Aug 2018** at Bengaluru.
- It was launched by the **Ministry of Defence** in partnership with **Atal Innovation Mission**.
  - Atal Innovation Mission (AIM) is Government of **India's flagship initiative to create and promote a culture of innovation and entrepreneurship** across the length and breadth of our country.

Note:

- Under the program, the start-ups, Indian companies and individual innovators (including research & academic institutions) can participate.
- DISC 6 witnessed the **participation of newly-formed seven defence companies**, the **Indian Coast Guard** and organisations under the Ministry of Home Affairs for the first time.

#### What are Government Initiatives Regarding Indigenisation?

- **First Negative Indigenisation**
- **Positive Indigenisation List**
- **New FDI Policy in Defence Sector**
- **Defence Acquisition Procedure 2020**
- **Defence Industrial Corridors**

## East Timor

### Why in News?

Recently, **East Timor, also known as Timor Leste, Asia's Youngest Democracy**, held the second and final round of its presidential election.



### What are Key Facts about East Timor?

- **History:**
  - The territory was **colonised by Portugal in the 18<sup>th</sup> century** and remained under its control until 1975.
  - When the Portuguese withdrew, troops from Indonesia invaded and annexed East Timor as its 27th province.

- A long and bloody struggle for independence ensued, during which at least 1,00,000 people died.
- In a **1999 UN-supervised referendum**, the East Timorese voted for independence, but that unleashed even more violence until peace-keeping forces were allowed to enter.
  - The country was **officially recognised by the United Nations (UN) in 2002**.
- East Timor has **applied to be a member of the Association of Southeast Asian Nations (ASEAN)**.
  - It currently **holds observer status**.
- **Geography:**
  - East Timor is **bounded by the Timor Sea** to the southeast, the Wetar Strait to the north, the Ombai Strait to the northwest, and western Timor (part of the Indonesian province of East Nusa Tenggara) to the southwest.
  - East Timor **comprises the eastern half of Timor island**, the western half of which is part of Indonesia.
  - It spans a **15,000 square km land area** – slightly smaller than Israel – and it's 1.3 million people are predominantly Roman Catholic.

### What about the Economy and Political System?

- **Politics:**
  - In nearly 20 years since independence, **East Timor's presidential and parliamentary elections have been dominated** by many of the same faces.
  - In the political system, the president also **shares some executive powers** and **appoints a government** and has the power to veto ministers or dissolve parliament.
- **Economy:**
  - The territory **depends on revenues from its offshore oil and gas reserves** which account for 90% of its **Gross Domestic Product (GDP)**.
  - It has an **agreement with Australia to split revenue** from the Greater Sunrise gas field, Australia which is worth an estimated USD65 billion.
  - The **Bayu Undan gas field**, its main revenue stream, is **set to dry up by 2023** and the country is now planning to collaborate with companies in Australia to turn it into carbon capture facilities.

Note:

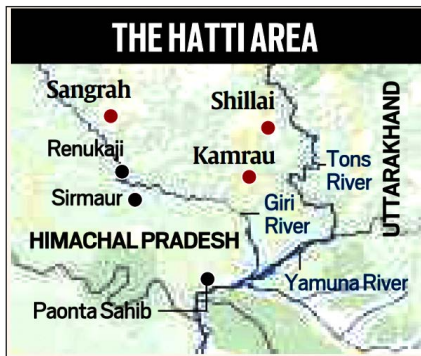


## Hattis of Himachal Pradesh

### Why in News?

Centre is considering the Himachal Pradesh government's request for inclusion of the Hatti community in the list of **Scheduled Tribes** in the state.

- The community has been making the demand since **1967**, when tribal status was accorded to people living in the Jaunsar Bawar area of Uttarakhand, which shares a border with Sirmaur district.
- Their demand for tribal status gained strength because of resolutions passed at various maha Khumbli's over the years.



### Who are the Hattis?

- The Hattis are a close-knit community who got their name from their tradition of selling homegrown vegetables, crops, meat and wool etc. at small markets called 'haat' in towns.
- The Hatti community, whose men generally don a distinctive white headgear during ceremonies, is cut off from Sirmaur by two rivers called Giri and Tons.
  - Tons divides it from the Jaunsar Bawar area of Uttarakhand.
- The Hattis who live in the trans-Giri area and Jaunsar Bawar in Uttarakhand were once part of the royal estate of Sirmaur until Jaunsar Bawar's separation in 1815.
  - The two clans have similar traditions, and inter-marriages are commonplace.
- There is a rigid caste system among the Hattis — the Bhat and Khash are the upper castes, while the Badhois are below them.
- Inter-caste marriages have traditionally remained a strict no-no.

