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Current Affairs (CONSOLIDATION)

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Polity and Governance

Highlights

- Security Breach in Parliament
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- Truth and Reconciliation Commission
- AMRIT Technology
- Merit Over Reservation in Appointments of Law Officers
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- Fast Track Special Courts
- Disclosure of Political Funding

POLITICAL PARTY SYSTEM

Groups of like-minded individuals voluntarily organise to gain political power through constitutional means, aiming to promote the national interest

- Three Types of Party Systems : One Party (China), Two Party (USA), Multi-Party (India)
- Parties in India:
 - National (6) : E.g. Aam Aadmi Party (AAP), Bharatiya Janata Party (BJP), Indian National Congress (INC), Bahujan Samaj Party (BSP), Communist Party of India (Marxist) (CPI-M), and National People's Party
 - State : E.g. DMK, AIADMK, Telugu Desam, Shiv Sena, Asom Gana Parishad, Mizo National Front, etc.
- Recognised national/state parties allotted a symbol exclusively reserved for its use in their respective jurisdiction

Criteria for National Party Recognition

- Secures 6% of valid votes (VV) polled in any 4 or more states at a general election (GE) to the Lok Sabha (LS)/Legislative assembly (LA)+it wins 4 seats in the LS from one or more states
- If it wins 2% of seats in LS at a GE (from 3 states)
- If it is recognized as a state party in 4 states.

Criteria for State Party Recognition

- If it secures 6% of the VV polled in the state at a GE to the LA+ it wins 2 seats in LA of the state concerned; or
- If it wins 3% of seats in the LA at a GE to the LA of the state concerned or 3 seats in the LA, whichever is more; or
- If it secures 8% of the total VV polled in the state at a GE to the LS from the state or to the LA of the state.
- If it secures 6% of the VV polled in the state at a GE to the LS from the state concerned+ it wins 1 seat in the LS from the state concerned; or
- If it wins 1 seat in the LS for every 25 seats or any fraction thereof allotted to the state at a GE to the LS from the state concerned; or



Note:

Security Breach in Parliament

Why in News?

Recently, a security breach unfolded in the **Lok Sabha** after leaders paid tribute to the security personnel martyred during the 2001 Parliament attack.

- The Delhi Police have invoked sections of the **Unlawful Activities (Prevention) Act**, an anti-terror law, against accused persons, as well as sections of the **Indian Penal Code (IPC)** related to criminal conspiracy, trespass, provoking a riot, and obstructing a public servant in the discharge of functions.
- The accused were carrying **visitors' passes** issued to them during the attack.

What are the Rules for Parliament Visitors?

- **Rule 386** of the **Rules of Procedure and Conduct of Business in the Lok Sabha** governs the "admission, withdrawal, and removal" of visitors (referred to as "strangers" in parliamentary terms) during the sittings of the House.
- **Rule 387** grants the **Speaker** the power to withdraw "strangers" from any part of the House if deemed fit.
- **Rule 387A**, authorized by the Speaker, empowers a **Secretariat officer to remove** or take into custody any **stranger within House precincts** reserved for members.
 - This includes strangers admitted who misbehave, violate Speaker's regulations (under Rule 386), or fail to withdraw when directed under Rule 387 during House sittings.
- Members can apply for **visitors' cards** only for individuals well-known to them personally.
 - Certification is required, stating, "The above-named visitor is my relative/personal friend/known to me personally, and I take full responsibility for him/her."
 - Cards for admission to visitors' galleries are ordinarily issued for a single sitting, generally for one hour. These cards are not transferable and are issued subject to the holder observing the conditions endorsed thereon.
- For security reasons, visitors are mandated to carry photo identification along with the certification.
- Similar rules are in force for visitor entry into the **Rajya Sabha**.

- Members are advised to exercise utmost care, especially when facilitating the entry of individuals introduced by someone personally known to them.
 - Members bear responsibility for any untoward incident or undesirable activity in the galleries resulting from cardholders.

2001 Attack on the Indian Parliament

- The 2001 attack on the Indian Parliament was a terrorist attack that took place on 13th December 2001, when a group of armed militants attacked the Parliament of India in New Delhi.
 - The attackers belonged to the Pakistan-based militant organizations **Lashkar-e-Taiba** and **Jaish-e-Mohammed**.
- The attack resulted in the **death of security personnel and government officials**.
- The attack exposed the **vulnerability of India's parliamentary democracy** to external threats and prompted a major overhaul of its security arrangements.

The CEC and Other ECs (Appointment, Conditions of Service and Term of Office) Bill, 2023

Why in News?

The **Rajya Sabha** recently approved the Chief Election Commissioner and Other Election Commissioners (Appointment, Conditions of Service and Term of Office) Bill, 2023, which outlines the procedures for appointing the **Chief Election Commissioner (CEC) and Election Commissioners (EC)**.

The legislation aims to bring transparency to the appointment process, responding to a **directive from the Supreme Court of India**.

What are the Key Provisions of the Bill?

- The **Bill replaces the Election Commission (Conditions of Service of Election Commissioners and Transaction of Business) Act, 1991**.
- It addresses the appointment, salary, and removal of the CEC and ECs.
 - Appointment Process:
 - The CEC and ECs will be **appointed by the President** upon the recommendation of a **Selection Committee**.

Note:



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- The Selection Committee will consist of the **Prime Minister, a Union Cabinet Minister, and the Leader of Opposition/leader of the largest opposition party in Lok Sabha.**
- Recommendations of the Selection Committee will be valid **even when there is a vacancy in this Committee.**
- A Search Committee headed by the **Cabinet Secretary** will propose a panel of names to the Selection Committee.
 - Eligibility for the posts includes holding (or having held) a post equivalent to the **Secretary to the central government.**
- **Changes in Salary and Conditions:**
 - The salary and conditions of service of the CEC and ECs will be equivalent to that of the **Cabinet Secretary.**
 - Under the 1991 Act, it was equivalent to the salary of a **Supreme Court Judge.**
- **Removal Process:**
 - The Bill retains the constitutional provision (**Article 324(5)**) that allows the CEC to be removed like a Supreme Court Judge, while ECs can only be removed on the recommendation of the CEC.
- **Protection for CEC And ECs:**
 - Bill safeguards CEC and ECs from **legal proceedings related to actions taken during their tenure**, provided such actions were carried out in the discharge of official duties.
 - The amendment aimed to shield these officials from civil or criminal proceedings related to their official functions.

How are the CEC and ECs Currently Appointed?

- **Constitutional Provisions:**
 - There are just five **Articles (324-329) in Part XV (Elections)** of the Constitution.
 - The Constitution does not lay down a specific legislative process for the appointment of the CEC and ECs.
 - Article 324 of the Constitution vests the **"superintendence, direction and control of elections"** in an Election Commission consisting "of the Chief Election Commissioner and such number of other Election Commissioners, if any, as the President may from time to time fix".

- The President makes the appointment on the advice of the Union Council of Ministers headed by the Prime Minister.
- The Law Minister suggests a pool of suitable candidates to the Prime Minister for consideration. The President makes the appointment on the advice of the PM.

➤ **Removal:**

- They can resign anytime or can also be removed before the expiry of their term.
- The CEC can be removed from office only through a process of removal similar to that of a SC judge by Parliament.
- Any other EC cannot be removed except on the recommendation of CEC.

What are the Concerns Regarding the Bill?

➤ **Transparency and Independence:**

- Allowing the Selection Committee's recommendations to be valid even with a vacancy could result in a **monopoly of ruling party members** during certain circumstances, undermining the diversity and independence of the committee.

➤ **Shift from Judicial Benchmark to Executive Control:**

- Equating the salary of the CEC and ECs with that of the **Cabinet Secretary**, whose salary is determined by the executive, raises concerns about **potential government influence.**
- Unlike the salary of a Supreme Court Judge, which is fixed by an Act of Parliament, this shift may compromise the **financial independence of the EC.**

➤ **Limiting Eligibility to Civil Servants:**

- Restricting eligibility to individuals who have held a position equivalent to the Secretary to the government **may exclude potentially qualified candidates**, limiting the diversity of backgrounds and expertise in the ECI.

➤ **Concerns About Lack of Parity:**

- The Bill retains the constitutional provision that allows the CEC to be removed like a Supreme Court Judge, while ECs can only be removed on the recommendation of the CEC.
 - This **lack of parity in removal processes** may raise questions about fairness.

Note:



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Truth and Reconciliation Commission

Why in News?

Recently, **the Supreme Court unanimously upheld the abrogation of Article 370 by the Centre in 2019** and also recommended setting up a **Truth and Reconciliation Commission (TRC)** to look into alleged violations of human rights by both state and non-state actors in Jammu & Kashmir.

What is a Truth and Reconciliation Commission (TRC)?