- Due to topographical disadvantages, the Hattis living in the Kamrau, Sangrah, and Shillai areas lag in education and employment.
- The Hattis are governed by a traditional council called **Khumbli**, which like the khaps of Haryana, decide community matters.
- The Khumbli's power has remained unchallenged despite the establishment of the **Panchayati Raj System**.

### What is a Scheduled Tribe?

- **Article 366 (25)** of the Constitution refers to **Scheduled Tribes** as those communities, who are scheduled in accordance with Article 342 of the Constitution.
- **Article 342** says that only those communities who have been declared as such by the President through an initial public notification or through a subsequent amending Act of Parliament will be Scheduled Tribes.
- The list of Scheduled Tribes is State/UT specific, and a community declared as a Scheduled Tribe in one State need not be so in another State.
- The Constitution is silent about the criteria for specification of a community as a Scheduled Tribe.
  - Primitiveness, geographical isolation, shyness and social, educational & economic backwardness are the traits that distinguish Scheduled Tribe communities from other communities.
- There are certain Scheduled Tribes, 75 in number known as **Particularly Vulnerable Tribal Groups (PVTGs)**, who are characterized by:
  - Pre-agriculture level of technology.
  - Stagnant or declining population.
  - Extremely low literacy.
  - Subsistence level of economy.
- **Government Initiatives for STs:**
  - The **Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 (FRA)**.
  - The **Provision of the Panchayats (Extension to the Scheduled Areas) Act, 1996**.
  - Minor Forest Produce Act 2005.
  - **SC And ST (Prevention Of Atrocities) Act**.
  - Tribal Sub-Plan Strategy are focused on the socio-economic empowerment of STs.

Note:

## Museums Grant Scheme

### Why in News?

The Ministry of Culture and Tourism has granted Rs 3.75 crore under the 'Upgradation of Museums Scheme' as part of **Museums Grant Scheme** for the Rs 5-crore project in Eluru town, Andhra Pradesh.

### What is the Museums Grant Scheme?

#### ➤ About:

- The scheme was **launched in 2013**.
- The Ministry of Culture provides **financial assistance under the Scheme** to the State Governments and Societies, Autonomous bodies, Local Bodies and Trusts registered under the Societies Act 1860, for **setting up new Museums**.
- It aims to **strengthen and modernize the existing museums at the Regional, State and District level**.
- The scheme also aims to develop at **least 1 Central / State Government Museum located in the State Capital** each year.

#### ➤ Components:

- **Establishment and Development of District and Regional Museums:**
  - Under this component museums have been classified into two categories:
    - **Category-I:** Government-owned State level Museums and renowned Museums with exquisite collection.
    - **Category-II:** all other Museums.
  - The maximum amount of financial assistance provided under this Component is **limited to Rs.10 crore**.
- **Development of Museums in State Capitals:**
  - Financial assistance under this component is **provided to existing renowned museums of the Central or State Government** located in the Capital cities.
  - The maximum financial assistance under this component is limited to **Rs. 15 Crore per museum**.
- **Establishment and Development of Large-Scale Museums in Public Private Partnership Mode:**

- Under this component, it is **proposed to establish large scale museums as joint ventures with State Governments** and the civil society in Public Private Partnership Mode.
- The maximum financial assistance provided under this component is 40% of the project cost subject to a maximum of **Rs. 20 Crore per museum**.

### What is a Museum?

- A museum is an institution in which **objects of historical, scientific, artistic, or cultural interest are stored and exhibited**.
- **ICOM (International Council of Museums)** defines museum as "A museum is a non-profit, permanent institution in the service of society and its development, open to the public, which acquires, conserves, researches, communicates and exhibits the tangible and intangible heritage of humanity and its environment for the purposes of education, study and enjoyment"
- ICOM is a **non-governmental organization dedicated to museums**, maintaining formal relations with UNESCO (**United Nations Educational, Scientific and Cultural Organization**) and having a **consultative status with the United Nations Economic and Social Council**.

### What are the other Schemes Related to Museums?

- The **National Portal and Digital Repository for Indian Museums** (under the Ministry of Culture) have been launched for digitization of the collections of the Museums.
- **JATAN: Virtual Museum Software:** JATAN is a virtual museum builder software, that enables creation of digital collection management system for Indian museums and is deployed in several national museums across India.

## Kisan Bhagidari Prathmikta Hamari campaign

### Why in News?

The Ministry of Agriculture & Farmers Welfare of India will conduct '**Fasal Bima Pathshala**' under '**Kisan Bhagidari Prathmikta Campaign**' as a Jan Bhagidari movement.

Note:

### What is the Kisan Bhagidari Prathmikta Hamari campaign?

- **About:**
  - Under the campaign all Implementing Insurance Companies will organize '**PMFBY (Pradhan Mantri Fasal Bima Yojana)- Fasal Bima Pathshala**' at Block/Gram Panchayat/village on all 7 days of the campaign period with participation of at least 100 farmers.
  - The detailed **information on crop loss intimations during localized calamities and post-harvest losses, tracking of farmers' application**, whom farmers can approach for grievance redressal etc. may be shared and explained in detail to farmers for maximum benefit of the scheme.
- **Objectives:**
  - It aims to **make the farmers aware of key scheme aspects of PMFBY** like basic scheme provisions, importance of ensuring the crops and how to avail scheme benefits etc. in the ongoing **Kharif Season 2022** along with facilitating farmers in getting benefit of the PMFBY scheme.
  - The broader focus will be on the importance of **PMFBY/RWBCIS (Restructured Weather Based Crop Insurance Scheme)** and **how farmers can enroll under the scheme** and avail the benefit of the scheme.

#### What is Pradhan Matri Fasal Bima Yojna?

- **Launch:**
  - Launched in **2016** and is being administered by the Ministry of Agriculture and Farmers Welfare.
    - It replaced the **National Agricultural Insurance Scheme (NAIS)** and Modified National Agricultural Insurance Scheme (MNAIS).
- **Aim:**
  - To provide **comprehensive insurance cover against the failure of the crop** thus helping in stabilizing the income of the farmers.
- **Scope:**
  - All food & oilseed crops and annual commercial/ horticultural crops for which past yield data is available.
- **Premium:**
  - The prescribed premium is **2% to be paid by farmers for all Kharif crops and 1.5% for all rabi crops**. In the case of annual **commercial and horticultural crops, the premium is 5%**.

- Premium cost over and above the farmer share was equally subsidized by States and Gol.
- However, Gol shared 90% of the premium subsidy for Northeastern States to promote the uptake in the region.
- **Implementation:**
  - By empanelled general insurance companies. The selection of the Implementing Agency (IA) is done by the concerned State Government through bidding.
- **Revamped PMFBY:**
  - The revamped PMFBY is often called **PMFBY 2.0**, it has the following features:
    - **Completely Voluntary:** Enrolment 100% voluntary for all farmers from 2020 Kharif.
  - Earlier, it was compulsory for loanee farmers to avail a Crop Loan/Kisan Credit Card (KCC) account for notified crops.
    - **Limit to Central Subsidy:** The Centre has decided to limit the PMFBY premium rates - against which it would bear 50% of the subsidy - to a maximum of 30% in un-irrigated and 25% in irrigated areas.
    - **More Flexibility to States:** The government has given the flexibility to states/UTs to implement PMFBY and given them the option to select any number of additional risk covers/features.
    - **Investing in ICE Activities:** Insurance companies must now spend 0.5% of the total premium collected on Information, Education and Communication (IEC) activities.

## Submarine Vagsheer

### Why in News?

Recently, Mazagon Dock Shipbuilders launched the sixth **Scorpene Submarine** 'Vagsheer' of **Project-75**.



Note:

**What is a Scorpene Class Submarine?**

- The submarines in the Project-75 Scorpene Class are powered by diesel-electric propulsion systems.
- Scorpene is one of the most sophisticated submarines, capable of undertaking multifarious missions including anti-surface ship warfare, anti-submarine warfare, intelligence gathering, mine laying, and area surveillance.
- The Scorpene class is the Navy's first modern conventional submarine series in almost two decades since INS Sindhushastra, procured from Russia in July 2000.