- **About:**
 - A **Truth and Reconciliation Commission**, also known as a **'truth and justice commission'** or simply, a **'truth commission'**, is an official mechanism to not just acknowledge, but also reveal, wrongdoings by a government or sometimes non-state actors.
- **Objective:**
 - The truth commission is one that is focused on the past, rather than in ongoing events.
 - It investigates a pattern of events that took place over a period of time.
 - The commission engages directly and broadly with the affected population, gathering information on their experiences;
 - It is a **temporary body**, with the aim of concluding with a final report.
 - Commission is officially authorized or empowered by the state under review.

Which Nations have Already Established TRC?

- The two best known and most consequential commissions are considered to be set up in **South Africa, Australia and Canada**.
- In India's neighborhood, truth commissions have been set up in **Sri Lanka and Nepal**.
- In **South Africa**, the first post-apartheid government of **President Nelson Mandela** established a **TRC** in **1995** with the aim of **uncovering the truth of human rights violations** during the decades of apartheid.

Article 370

- **Article 370** in the **Indian constitution** gave special status to **Jammu and Kashmir**, a region disputed by **India, Pakistan and China**.
- It was drafted by **N Gopalaswami Ayyangar**, a member of the **Constituent Assembly of India**, and was added to the constitution as a **'temporary provision'** in **1949**.
- It allowed the state to have its **own constitution, flag and autonomy** over most matters except **defense, foreign affairs and communications**.
- It was based on the terms of the **Instrument of Accession**, which was signed by the ruler of **Jammu and Kashmir, Hari Singh**, in **1947** to join India after an invasion by Pakistan.

AMRIT Technology

Why in News?

Recently, the **Ministry of Jal Shakti** has shed light on the progress of the **Jal Jeevan Mission** and the **Arsenic and Metal Removal by Indian Technology (AMRIT)**.

What is AMRIT Technology?

- The technology was developed by the **Indian Institute of Technology (IIT) - Madras**. It is designed for the **removal of arsenic and metal ions** from water, addressing water quality issues.
- The technology utilizes **nano-scale iron oxy-hydroxide**, which selectively removes **arsenic** when water passes through it.
- AMRIT is applicable for both **domestic and community-level water purification**.
- The technology aligns with the broader goals of the **Jal Jeevan Mission**, which aims to provide safe and potable tap water to rural households in India.
- The technology has been recommended by the **'Standing Committee'** of the Department of Drinking Water and Sanitation for consideration in addressing water and sanitation challenges.

Note:

- Arsenic is a natural component of the earth's crust and is widely distributed throughout the environment in the **air, water and land**. It is **highly toxic in its inorganic form**.

Note:

- Long-term exposure to arsenic from drinking water and food can cause **cancer and skin lesions**. Chronic poisoning of arsenic can cause **Blackfoot disease (BFD)**, which affects the blood vessels in the lower limbs.

What is the Jal Jeevan Mission?

- **About:**
 - Jal Jeevan Mission, launched in 2019, is envisioned to **provide safe and adequate drinking water** through individual household tap connections by 2024 to all households in rural India by **Sustainable Development Goal- 6 (Clean Water and Sanitation for all)**.
 - It envisages a supply of **55 liters of water per person per day** to every rural household through **Functional Household Tap Connections (FHTC) by 2024**.
 - The Government of India also launched the **Jal Jeevan Mission (Urban)** which has been designed to provide universal coverage of water supply through functional taps in all 4,378 statutory towns of India.
- **Objectives:**
 - Securing tap and sewer connections.
 - Rejuvenation of water bodies.
 - Creating a circular water economy.
- **Progress of the Jal Jeevan Mission:**
 - In August 2019, only **16.8% of rural households had tap water connections**. By December 2023, this increased to around **71.51%**.
 - All 378 arsenic-affected habitations awaiting tap water supply reported to have received safe drinking water through **Community Water Purification Plants (CWPPs)**.

Merit Over Reservation in Appointments of Law Officers

Why in News?

Recently, the **Madras High Court** ruled that the rule of reservation need not be followed in the appointment of law officers.

- The court held that merit must be the sole criterion for such appointments as the government is duty-bound to engage only the most proficient, competent and capable lawyers to represent it before the courts of law.

What are the Key Points of the Verdict?

- The verdict was delivered while dismissing a public interest litigation petition filed in 2017 insisting upon transparency and adequate representation for **women**, the **Scheduled Caste**, the **Scheduled Tribe** and the **minorities** in the appointment of law officers.
 - The petitioner highlighted that the **Appointment of Law Officers** of the **High Court of Madras** had failed to provide **vertical** as well as **horizontal reservation**.
- The **Division Bench** has stated that the relationship between an advocate and their client is one of active **confidence** and **trust** and is governed by the **doctrine of uberrima fides**.
 - The relationship between the government and the law officer is purely professional and not that of a master and a servant.
- The **law officers are not appointed to a civil post** nor are they employees of the government. Therefore, it cannot be held that reservation needs to be provided while appointing law officers by the government.
- The court suggested that the invitation for applications should be inclusive, allowing the government to select highly competent and meritorious lawyers as law officers.

Doctrine of Uberrima Fides:

- The **doctrine of Uberrima Fides** is a Latin phrase that translates to **"utmost good faith"**. It requires the advocate to act in the best interests of the client.

What are the Rules/ Judgements Related to Reservation in Public Employment?

- According to Office Memorandum issued by the **Department of Personnel and Training (DoPT)** in **2021** the **rule of reservation** must be applied even to **contractual** as well as **temporary appointments** barring those that were to last for less than **45 days**.
- The **Supreme Court** in **Indra Sawhney's case, 1992** ruled that providing reservations for certain **services and positions** might not be advisable for the performance of duties.

Note:



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- The post of a **law officer** was one such position that must be exempt from the rule of reservation.
- In 2022, Justices **Nageswara Rao**, **Sanjiv Khanna**, and **B.R. Gavai** issued a ruling emphasizing that state governments must provide **measurable data** to justify reservation policies for the promotion of candidates belonging to **SC and STs**.
- The court upheld the requirement for state authorities to support their decisions on promoting **SC/ST** candidates with concrete and measurable evidence.
- **Constitutional Provisions Governing Reservation in India:**
 - **Articles 15(4)** and **16(4)** of the Constitution enabled the State and Central Governments to reserve seats in government services for the members of the **SC and ST**.
 - Constitutional **81st Amendment Act, 2000** inserted **Article 16 (4B)** which enables the state to fill the unfilled vacancies of a year which are reserved for **SCs/STs** in the succeeding year, thereby nullifying the ceiling of **50%** reservation on the total number of vacancies of that year.
 - **Article 335** of the constitution says that the claims of **STs** and **STs** shall be taken into consideration consistently with the maintenance of efficacy of the administration.

➤ Advocate General

- **Under Article 165** of the Constitution of India the **Governor of each State shall appoint a person who is qualified to be appointed as a Judge of a High Court to be Advocate General for the State**.
- **The Advocate General** is the **Highest legal officer** in the state in India.
 - He possesses the **complete authority** to present himself in any court within the state.
 - He **lacks voting privileges** in the proceedings of the **state legislature** or any committees initiated by the state legislature. However, he does retain the **right to speak** and **participate** in these proceedings.

Global River Cities Alliance: NMCG

National Mission for Clean Ganga

Why in News?

Recently, the **National Mission for Clean Ganga (NMCG)**, has launched the **Global River Cities Alliance (GRCA)** at COP28 in Dubai, United Arab Emirates.

- During the event the NMCG also signed a Memorandum of Common Purpose (MoCP) with the **Mississippi River Cities and Towns Initiative (MRCTI)**, representing **124 cities/towns situated along the banks of the Mississippi River**, the United States.
- The NMCG has signed the MoCP on behalf of the **River Cities Alliance (RCA)**.

Recently, the **National Mission for Clean Ganga (NMCG)** has signed a Memorandum of Common Purpose (MoCP) with the **Mississippi River Cities and Towns Initiative (MRCTI)**.

- MRCTI represents **124 cities/towns situated along the banks of the Mississippi River**, in the United States.
- The NMCG has signed the MoCP on behalf of the **River Cities Alliance (RCA)**. The signing ceremony took place as part of the **COP28**, in Dubai.

What is the Global River Cities Alliance (GRCA)?

➤ About:

- The GRCA is an **international coalition of cities and countries dedicated to the conservation, sustainable management, and protection of river systems worldwide**.
- The alliance encompasses a **diverse array of countries and river cities**, fostering partnerships among key nations like **India, Egypt, Netherlands, Denmark, Ghana, Australia, Bhutan, Cambodia, Japan, and others**.
- GRCA's membership extends to **cover 275+ river-cities across 11 countries**, demonstrating a substantial global reach and influence.

➤ Objective:

- It will serve as a platform for **collaboration, knowledge exchange**, and concerted efforts among various stakeholders, including governments, cities, financial institutions, and environmental organizations..

Note:



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What is the Mississippi River Cities and Towns Initiative (MRCTI)?

- The MRCTI was created in 2012 to provide an influential voice for the Mississippi River, dramatically increasing demand for effective river protection, restoration, and management in Washington, DC.
- It addresses matters of mutual concern, including river water quality and habitat restoration, flooding and floodplain issues, river-focused recreation, sustainable economies, and celebration of the River culture and history.

What is River Cities Alliance (RCA)?

- **About:**
 - The RCA is a joint initiative of the Ministry of Jal Shakti (MoJS) & the Ministry of Housing and Urban Affairs (MoHUA), with a vision to connect river cities and focus on sustainable river centric development.
 - The Alliance focuses on three broad themes- Networking, Capacity Building and Technical Support.
 - Beginning with 30 member cities in November 2021, the Alliance has expanded to 110 river cities across India and one international member city from Denmark.
- **Objective:**
 - The RCA intends to facilitate knowledge exchange (online) for Indian cities to learn new practices and approaches for urban river management.
 - It will also be an opportunity for international cities to learn about experiences in Indian cities, which may be relevant to their contexts.

What is the National Mission for Clean Ganga (NMCG)?

- **About:**
 - On 12th August 2011, the NMCG was listed as a society under the Societies Registration Act, 1860.
 - It acted as the implementation arm of the National Ganga River Basin Authority (NGRBA) which was constituted under the provisions of the Environment (Protection) Act (EPA), 1986.

- NGRBA was dissolved in 2016 and replaced by the National Council for Rejuvenation, Protection, and Management of River Ganga.

➤ Objective:

- The objective of the NMCG is to reduce pollution and ensure the rejuvenation of the Ganga River.
 - **Namami Gange** is one of the Coveted Programmes of NMCG to clean Ganga.
- This can be achieved by promoting intersectoral coordination for comprehensive planning & management and maintaining minimum ecological flow in the river, with the aim of ensuring water quality and environmentally sustainable development.

➤ Organization Structure:

- The Act envisages a five-tier structure at the national, state, and district levels to take measures for prevention, control, and abatement of environmental pollution in river Ganga as below:
 - National Ganga Council under the chairmanship of the Hon'ble Prime Minister of India.
 - Empowered Task Force (ETF) on river Ganga under the chairmanship of Hon'ble Union Minister of Jal Shakti (Department of Water Resources, River Development and Ganga Rejuvenation).
 - National Mission for Clean Ganga (NMCG).
 - State Ganga Committees
 - District Ganga Committees in every specified district abutting river Ganga and its tributaries in the states.

What are the Other Initiatives for River Rejuvenation in India?

- **Ganga Action Plan:** It was the first River Action Plan that was taken up by the Ministry of Environment, Forest and Climate Change in 1985, to improve the water quality by the interception, diversion, and treatment of domestic sewage.
 - The National River Conservation Plan is an extension to the Ganga Action Plan. It aims at cleaning the Ganga River under the Ganga Action Plan phase 2.
- **National Water Mission (2010):** It ensures integrated water resource management leading to water conservation, less wastage, and equitable distribution forming better policies.

Note:

- **Clean Ganga Fund:** In 2014, it was formed to clean up the Ganga, set up waste treatment plants, and conserve of biotic diversity of the river.
- **Bhuvan-Ganga Web App:** It ensures the involvement of the public in monitoring of pollution entering into the river Ganga.
- **Ban on Waste Disposal:** In 2017, the **National Green Tribunal** banned the disposal of any waste in the Ganga.

SC Verdict on Revocation of Article 370

Why in News?

Recently, The **Supreme Court** gave its verdict on the Union government's **2019 move to amend Article 370 of the Constitution**. The abrogation had ended the special status conferred to the erstwhile state of Jammu and Kashmir. **The court held the Constitutional order that revoked Article 370 as valid.**

What is the Recent Judgement of the Supreme Court?

- **Jammu and Kashmir did not Possess Sovereignty:**
 - SC observed that there is much evidence in Article 370 and the J&K Constitution to show that in regards to Kashmir, a merger agreement was not necessary to surrender its sovereignty.
 - **Article 370(1)** applied **Article 1** of the Constitution of India (where J&K was listed as a Part III State) with no modifications.
 - **Section 3** of the J&K Constitution explicitly states that **"the State of Jammu and Kashmir is and shall be an integral part of the Union of India."**
 - **Section 147** of the Indian constitution prohibited **any amendments to Section 3**, further making the provision absolute.
 - Thus, Court said that the Constitution of India, **"became the supreme governing document of the land."** Further, the Preamble to the J&K Constitution shows a **"clear absence of...a reference to sovereignty."**
 - **Article 370 is a Temporary Provision:**
 - The SC relied on the fact that the Constitution framers placed **Article 370 with the temporary and transitional provisions contained in Part XXI.**

- Then, it pointed out that the **Instrument of Accession (IoA)** made it **"abundantly clear"** that **Article 1** which stated that **"India that is Bharat shall be a Union of States"** applied in its entirety to J&K.
- **Constitutional Validity of Proclamations Under President's Rule:**
 - SC's Bench concurred that the President has the power to make **"irreversible changes, including the dissolution of the State Assembly,"** and that the President's powers are kept in check by **"judicial and constitutional scrutiny."**
- **The Constitution of J&K Stands Inoperative:**
 - Court held that it is no longer necessary for the Constitution of J&K through which only certain provisions of the Indian Constitution applied to J&K, to exist.
 - The implicit but necessary consequence of the application of the Constitution of India in its entirety to the State of Jammu and Kashmir is that the Constitution of the State is inoperative.
- **Set up a Truth and Reconciliation Commission to Address Human Rights:**
 - The SC recommended that the Union set up a **"truth and reconciliation Commission"** just like South Africa did **post-apartheid** to investigate human rights violations by both state and non-state actors. **The exercise should be time-bound.**

What was the Special Status of J&K?

- **About:**
 - On **5th August 2019**, the **President of India** in the exercise of the powers conferred by Article 370(1) of the Constitution issued the **Constitution (Application to Jammu and Kashmir) Order, 2019**.
 - Through this, the Government of India has **made modifications to Article 370 itself (not revoked it).**
 - With this, the Government of India has dramatically altered the relationship between the state of Jammu and Kashmir and the Indian Union.
- **Background:**
 - On 17th October 1949, Article 370 was added to the Indian constitution, as a **'temporary provision'**, which exempted Jammu & Kashmir, permitting it to draft its own Constitution and restricting the Indian Parliament's legislative powers in the state.
 - It was introduced into the draft constitution by N Gopalaswami Ayyangar as Article 306 A.

Note:

➤ **Article 370:**

- The **Constituent Assembly of Jammu & Kashmir** was empowered to recommend which articles of the Indian Constitution should apply to the state.
 - The J&K Constituent Assembly was dissolved after it drafted the state's constitution. **Clause 3 of Article 370 gives the President of India the power to amend its provisions and scope.**
- **Article 35A** stems from Article 370 and was introduced through a Presidential Order in 1954, on the recommendation of the J&K Constituent Assembly.
 - Article 35A empowers the Jammu & Kashmir legislature to define the **permanent residents of the state, and their special rights and privileges.**

- It appears in Appendix I of the Constitution of India.

- Several states have different constitutional guarantees. **These are codified in Articles 371, 371A- I** for states including Andhra Pradesh, Maharashtra, Gujarat, and those in the North East.

Note: For the rest of India, the Constitution lays down an elaborate procedure in **Article 367 to enlarge or curb state power through a constitutional amendment.** However, for J&K, the Constitution provides that a mere executive action under Article 370 would suffice.



What are the Key Changes Brought Out by the Order of 2019?

➤ **Constitution (Application to Jammu and Kashmir) Order, 2019:**

- The Constitution (Application to Jammu and Kashmir) Order, 2019 has replaced the **Presidential Order of 1954.**
 - Subsequently, the **Jammu and Kashmir Reorganisation Bill, 2019**, passed by Parliament divides the state of Jammu and Kashmir into two new Union Territories (UTs): Jammu & Kashmir, and Ladakh.

- This is the first time that a state has been converted into UTs.
 - Of the six Lok Sabha seats currently with the state of Jammu and Kashmir, five will remain with the union territory of Jammu and Kashmir, while one will be allotted to Ladakh.
- The UT of Jammu and Kashmir will have an Assembly, like in Delhi and Puducherry.
 - Ladakh will be a UT without legislature
 - Kashmir will no longer have a Governor, but rather a **Lieutenant Governor** like in Delhi or Puducherry.

Note:

➤ **Status of J&K Union Territory:**

- J&K Assembly will have a five-year term, not six, as was the earlier case.
- Section 32 of the J&K 2019 Bill proposes that the Assembly can make laws on any subjects in the State and Concurrent lists except on state subjects relating to “public order” and “police”.
 - This is similar to **Article 239A of the Constitution** that is applicable to Union Territories of Puducherry and Delhi.
 - However, by insertion of **Article 239AA** and by virtue of the **69th Constitutional Amendment**, the Delhi Assembly cannot legislate on matters in entry 18 of the State List, i.e. land.
 - In the case of J&K, the Assembly can make laws on land.