**What is Submarine Vagsheer?**

- **About:**
  - Vagsheer is named after the sand fish, a **deep sea predator of the Indian Ocean**.
  - The first submarine Vagsheer, from Russia, was commissioned into the **Indian Navy in December, 1974, and was decommissioned in April, 1997**.
  - It is the last of the Scorpene class submarines made under the P75 project and can join the Navy fleet within 12-18 months after sea trials.
- **Features:**
  - Vagsheer is a **diesel attack submarine, designed to perform sea denial as well as access denial warfare** against the adversary.
  - It is enabled with a **C303 anti-torpedo countermeasure system**.
  - It can carry up to 18 torpedoes or Exocet anti-ship missiles, or 30 mines in place of torpedoes.
  - Its superior stealth features include advanced acoustic absorption techniques, low radiated noise levels, hydro-dynamically optimized shape, and it can launch a crippling attack using precision guided weapons, underwater or on surface.

**What is Project-75?**

- P 75 is one of two lines of submarines, the other being **P75I**, as part of a plan approved in 1999 for indigenous submarine construction with technology taken from overseas firms.
- The contract for six submarines under P75 was given to Mazgaon dock in October 2005 and delivery was to start from 2012, but the project has faced delays.

- The programme has been undertaken with **transfer of technology from French company Naval Group** (formerly known as DCNS) at the Mazagon Dock Limited (MDL).
- Under P75, **INS Kalvari, INS Khanderi, INS Karanj and INS Vela have been commissioned**.
- Sea trials are on for **Vagir**.
- Vagsheer is the sixth; its production was delayed due to the pandemic.

**Alluri Sitarama Raju****Why in News?**

The Vice-President visited the birthplace of revolutionary freedom fighter Alluri Sitarama Raju (1897 – 1924) at Pandrangi, Andhra Pradesh.

**Who was Alluri Sitarama Raju?**

- Alluri Sitarama Raju was an Indian revolutionary who waged an armed campaign against British colonial rule in India. He became a monk at the age of 18.
- Born in present-day Andhra Pradesh, he became involved in anti-British activities in response to the **1882 Madras Forest Act**, which effectively restricted the free movement of Adivasis (tribal communities) in their forest habitats and prevented them from practicing a traditional form of agriculture known as podu (shifting cultivation).
- Rising discontent towards the British led to the **Rampa Rebellion/Manyam Rebellion of 1922**, in which he played a major part as a leader.
- He was **nicknamed "Manyam Veerudu"** (Hero of the Jungle) by local villagers for his heroic exploits.
- In 1924, Raju was taken into police custody, tied to a tree, and shot by a public execution, effectively ending the armed rebellion.



Note:



## NCX India

### Why in News

Recently, the **National Security Council Secretariat** organised the **National Cyber Security Incident Response Exercise (NCX India)**.

- NCX India will be conducted as a **hybrid exercise** over a period of ten days from 18<sup>th</sup> to 29<sup>th</sup> April 2022.
- It is launched with the aim to **train senior management and technical personnel of Government/Critical Sector organisations** and agencies on contemporary cyber threats and handling cyber incidents and response.

### What is the National Security Council?

- NSC of India is a **three-tiered organisation** that oversees political, economic, energy and security issues of strategic concern.
- The **National Security Advisor (NSA)** presides over the NSC and is also the primary advisor to the Prime Minister. The current **National Security Advisor is Ajit Doval**.
- It was **formed in 1998**, where all aspects of national security are deliberated upon.

### What is NCX India?

- **Platform:** The platform for training is being provided by **CyberExer Technologies**, an **Estonian cybersecurity company** accredited for globally conducting several large cyber exercises.
- **Need: Digital Revolution** taking place in the country and the launch of a large number of **digital services by the Government**.
  - In this context, Cyber Security remains the foundation of **any successful Digital Transformation**.
  - Any threats in cyberspace directly impact our social, economic and National Security and thus, there is a need to safeguard our Cyberspace.
- **Training Module:** The participants will be trained on various key cyber security areas such as **Intrusion Detection Techniques, Malware Information Sharing Platform (MISP), Vulnerability Handling & Penetration Testing, Network Protocols & Data Flows, Digital Forensics**, etc.
- **Envisaged Goal:** NCX India will help strategic leaders to **better understand cyber threats, assess readiness,**

**and develop skills** for cyber crisis management and cooperation.

- This will also help develop and test **cybersecurity skills, teamwork, planning, communication, critical thinking, and decision-making**.