➤ **The Special Status of J&K Abolished:**

- Jammu & Kashmir will no longer have the separate constitution, flag or anthem.
- The citizens of Jammu and Kashmir will not have dual citizenship.
- As the new union territory of Jammu and Kashmir will be subject to the Indian Constitution, its citizens will now have the Fundamental Rights enshrined in the Indian constitution.
- Article 360, which can be used to declare a Financial Emergency, will now also be applicable.
- All laws passed by Parliament will be applicable in Jammu and Kashmir, including the **Right to Information Act** and the **Right to Education Act**.
- The **Indian Penal Code** will replace the Ranbir Penal Code of Jammu and Kashmir.
- Article 35A, which originates from the provisions of Article 370 stands null and void.

Note: J&K historically had a unique relationship with the Union. There was no merger agreement between J&K and the Union, **but only the Instrument of Accession (IoA)**. Hence there is no transfer of sovereignty, and the state's autonomy has to be maintained. The IoA deals with external sovereignty. External sovereignty is lost with a few exceptions here and there. **CJI in recent judgement said that J&K has no internal sovereignty after the signing of IoA.**

What were the Different Legal Challenges in Abrogation of Article 370?

➤ **Constitutional Challenges:**











- Presidential order that sought to abrogate Jammu and Kashmir's special status, according to **Article 370 (3) the President would require the recommendation of the constituent assembly of Jammu and Kashmir** to make such a change.
 - However, the **2019 Presidential order adds a sub-clause to Article 367**, replacing the terms:
 - “Constituent Assembly of Jammu and Kashmir” to mean “legislative Assembly of Jammu and Kashmir”.
 - “Government of Jammu and Kashmir” to mean “Governor of Jammu and Kashmir acting on the aid and advice of the council of ministers”.
 - The government **sought to dilute the autonomy under Article 370 without bringing a Constitutional Amendment** that would require a two-thirds majority in the Parliament.
 - This provision **was challenged in the Supreme Court on the ground that it added article 35A to the Indian Constitution only through a Presidential Order**.
 - Conversion of Jammu and Kashmir into a Union Territory **is in violation of Article 3**, as the **Bill was not referred to the President by the State Assembly**.
 - In the reorganisation of the state, **the Presidential order also requires the concurrence of the government of the state**. However, since Jammu & Kashmir is currently under the Governor's rule, the Governor's concurrence is deemed to be the government's concurrence.
- **Federalism Issue:**
- The Instrument of Accession was **like a treaty between two sovereign countries** that had decided to work together.
 - In **Santosh Kumar v. State of J&K & ors, 2017**, the SC said that due to historical reasons, Jammu and Kashmir had a special status.
 - In **SBI v Zaffar Ullah Nehru, 2016**, the SC held that Article 370 cannot be repealed without the concurrence of the Constituent Assembly of Jammu and Kashmir.

Note:

What are the Signs of Peace and Security in J&K After the Abrogation of Article 370?

- **Reduction in Stone Pelting and Militancy:**
 - Increased security presence and action by central agencies like the **National Investigation Agency (NIA)** led to decrease in the cases of stone pelting.
 - The number of stone-pelting incidents decreased from 618 in 2019 to 222 in 2020.
 - Injuries to security forces decreased from 64 in 2019 to 10 in 2021.
- **Reduction in Civilian Injuries:**
 - Civilian Injuries from pellet guns and baton charges reduced from 339 (2019) to 25 (2021).
 - Law and Order also improved in J&K as only 20 law and order incidents were reported in 2022.
- **Arrests of Militants and Over-Ground Workers (OGWs):**
 - Arrests of OGWs of militant groups increased from 82 in 2019 to 178 in 2021.
 - There has been a 32% decline in terrorist acts from August 2019 to June 2022, compared to the preceding 10 months.

FEWER INJURIES, DEATHS AMONG SECURITY FORCES

Incidents	52 months before Aug 5, 2019	52 months after Aug 5, 2019
Terrorist-initiated incidents	765 	455 
Attacks on civilians	193 	156 
Civilian casualties	234 	131 
Civilians injured	1,300 	422 
Encounters	390 	338 
Security forces injured	1,098 	334 
Security forces killed	355 	125 

EU's Landmark AI Legislation

Why in News?

Recently, the **European Union (EU)** has set the stage for the **world's first comprehensive legislation** aimed at **regulating the use of Artificial intelligence (AI)**.

- The EU's proposed framework will undergo a parliamentary vote in early 2024, potentially becoming enforceable by 2025.

What are the Key Components of the EU Framework for AI Regulation?

- **Safeguards in Legislation:**
 - **Empowerment of Consumers:** Ability for individuals to launch **complaints against perceived AI violations**.
- **Restrictions on Law Enforcement Adoption:** Clear **boundaries on AI usage** by law enforcement agencies.
- **Strict Limitations on AI:** Strong restrictions on **facial recognition technology** and AI manipulation of human behaviour.
- **Penalties for Violations:** Provision for **tough penalties for companies** found breaking the rules.
- **Limited Biometric Surveillance:** Governments permitted to use real-time **biometric surveillance in public areas** only in cases of serious threats like terrorist attacks.
- **Categorization of AI Applications:**
 - **Four Risk Classes:** AI applications classified into **four risk categories** based on their **level of risk and invasiveness**.

Note:

- **Banned Applications:** Mass-scale facial recognition and behavioral control AI applications are **largely banned**, with exemptions for law enforcement.
- **High-Risk Applications:** Allowed with certification and provision for backend technique transparency, such as **AI tools for self-driving cars**.
- **Medium-Risk Applications:** Deployable without restrictions, like **generative AI chatbots**, with explicit disclosure to users about AI interaction, transparency obligations, and detailed tech documentation.
- Other EU's Regulatory Achievements:
- **General Data Protection Regulation (GDPR) Implementation:** Enforced since May 2018, focusing on **privacy and explicit consent for data processing**.
- **Sub-Legislations: DSA and DMA:**
 - **Digital Services Act (DSA):** Focus on **regulating hate speech**, counterfeit goods, etc.
 - **Digital Markets Act (DMA):** Identifying **"dominant gatekeeper"** platforms and addressing non-competitive practices and dominance abuse.

What are Different Global Approaches to AI Regulation?

- **EU:** Tough stance, categorising AI based on invasiveness and risk.
- **United Kingdom:** 'Light-touch' approach fostering innovation in AI.
- **United States:** Positioned between strict regulation and innovation support.
- **China:** Introduced its own measures for AI regulation, aligning with its policies and priorities.

What is India's Strategy Regarding AI Regulation?

- **Stance:**
 - India is yet to have a comprehensive framework for regulating AI. However, India has shifted from a **stance of not considering AI regulation to actively formulating regulations based on a risk-based, user-harm approach**.
- **Advocacy for Inclusive and Responsible AI:**
 - India's initial national AI strategy, **#AIFORALL**, aimed at inclusivity, debuted in 2018.
 - **NITI Aayog's National Strategy for AI (2018)** included a chapter on responsible AI.

- In **2021**, NITI Aayog issued a paper, '**Principle of Responsible AI**'. Seven broad principles were enumerated in the paper: equality, safety and reliability, inclusivity and non-discrimination, transparency, accountability, privacy and reinforcement of positive human value.
- In March 2023, the **Ministry of Electronics and Information Technology introduced IndiaAI**, the national program on AI, aimed at serving as a comprehensive initiative to cover all AI-related research and innovations.
- In July, 2023 **Telecom Regulatory Authority of India** issued a paper, that recommended setting up a **domestic statutory authority to regulate AI through the lens of a "risk-based framework"** and constitution of an advisory body with members from multiple government departments, academia and experts.

Major Sector-specific AI Frameworks in India:

- **Healthcare Sector:**
 - **Indian Council of Medical Research** issued ethical guidelines for AI in biomedical research and healthcare in June 2023.
- **Capital Market:**
 - **SEBI** issued a circular in January 2019 to guide policies and **create an inventory for AI systems** in the capital market.
- **Education Sector:**
 - **National Education Policy 2020** recommends AI awareness integration in school courses.

Global Partnership on Artificial Intelligence (GPAI)

- **GPAI is a forum of 28 nations and the European Union** that is working together to understand the challenges and opportunities of artificial intelligence, or AI, and to promote its responsible evolution.
- India **joined the GPAI as a founding member in 2020** and became the Chair of the GPAI in November 2022 after France.
- Notably, **China is not a member of the GPAI**.
 - India is set to host the **Annual GPAI Summit** from **12th December to 14th December 2023**.

Note:

PM-JANMAN Scheme

Why in News?

Recently, the Ministry of Tribal Affairs has brought to light the ambitious **Pradhan Mantri-Janjati Adivasi Nyaya Maha Abhiyan (PM-JANMAN) Scheme**. Aimed at uplifting **Particularly Vulnerable Tribal Groups (PVTGs)**, this initiative carries the potential to address their unique challenges and provide essential infrastructure for a brighter future.

What is the PM-JANMAN Scheme?

➤ About:

- PM JANMAN is a government scheme that aims to **bring tribal communities into the mainstream**.
- The scheme (comprising Central Sector and Centrally Sponsored Schemes) will be implemented by the Ministry of Tribal Affairs, in collaboration with the State governments and the PVTG communities.
- The scheme will **concentrate on 11 critical interventions overseen by 9 line Ministries**, ensuring the implementation of existing schemes in villages inhabited by PVTGs.
 - It encompasses various sectors, including safe housing under the **PM-AWAS Scheme**, access to **clean drinking water**, improved **healthcare, education, nutrition**, road and telecommunications connectivity, as well as opportunities for sustainable livelihoods.
- The plan also includes the establishment of **Van Dhan Vikas Kendras** for **trading in forest produce**, off-grid solar power systems for 1 lakh households, and solar street lights.
- The scheme is expected to **enhance the quality of life and well-being of the PVTGs**, by addressing their multiple and intersecting forms of **discrimination and exclusion**, and by recognizing and valuing their unique and valuable contribution to national and global development.

➤ Challenges in Implementation:

- Lack of current data on PVTGs is a significant challenge, as the last available census data for PVTGs is from 2001, which counted a total of around 27.6 lakh individuals belonging to these communities.

- The Ministry of Tribal Affairs has started conducting baseline surveys, but an accurate and current dataset of PVTG populations is yet to be compiled.
- The population data submitted to the **Parliamentary Standing Committee** on Social Justice and Empowerment in 2022 was based on the **2011 Census** and **did not include the population of PVTGs in Maharashtra, Manipur, and Rajasthan**.
- The lack of current data hampers the accurate assessment of the needs and progress of PVTG communities.
- The absence of a specific Census for PVTG communities, as recommended by the **National Advisory Council in 2013**, further adds to the challenge of gathering comprehensive information on their education, health, and housing status.
- The complexity and diversity of the needs and capacities of the PVTGs across different regions and states and the **need for customized and flexible approaches and interventions**.
- The stigma and discrimination faced by the PVTGs in mainstream society and the state and the **need for sensitization and awareness** among the stakeholders and the public.
- The coordination and convergence of the scheme with the existing schemes and programmes of the central and state governments and the need for effective and efficient delivery and utilization of the resources and services.

Who are Particularly Vulnerable Tribal Groups (PVTGs)?

- In 1973, the **Dhebar Commission** established **Primitive Tribal Groups (PTGs)** as a distinct category, encompassing tribal communities characterized by a **declining or stagnant population**, the use of **pre-agrarian technology, economic backwardness, and low literacy**.
 - These groups are identified as **less developed among the tribal communities**.
- In 2006, the Government of India renamed the PTGs as **PVTGs**. They reside in **remote and inaccessible areas**, facing challenges due to poor infrastructure and administrative support.

Note:

- There are **75 PVTG communities** spread across 18 States and Union Territories in India.
 - **Odisha has the highest number of PVTGs (15)**, followed by **Andhra Pradesh (12)**, Bihar and Jharkhand (9), Madhya Pradesh and Chhattisgarh (7), Tamil Nadu (6), and Kerala and Gujarat (5 each).
 - The rest of the communities are spread across Maharashtra, West Bengal, Karnataka, Uttarakhand, Rajasthan, Tripura, and Manipur.
 - **All four tribal groups in the Andaman and one in the Nicobar Islands are recognized as PVTGs.**

Other Initiatives for PVTGs

- [Janjatiya Gaurav Divas.](#)
- [Viksit Bharat Sankalp Yatra.](#)
- [PM PVTG Mission.](#)

Gram Manchitra and mActionSoft

Why in News?

Recently, the Ministry of Panchayati Raj introduced "Gram Manchitra," a [Geographic Information System \(GIS\)](#) app.

- Additionally, the Ministry launched "mActionSoft," a mobile-based solution for [geo-tagging](#) project assets.

What is Gram Manchitra and mActionSoft?

- **Gram Manchitra:**
 - **About:** The primary goal of Gram Manchitra is to encourage **spatial planning initiatives by Gram Panchayats**, leveraging the capabilities of geo-spatial technology.
 - The app supports the **Gram Panchayat Development Plan (GPDP)** by aiding decision-making.
 - Features:
 - **Unified GeoSpatial Platform:** Gram Manchitra provides a **single and unified platform**, facilitating the visualisation of developmental projects and activities at the Gram Panchayat level.
 - **Sector-Wise Planning:** It **enables Gram Panchayats to plan and execute developmental works across different sectors**, fostering a holistic approach to rural development.

- **Development Plan Tools:** Tools include project **site identification**, **asset tracking**, **cost estimation**, and **project impact assessment**.

➤ mActionSoft:

- **About:** mActionSoft is a **mobile-based solution**, plays a crucial role in **capturing geo-tagged photos** with GPS coordinates for works with asset outputs.
 - Assets undergo **geo-tagging at three stages:** before the commencement of work, during the work, and upon completion.
 - This establishes a **comprehensive repository of information** on various works related to natural resource management, water harvesting, sanitation, agriculture, and more.
- Features:
 - **Geo-Tagging:** Panchayats geotag assets created under finance commission funds with photographs, ensuring transparency and accountability.
 - The assets geo-tagged using mActionSoft seamlessly **integrate with Gram Manchitra**, enriching the visualisation of developmental works in Gram Panchayats.

- **Geographic Information System:** It is a technology that **captures, manages, analyses, and presents geographical or spatial data**.
 - It allows users to **visualise, interpret, and understand data by linking it to locations on the Earth's surface**.
 - GIS combines various layers of information **such as maps, satellite imagery, and data tables** to create interactive maps and models.
 - It is used in diverse fields like **urban planning, environmental analysis, natural resource management, emergency response**, and more, aiding in decision-making and problem-solving related to spatial information.
- **Geotagging:** It is the process of **adding geographical identification** to various media such as **photos, videos, websites, or other documents**.
 - It involves attaching **metadata, usually GPS coordinates to these files, providing specific location information** about where the media was created or captured.

Note:

- This enables users to pinpoint the exact geographic location associated with the content, facilitating organization, search, and mapping of data based on its location.

What are the Other Related Government Initiatives?

- [SVAMITVA Scheme](#)
- e-Gram Swaraj e-Financial Management System

Jammu and Kashmir Reservation Bill and J&K Reorganisation (Amendment) Bill 2023

Why in News?

Recently, the [Lok Sabha](#) has passed the **Jammu and Kashmir Reorganisation (Amendment) Bill, 2023** and the **Jammu and Kashmir Reservation (Amendment) Bill, 2023**.

- The Bill seeks to represent those who became refugees in their own country and also reserves one seat in the Jammu and Kashmir Assembly for people who have been displaced from [Pakistan-occupied Kashmir \(PoK\)](#).

What is the Background?

- Before the [Revocation of Article 370](#), Jammu and Kashmir had distinct rules for **delimiting Lok Sabha and Assembly seats**.
- Post the abrogation of Article 370 and the region's transition into a **Union Territory**, a [Delimitation Commission](#) was formed in March 2020.
- This commission was tasked not only with delimiting J&K's seats but also those of Assam, Manipur, Arunachal Pradesh, and Nagaland, aiming to finish within a year.
- Recently, the commission concluded its delimitation process, resulting in an increase in J&K's legislative assembly seats from **107 to 114**, facilitated by the **Jammu and Kashmir Reorganisation (Amendment) Bill, 2023**.

What are These Two Bills?

- What is the Jammu & Kashmir Reservation (Amendment) Bill, 2023:
 - It seeks to amend **Section 2 of the Jammu and Kashmir Reservation Act, 2004**.

- The Jammu and Kashmir Reservation Act, 2004 provided reservation in jobs and admission in professional institutions to [Scheduled Castes \(SCs\)](#), [Scheduled Tribes \(STs\)](#), and other socially and educationally backward classes.

- The amendment Bill suggests a **change in the nomenclature of a section of people who were earlier described as "weak and underprivileged classes (social castes)" to "other backward classes"**.
- **Jammu and Kashmir Reorganisation (Amendment) Bill, 2023:**
 - It seeks to amend the **2019 Act** and provide **representation in the Legislative Assembly** to the **Kashmiri Migrants and displaced persons** from the PoK.
 - It seeks to **nominate two members from the Kashmiri migrant community**, with one nominee **being a woman** and the power of the lieutenant governor to nominate one person representing the displaced persons from **Pakistan-occupied Kashmir (PoK)** to the Legislative Assembly.
 - This bill proposes to **increase the total number of seats in the Jammu and Kashmir legislative assembly from 107 to 114**, of which **7 would be reserved for scheduled caste members** and **9 seats for legislators from scheduled tribes**.
 - As per the Bill, **24 seats of the Assembly will remain vacant until the occupation in Pakistan-occupied Kashmir ceases**.
 - Therefore, the **effective strength of the Assembly is 83**, which the amendment seeks to increase to 90.

How is the Zero Terror Plan Linked with the Abrogation of Article 370?

- The **Zero Terror Plan** refers to a comprehensive strategy initiated by the Indian government to **eradicate terrorism from Jammu and Kashmir**. This plan has been in effect for the past three years and is slated for **full implementation by 2026**.
- Since the abrogation of Article 370, which granted special status to Jammu and Kashmir, there has been a **noticeable decline in terrorism in the region**.