### What are Present Government Initiatives for Cyber Security?

- Cyber Surakshit Bharat Initiative.
- Cyber Swachhta Kendra.
- Online cybercrime reporting portal.
- Indian Cyber Crime Coordination Centre (I4C).
- National Critical Information Infrastructure Protection Centre (NCIIPC).
- Information Technology Act, 2000.

## 40<sup>th</sup> Hunar Haat

### Why in News

Recently, the 40<sup>th</sup> edition of the **'Hunar Haat'** was inaugurated in **Mumbai**. In this edition, more than a thousand craftsmen and artisans coming from **31 states and Union Territories** participated.

### What are Key Points

#### Associated with Hunar Haat?

- **About:**
  - Hunar Haat has been conceptualized to **protect and promote the country's ancestral legacy of arts and crafts** in the current global competition and to support the traditional artisans and craftsmen.
  - The artisans selected in the Hunar Haat exhibition are those whose **forefathers were involved in such traditional handmade work** and are still continuing the profession.
- **Theme:**
  - **Vocal for Local** and "Best from Waste"
- **Aim:**
  - To provide market **exposure and employment opportunities** to artisans, craftsmen and traditional culinary experts.
  - **Boosting the skills** of craftsmen, weavers and artisans who are already engaged in the traditional ancestral work.

Note:

- **Organizer:**
  - These are organized by the Ministry of Minority Affairs under **USTTAD (Upgrading the Skills & Training in Traditional Arts/Crafts for Development) scheme**.
    - The USTTAD scheme aims to promote and preserve the rich heritage of the traditional arts & crafts of the minority communities.
- **Significance:**
  - **Aatmanirbhar Bharat** is being strengthened by initiatives like Hunar Haat.
  - Skill training is provided so that you do not become job-seekers, instead become job-givers.
 

**For Example:**

    - **'Tejas'a skilling programme** which has been launched by the Government of India.
    - Under this initiative, India will send skilled manpower to the UAE. Within a year, 30,000 skilled job-seekers will be sent to the UAE.
  - Through Hunar Haats one will get to witness **'Ek Bharat Shreshtha Bharat'** and experience the essence of **'Unity in Diversity'**.

## World Heritage Day

### Why in News?

- Every year, 18<sup>th</sup> April is celebrated as **International Day for Monuments and Sites**, also known as **'World Heritage Day'**.
- The theme for World Heritage Day 2022 is **"Heritage and Climate"**.

### What is World Heritage Day?

- The **International Council on Monuments and Sites (ICOMOS)** established the day in 1982 and the **United Nations Educational, Scientific and Cultural Organization (UNESCO)** approved it in 1983.
- The aim of the day is to **create awareness about Heritage among communities**.

### What are UNESCO's World Heritage Sites?

- A **World Heritage Site** is a place that is listed by UNESCO for its special cultural or physical significance.

- The list of World Heritage Sites is maintained by the international 'World Heritage Programme', **administered by the UNESCO World Heritage Committee**.
- This is embodied in an international treaty called the Convention concerning the Protection of the World Cultural and Natural Heritage, **adopted by UNESCO in 1972**.

### What are the World Heritage Sites in India?

- India is home to a total of **3691 monuments and sites**. Of these **40 are designated as UNESCO World Heritage Sites**.
- Including places like the Taj Mahal, **Ajanta Caves and Ellora Caves**. World Heritage Sites also include natural sites like the **Kaziranga National Park in Assam**.
  - Harappan city of **Dholavira** in Gujarat as India's **40<sup>th</sup> world heritage site**.
  - **Ramappa Temple (Telangana)** was India's 39<sup>th</sup> World Heritage Site.
  - **Khangchendzonga National Park**, Sikkim has been inscribed as India's first and the only "Mixed World Heritage Site".
- In 2022, the Union Ministry of Culture **nominated Sacred Ensembles of the Hoysalas temples** for consideration as a **World Heritage site** for the year **2022-2023**.

### What is UNESCO?

- It was founded in 1945 to develop the "intellectual and moral solidarity of mankind" as a means of building lasting peace. It is located in **Paris, France**.
- **Major Initiatives of UNESCO:**
  - Man and Biosphere Programme
  - World Heritage Programme
  - Global Geopark Network
  - Network of Creative Cities
  - Atlas of World Languages in Danger

### What is ICOMOS?

- It is a **global non-governmental organization** associated with UNESCO. It is located in Paris, France.
- Its mission is to promote the conservation, protection, use and enhancement of monuments, building complexes and sites.