What is Delimitation?

- Delimitation is the act of fixing or redrawing the limits or boundaries of territorial constituencies (Assembly or Lok Sabha seat) in a country or a province having a legislative body, as per the [Election Commission](#).

Note:



drishti

- The delimitation exercise is carried out by an independent high-powered panel known as the Delimitation Commission whose orders have the force of law and cannot be questioned by any court.
 - **Delimitation Commissions have been set up four times** — 1952, 1963, 1973 and 2002 under the Acts of 1952, 1962, 1972 and 2002.
- The exercise has been carried out over the years to redefine the area of a constituency based on its population size (based on the last **Census**).
- Aside from changing the limits of a constituency, the process may result in a change in the number of seats in a state.
- This exercise also involves reservation of Assembly seats for SC & ST in accordance with the Constitution.

Decoding Online Gaming Ethics

Why in News?

Recently, the online gaming industry has voluntarily entered into a signed **code of ethics**.

- This move signifies an attempt to **self-regulate** and create a more stable environment for the industry.
 - Responsibility for **online gaming** matters has been assigned to the **Ministry of Electronics and Information Technology** by the Government of India.

What is the Code of Ethics Adopted by the Gaming Industry?

- To govern itself and address growing concerns, three prominent lobby groups **Internet and Mobile Association of India (IAMAI)**, **E-Gaming Federation (EGF)**, and **All India Gaming Federation (AIGF)** have voluntarily **co-signed a code of ethics**.
- The code of ethics is entirely voluntary, in nature. Despite its **non-binding nature**, the code aims to foster responsible practices within the industry and is viewed as a step towards self-regulation.
- The code endeavors to safeguard the **interests of consumers** by empowering them to make informed decisions regarding the online games they choose.
- According to the code, **online gaming companies** are required to undertake **know-your-customer (KYC)** procedures in accordance with applicable laws.

- Additionally, companies must disclose on their platforms the **criteria for determining winners, fees charged**, and ensure that deposits are solely utilized for playing games on the platform.
- It also strives to create a **“healthy environment”** for online games in India, focusing on aspects such as **transparency, fairness, and responsible gaming**.

What is Online Gaming?

- About:
 - **Online gaming** involves playing games through the **internet**, facilitating player connections and collaborative gameplay irrespective of their physical locations.
 - It is accessible on various devices, including computers, and mobile phones.
- Difference Between Gambling and Online Gaming:
 - **Gambling is the practice of placing bets on events** with uncertain outcomes, primarily aimed at winning money or material possessions.
 - Various forms of gambling exist, such as casino games, sports betting, and lotteries.
 - Unlike online gaming, gambling carries the risk of losing money or valuable items.
- In India, **games of chance** fall under the category of **gambling** and are **generally prohibited**, while games of skill, falling outside the ambit of gambling are **usually exempted**.
 - In **RMD Chamarbaugwala v. Union of India**, the Supreme Court relied on the **‘skill test’** to decide whether an activity is gambling or not.
 - The court held that competitions that substantially **involve skills** are not **gambling** activities.

How Does the Code Align With Government Regulations on Online Gaming?

- **Public Gambling Act, 1867:**
 - The act primarily addresses physical gambling activities. However, its relevance extends to online gaming, providing a legal framework for regulation.
- **Information Technology Act, 2000:**
 - The **Information Technology Act of 2000** plays a pivotal role in regulating online activities, including gaming. **Section 66** of the **IT Act** deals with **computer-related offenses**, providing a legal basis for addressing **cyber crimes** associated with **online gaming**.

Note:

- **Sections 67, 67A, and 67B of the IT Act** empower authorities to formulate laws related to online gaming, recognizing the need for discretion in regulating activities that involve elements of chance, gambling, and betting.
 - This recognition aligns with the constitutional division of responsibilities, placing gambling and betting within the state's jurisdiction.
- **Self-Regulatory Bodies:**
 - The **Ministry of Electronics and Information Technology** has introduced rules that permit the **establishment of self-regulatory bodies** within the online gaming industry.
- **Inter-Ministerial Task Force Recommendations:**
 - The government's proactive approach is evident in the recommendations put forth by the **inter-ministerial task force**, contributing to the formulation of rules for online gaming.
 - These recommendations reflect a collaborative effort aimed at striking a balance between industry growth and consumer protection.

New Regulation of AICTE

Why in News?

Recently, the **All India Council for Technical Education (AICTE)** has announced new regulations for undergraduate courses like Bachelor of Business Administration (BBA) and Bachelor of Computer Application (BCA) starting from 2024-25.

What are the Key Highlights of the New Regulations?

- **Regulation Expansion:**
 - Undergraduate (UG) courses in Computer Applications (BCA) and Management (BBA/BMS) will **come under the umbrella of AICTE** to ensure coordinated development in technical and management education.
 - Engineering colleges are now permitted to offer BBA and BCA programs, expanding their scope beyond traditional engineering disciplines.
- **Institutional Flexibility:**
 - Well-performing institutions will be given provision for Extension of Approval up to 3 years for well-performing institutions.

- Presently, every technical education institute has to reapply for approval every year.
- **Career Advancement for Working Professionals:**
 - Flexible study timings are introduced for selected institutes, allowing working professionals, such as diploma graduates, to pursue lateral entry into engineering degrees. This accommodates their work commitments by allowing extended study durations.
- **Professional Upgradation Initiatives:**
 - AICTE has identified and selected over 300 institutes nationwide offering limited seats in diploma, engineering UG, and PG degrees for working professionals seeking educational upgrades.
 - Relaxation in ranking criteria is provided for regions lacking suitable institutes.
- **Regional Language Emphasis:**
 - AICTE has published academic textbooks, including engineering, in **13 regional languages**, promoting regional language education in technical fields.
- **Polytechnic Autonomy and Industry Collaborations:**
 - AICTE is granting autonomy to polytechnic colleges and encouraging collaborations with industries for degree issuance, focusing on employability and facilitating placements.

What is All India Council for Technical Education (AICTE)?

- The All India Council for Technical Education (AICTE) is a statutory body, and a national-level council for technical education, under Ministry of Education, Government of India.
- It was set **up in November 1945** as a national-level **apex advisory body**.

World Soil Day 2023

Why in News?

Every year, the **United Nations** celebrates 5th December as **World Soil Day**.

- In August 2023, a study by US and Australian researchers in Scientific Reports explored the connection between soil micronutrient levels and the nutritional well-being of individuals in India.

Note:

What is World Soil Day (WSD)?

- WSD is celebrated to commemorate the birthday of the late King of Thailand Bhumibol Adulyadej for his lifelong commitment to raising awareness of the importance of sustainable soil management and rehabilitation for food security, poverty alleviation and more.
- WSD was recommended by the **International Union of Soil Sciences (IUSS)** in 2002.
- The **Food and Agriculture Organization (FAO)** has supported the formal establishment of WSD as a global awareness-raising platform under the leadership of the Kingdom of Thailand within the framework of the Global Soil Partnership.
- 5th December 2014 was designated as the first official **WSD by the UN General Assembly (UNGA)**.
- **Theme 2023:** Soil and Water, a Source of Life.

What is the Link between Soil Micronutrients and the Nutritional Status of Individuals as per the Study?

- **Soil Composition and Micronutrient Absorption:**
 - Soil composition **directly influences the levels of essential micronutrients like zinc and iron** in crops. Plants absorb these nutrients from the soil, and their availability in the soil affects the micronutrient content in food.
- **Impact on Human Health:**
 - Low soil zinc levels have been linked to **higher rates of stunting and underweight conditions in children**. Zinc plays a vital role in growth and immune system function.
 - Soil iron availability correlates with the prevalence of anemia. Iron is crucial for hemoglobin production, necessary for oxygen transport in the body.
 - In regions where soil lacks adequate zinc, iron, and other essential micronutrients, there's a higher likelihood of micronutrient deficiencies in the population consuming crops grown in such soil.
- **Solutions Suggested:**
 - Application of zinc to crops on zinc-deficient soils increases yields of rice, wheat, maize, and oats by over 75% more than application of only nitrogen, phosphorus, and potassium fertiliser.
 - **Zinc-enriched fertilisers can enhance soil zinc for three to four years after application**, which means

that it could be an effective long-term intervention, requiring less short-term maintenance than other solutions.

What is the Status of Nutrient Deficiency in India Soil?

- India's soil has been facing widespread **deficiency of nitrogen and phosphorus for a long time**. Potassium deficiency became more prevalent in the 1990s, and **sulphur deficiency emerged as a major problem in the 2000s**.
- An analysis of 0.2 million soil samples from 28 states by scientists associated with **All India Co-ordinated Research Project** on Micro- and Secondary Nutrients and Pollutant Elements in Soils and Plants (AICRP-MSPE) **under the Indian Council of Agricultural Research** shows:
 - **Zinc Deficiency:** Approximately 36.5% of India's soil is deficient in zinc.
 - **Iron Deficiency:** About 12.8% of the country's soil is deficient in iron.
 - **Other Micronutrients:** Apart from zinc and iron deficiencies, the research indicates deficiencies in other micronutrients as well:
 - Boron deficiency is found in 23.4% of soils.
 - Copper deficiency is observed in 4.20% of soils.
 - Manganese deficiency affects 7.10% of soils.

Note: The AICRP-MPSE was launched in 1967 to analyse micronutrient deficiency in soil across the country. Since 2014, the project has shifted focus to analysing the link between soil health and human health.

What can be Done to Shift Towards Soil-Centric Agriculture for Sustainability?

- **Conservation Agriculture and Efficient Farming Techniques:**
 - Implement conservation agriculture techniques like no-till, residue mulch, and crop rotations to restore soil nutrients and health.
 - Discourage traditional fertiliser broadcasting in favor of seed-cum-fertiliser drill machines to enhance water use efficiency.
- **Embracing Diversity and Innovation:**
 - Encourage cover crops, mulching, agroforestry, and smart soil solutions like Bhoomitra and Krishi-RASTAA.

Note:

- Promote practices that enhance sequestration, diversify crops, eliminate residue burning, and adopt precision farming with technology and AI.
- **Restoration and Reclamation Methods:**
 - Advocate for carbon farming, reclaim saline/alkaline soils, and regulate micronutrient use while minimizing chemical inputs.
 - Utilize mechanization for efficient fertilizer placement and integrate organic manures for improved soil health.

What are the Initiatives to Improve Soil Health?

- Soil Health Card Scheme
- Organic Farming
- Fertilizer Self-Sufficiency
- Digital Agriculture
- Carbon Farming
- Paramparagat Krishi Vikas Yojana
- The Nutrient Based Subsidy (NBS) Scheme

Section 6A of the Citizenship Act, 1955

Why in News?

Recently, a Constitution Bench led by the Chief Justice of India is hearing a series of petitions challenging the constitutionality of Section 6A of the Citizenship Act, 1955.

- The Constitution Bench clarifies its focus is limited to examining the validity of Section 6A and not the Assam National Register of Citizens (NRC).

What is Section 6A of the Citizenship Act of 1955?

- **Background:**
 - Section 6A was enacted as part of the **Citizenship (Amendment) Act, 1985**, following the Assam Accord of 1985.
 - The Assam Accord was a tripartite agreement between the Central Government, the State Government of Assam, and the leaders of the Assam Movement, which sought to end the influx of illegal migrants from Bangladesh.

- The Assam Accord, signed in 1985, introduced Section 6A into the Citizenship Act, of 1955, exclusively for Assam.
 - This provision addresses the issue of large-scale migration preceding the 1971 Bangladesh Liberation War. Notably, it mandates the detection and deportation of foreigners who entered Assam after March 25, 1971, marking the creation of Bangladesh.
 - The introduction of Section 6A reflects the specific historical and demographic challenges faced by Assam during this critical period.
- Provisions and implications:
 - Section 6A created a special provision for Assam by which persons of Indian origin who came from Bangladesh **before 1st January 1966, were deemed to be citizens of India as of that date.**
 - Persons of Indian origin who came to Assam **between 1st January 1966, and 25th March 1971**, and who were detected to be foreigners, were required to register themselves and **were granted citizenship after 10 years of residence**, subject to certain conditions.
 - Persons who entered Assam after 25th March, 1971, were to be detected and deported in accordance with the law.
- **Challenges:**
 - **Constitutional Validity:**
 - **Article 6:**
 - The petitioners argue that Section 6A is in violation of Article 6 of the Constitution.
 - Article 6 of the Indian Constitution deals with the citizenship of people who migrated from Pakistan to India during the partition.
 - ◆ The article states that **anyone who migrated to India before 19th July 1949, would automatically become an Indian citizen** if either of their parents or grandparents was born in India.
 - This raises concerns about the legal and constitutional validity of the provision.
 - **Article 14:**
 - Critics argue that Section 6A may violate Article 14 of the Constitution, which guarantees the **right to equality**.
 - ◆ The provision is perceived as discriminatory as it singles out Assam for specific citizenship criteria.

Note:

- The provision is applicable only to Assam, and this selective application raises concerns about equal treatment and fairness compared to other states facing similar issues of migration.
- **Demographic Impact:**
 - Section 6A's citizenship grant is criticized by some petitioners for **allegedly contributing to an influx of illegal migrants** from Bangladesh into Assam.
 - Concerns focus on the unintended consequence of encouraging illegal migration and the **resultant impact on the state's demographic composition**.
 - The petitioners argue that the conferring of citizenship on the migrant population in Assam, as facilitated by Section 6A, amounts to **"cementing an illegality."**
 - They claim that the provision has had a multiplier effect by recognizing these individuals as citizens, leading to continued influx.
- **Cultural Impact:**
 - Petitioners argue that the benefits given to cross-border migrants between 1966 and 1971 led to a radical demographic change affecting the cultural identity of Assam.

What is Citizenship?

- **About:**
 - Citizenship is the legal status and relationship between an individual and a state that entails specific rights and duties.
- **Constitutional Provisions:**
 - **Articles 5 to 11 in Part II of the Constitution of India** deal with the aspects of citizenship, such as acquisition of citizenship by **birth, descent, naturalization, registration, and** relinquishment of Citizenship by **renunciation, and termination**.
 - Citizenship is listed in the **Union List** under the Constitution and thus is under the **exclusive jurisdiction of Parliament**.
- **Citizenship Act:**
 - The Parliament has enacted the Citizenship Act, 1955 to regulate the matters of citizenship in India.
 - The Citizenship Act, 1955 has been **amended six times since its enactment**. The amendments were made in the years **1986, 1992, 2003, 2005, 2015, and 2019**.

- The latest **amendment was made in 2019**, which granted **citizenship to certain illegal migrants belonging to Hindu, Sikh, Buddhist, Jain, Parsi, and Christian communities from Afghanistan, Bangladesh, and Pakistan**, who entered India on or before 31st December 2014.

Quest for Simultaneous Elections in India

Why in News?

In a move towards electoral reform, the Union Government set the wheels in motion in September 2023 by **forming a six-member panel** tasked with the **mammoth responsibility of exploring the feasibility of simultaneous elections** for the **Lok Sabha**, State assemblies, and local bodies.

What are Simultaneous Elections?

- **About:**
 - Simultaneous elections refers to the **idea of holding elections for the Lok Sabha (the lower house of Parliament), State legislative assemblies, and local bodies like municipalities and panchayats** across the country at the same time.
 - This concept proposes to synchronize the electoral cycles of these different tiers of governance, aiming to conduct all elections together, **ideally once every five years**.
- **Historical Simultaneous Elections in India:** The initial four general elections in India **synchronized Lok Sabha and State Assembly elections**.
 - Presently, Lok Sabha elections align with Assembly polls in **Andhra Pradesh, Odisha, Arunachal Pradesh, and Sikkim**.
- **Benefits of Simultaneous Elections:**
 - **Resource Efficiency:** Conducting **elections** at various levels requires significant financial resources. Synchronizing elections would consolidate these expenses, leading to **substantial cost savings for the government**.
 - **Optimized Administration:** Simultaneous elections would **streamline the deployment of security forces and administrative staff**, minimizing disruptions caused by election-related duties and allowing officials to focus more consistently on governance and development.

Note:

- **Continuity in Policies:** With elections occurring simultaneously, there would be **fewer interruptions in policy implementation due to the Model Code of Conduct**, ensuring more sustained and consistent governance.
- **Enhanced Voter Turnout:** Reducing the frequency of elections **might combat voter fatigue and increase voter participation**, leading to more representative outcomes and increased legitimacy for elected representatives.
- **Increased Accountability:** When voters cast their ballots for various levels of governance together, **politicians are held accountable for their actions across different tiers**, fostering a more comprehensive accountability structure.
- **Reduced Polarization:** Simultaneous elections could potentially **diminish the influence of regional, caste-based, or communal politics** by bringing national issues to the forefront, thus encouraging more inclusive campaigning and policy-making.
- **Associated Challenges:**
 - **Constitutional Amendments:** Synchronizing elections requires **amendments to various constitutional articles**.
 - Changes in tenure provisions, dissolution of legislative bodies, and **aligning different election cycles** pose substantial legal challenges.
 - For example, **Articles such as 83(2), 85(2), 172(1), and 174(2)** govern the duration and dissolution of the Lok Sabha and State Assemblies, allowing premature dissolution under certain circumstances, which would need repeal for simultaneous elections.

Note:

- **Article 85 (1) and 174 (2)** allows the President and the Governor to dissolve the Lok Sabha and State Legislative Assembly before the completion of their tenure of five years, under the circumstances mentioned in the Constitution.
- **Article 83(2)** allows the tenure of the Lok Sabha to be extended for one year at a time in case of an Emergency being proclaimed under **Article 352**.
- As of now, after the passage of the **anti-defection law enshrined in the 10th Schedule (52nd Amendment Act, 1985)** and later the Supreme Court judgment in S.R. Bommai case (1994) followed by the High

Court judgment in Rameswar Prasad (2006), the decision to dissolve the **State Legislative Assembly** and impose President Rule under Article 356 is subject to judicial review.