Note:

- It is an **Advisory Body of the World Heritage Committee** for the implementation of the **World Heritage Convention of UNESCO**.
  - As such, it reviews the nominations of cultural world heritage and ensures the conservation status of properties.
- Its **creation in 1965** is the logical outcome of initial conversations between architects, historians and international experts that began in the early twentieth century and that materialised in the adoption of the Venice Charter in 1964.

## Veer Kunwar Singh

### Why in News?

The Government will pay tribute to freedom fighter Veer Kunwar Singh (1777-1858) on his birth anniversary (23<sup>rd</sup> April).



### Who was Kunwar Singh?

- He **belonged to a family of the Ujjainiya clan of the Parmar Rajputs of Jagdispur**, currently a part of **Bhojpur district, Bihar**.
- He was the **chief organiser of the fight against the British in Bihar**. He is popularly known as Veer Kunwar Singh.
- Singh led the **Indian Rebellion of 1857** in Bihar. He was nearly eighty and in failing health when he was called upon to take up arms.
- He was **assisted by both his brother**, Babu Amar Singh and his commander-in-chief, Hare Krishna Singh. Some argue that the latter was the real reason behind Kunwar Singh's initial military success.
- He gave a good fight and **harried British forces for nearly a year and remained invincible until the end**. He was an **expert in the art of guerilla warfare**.
- He passed away on 26<sup>th</sup> April 1858.
- To honour his contribution to India's freedom movement, the **Republic of India issued a commemorative stamp on 23<sup>th</sup> April 1966**.
  - The **Government of Bihar established the Veer Kunwar Singh University**, Arrah in 1992.

- In 2017, the **Veer Kunwar Singh Setu**, also known as the Arrah–Chhapra Bridge, was inaugurated to connect north and south Bihar.
- In 2018, to celebrate the 160th anniversary of Kunwar Singh's death, the government of Bihar relocated a statue of him to Hardinge Park. The park was also officially renamed as '**Veer Kunwar Singh Azadi Park**'.

## UGC Norms for Dual & Joint Degrees

### Why in News

Recently, the **University Grants Commission** has released **Academic Collaboration between Indian and Foreign Higher Education Institutions to offer Joint Degree, Dual Degree, and Twinning Programmes Regulations, 2022**.

- Under these regulations collaborating institutes will be allowed to offer three kinds of programmes — **twinning, joint degrees and dual degrees**.

### What are the Key Points of the New Regulations?

- **Dual Degree Programmes:** The approved amendments include a provision for **"dual degree programmes"** — both the Indian and foreign institutions will give separate and simultaneous degrees for a course of the same discipline, and at the same level.
- **Easing Regulation:** Indian universities that meet a **minimum academic standard** will not need UGC's permission to offer such programmes.
- **Joint Degrees:** Students enrolling for these programmes will have to go **abroad to earn credits**, but they will not have to seek admission separately while doing so.
  - In the draft amendments, foreign partner institutions were required to be among the **world's top 1,000 in global rankings**.
- **Dual Degrees:** For dual degrees, students will have to **complete at least 30%** of their course credit at the foreign institution.
  - The degrees awarded by both the **Indian and foreign institutions** will indicate the credits earned at the respective institutions.

Note:



- At the end of the course, the student will be **awarded two degrees**, separately and simultaneously, by the Indian and foreign institution.
  - **Twinning Arrangement:** A student can study a programme partly in India and partly in a foreign university, but the diploma or degree will be awarded just by the Indian university.
  - Students will have to **complete up to 30% of the course's credits** at the foreign institution by means of an exchange programme.
  - **Exception:** The new regulations are not applicable to programmes offered online and in the open and distance learning mode.
- **Significance:** The new regulation will prompt the Indian students to get a foreign degree and enhance their employability in international market.

#### What is University Grants Commission?

- It came into existence on **28th December, 1953** and became a **statutory body by an Act of Parliament in 1956**, for the coordination, determination and maintenance of standards of **teaching, examination and research in university education**.
- The head office of the **UGC is located in New Delhi**.



Note:



**Key Points**

**Details**

Blank area for Key Points.

Lined area for Details.

**Summary**

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