- The Court can revive the Assembly and restore the government if it does not find the grounds of the President's rule to be constitutionally valid as has happened in recent years in the case of **Nagaland, Uttarakhand and Arunachal Pradesh**.
- **Federalism Concerns:** India's federal structure involves multiple states with varying political landscapes.
 - Any move towards simultaneous elections needs **widespread consensus among states**, which **may have differing political agendas**.
 - Also, linking general and local body elections faces hurdles due to local governance being a state subject, **requiring changes in diverse state laws (56 legal provisions from 28 states' Panchayati Raj Acts and Municipal Acts)**.
- **Technology and Infrastructure:** Upgrading technological infrastructure, such as **electronic voting machines (EVMs) and Voter Verifiable Paper Audit Trail Machines (VVPATs)**, on a large scale poses challenges in procurement, maintenance, and ensuring reliability.
- **By-elections and Legislative Councils:** Synchronizing all elections might **exclude by-elections and elections to legislative councils**, leading to potential gaps in representation and governance.
- **Diverse Political Landscapes:** India's multi-party system involves **diverse political ideologies and regional priorities**.
 - Simultaneous elections may overlook regional issues and dilute the representation of smaller or regional parties.

What is the Stance of Law Commission on Simultaneous Elections?

- The **Law Commission's draft report on Simultaneous Elections**, released in August 2018, examined the challenges and proposed solutions for conducting simultaneous elections in India.
- **Proposed Framework for Election Synchronization:**
 - **Reducing Election Cycles:** Recommends holding elections twice in five years.
 - **Conducting All Elections in a Calendar Year:** If simultaneous elections are not feasible, propose conducting all elections falling in a calendar year together.

Note:



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- **Constructive Vote of No-Confidence Motion:** Recommends replacing the 'no-confidence motion' with a '**constructive vote of no-confidence**' to ensure confidence in an alternate government before ousting the existing one.
- **Hung House Resolution:** Proposes a **process for resolving situations where no party secures a majority to form a government**, involving an opportunity for the largest party/alliance to attempt government formation before midterm elections.
- **Timely Disqualification:** Suggests **amending anti-defection laws** to ensure the swift resolution of disqualification issues within six months by the presiding officer.
- **In late October 2023**, the panel tasked to check the feasibility of simultaneous elections had an interaction with the Law Commission to discuss the roadmap to synchronize **Parliamentary and Assembly elections by 2029**.

India Infrastructure Report 2023

Why in News?

Recently, the **India Infrastructure Report (IIR) 2023 on Urban Planning and Development** was released, it is a comprehensive document that covers various aspects of infrastructure planning, finance and governance in the country.

- The IIR 2023 has been a collaborative effort of the **IDFC Foundation, Infrastructure Development Corporation (Karnataka) Ltd. (iDeCK)** and the **National Institute of Urban Affairs (NIUA)**.

Note:

- **IDFC Foundation is a non-profit organization** that supports social infrastructure, research, and advocacy in India
 - It publishes reports and papers that offer new insights and solutions for infrastructure development.
- **iDeCK is a joint venture of the Government of Karnataka, IDFC Foundation and HDFC** that **works on sustainable infrastructure projects**. It supports research and capacity building activities through IDFC Foundation and ICAP Trust.

What are the Key Highlights of the India Infrastructure Report?

- **Thematic Focus on Urban Challenges:**
 - The IIR systematically addresses key themes that are central to India's urban challenges.
 - These include **planning and governance, smart initiatives, public-private partnerships (PPPs) and financing, housing and migration**, public service delivery, integrating infrastructure, and urban redevelopment.
- **Critique of Planning Mechanism:**
 - Criticizes existing planning mechanisms, particularly restrictions on building construction, for rendering cities "**unlivable**" and **contributing to the emergence of slums**.
 - Highlights the role of poor planning as a major factor in urban challenges.
- **Low Floor Space Indices (FSIs) and Urban Sprawl:**
 - Underscores the impact of **low floor space indices (FSIs)** or **floor area ratios (FARs)** on high-density development and **urban sprawl** (rapid expansion of cities and towns into undeveloped land).
 - A **low Floor Space Index (FSI)** means that a smaller area of a plot will be developed. It's a parameter used in urban planning to **determine the maximum allowable construction density on a plot of land**.
 - Links **low FSI to the creation of slums**, with a focus on planning errors leading to forced high population density.
 - The report advocates for cities to adopt a redevelopment policy, emphasizing the recovery of land from private owners in exchange for **higher floor space indices (FSIs) and improved road connectivity**.
 - Advocates for dynamic city building, stressing that the carrying capacity needs to increase in tandem with the growth of cities.
- **Financial Management of Urban Local Bodies:**
 - Highlights the report's analysis of the financial management of **urban local bodies**, emphasizing the urgent need for financial sustainability.
 - Report advocates for PPPs and **municipal bonds** as essential tools for financing urban development projects.

Note:



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- The report noted that while India has led in PPPs, especially in roads, ports, airports and energy, **few PPPs have happened in the urban sector.**

India Infrastructure Report (IIR)

- The IIR 2023 **contains 25 chapters** by prominent names in the urban development and policy ecosystem on the current state of urban development in India.
- This **annual publication** has been instrumental in identifying and analyzing legal, fiscal, regulatory, technological, social, and conceptual aspects related to contemporary themes relevant to infrastructure development.
- This makes it an **invaluable resource for those involved in formulating urban policy**, as well as for those interested in the development of India's infrastructure and urbanization, such as policymakers, investors, academics, financiers, and multilateral agencies.

What is the Current Urban Landscape in India?

- India is one of the fastest-growing economies in the world, and its growth is propelled by its cities.
 - Cities contribute **66% to the national GDP**, a number expected to rise to **80% by 2050**.
- Urbanization has been relatively slow in India, with the share of the population living in officially classified urban settlements growing at a **rate of just over 1.15% a year from 2001-2011**.
- India's seven largest metropolitan areas are Mumbai, Delhi, Bangalore, Kolkata, Chennai, Hyderabad, and Ahmedabad.

What are the Initiatives Related to Urban Development?

- **Smart Cities**
- **Swachh Bharat Mission-Urban**
- **HRIDAY**
- **Aspirational district programm.**
- **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**
- **Atmanirbhar Bharat Abhiyan (Self-Reliant India)**

Supreme Court Notice on Birth Registration

Why in News?

The **Supreme Court** has issued notice to the Union government related to a petition seeking the effective implementation and full realization of the object and purpose of the **Registration of Births and Deaths (RBD) Act, 1969**.

- The petition highlights **birth registration as a fundamental right** that has been recognised in various international conventions as well as in the **Universal Declaration of Human Rights** and its significance in establishing individual legal identities.

What are the Major Provisions Related to Registration of Births in India?

- Registration of Births and Deaths Act, 1969:
 - **Registrar Appointments:** Registrars are appointed for local areas **under Section 7 of the RBD Act, 1969** to oversee the registration of births within their jurisdictional area.
 - These registrars can be individuals **affiliated with various entities like municipalities, Panchayats, government health institutions**, or other local authorities designated by the State Government.
 - **Institutional Responsibilities:** Under the Registration of Births and Deaths Act, 1969, institutions such as **hospitals, health centers, maternity or nursing homes are responsible for reporting births** occurring within their premises to the registrar.
 - **Citizen's Obligations:** In the case of births, citizens are required to inform the **registrar within 21 days of the event occurring in their jurisdiction**.
- **Registration of Births and Deaths (Amendment) Act, 2023:** It paved way for **digital birth certificates** which will be a single document to be used for admission to educational institutions, applications for driving license, government jobs, passports or Aadhaar, voter enrolment, and registration of marriage, among others
 - It will be compulsory for States to register births and deaths on the **Centre's Civil Registration System (CRS)** portal and share data with the **Registrar General and Census Commissioner of India (RGI)** which functions under the Union Home Ministry.

Note:



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What is the Previous Stance of the Supreme Court over Birth Registration?

- The previous Supreme Court interventions, including a **2011 judgment in the Committee for Legal Aid to Poor v. Union of India case** and the **2016 Voluntary Health Association of Punjab v. Union of India case**, emphasized the **importance of birth registration** and the alarming consequences of sex-selective abortions on sex ratios.
- Despite court directives to create a **centralized database for civil registration records**, the **authorities have allegedly failed to adhere to the orders**, leading to inadequate data availability hindering transparency and research.

Grain Storage Plan in Cooperative Sector

Why in News?

Recently, the Ministry of Cooperation has shed light on the **"World's Largest Grain Storage Plan in Cooperative Sector."**

- This initiative is aimed at addressing the persistent shortage of storage capacity for food grains in the country.

What is the Grain Storage Plan in the Cooperative Sector?

- **Comprehensive Infrastructure Creation:**
 - The project entails establishing various agricultural infrastructures at **Primary Agricultural Cooperative Societies (PACS)** levels, including warehouses, custom hiring centers, processing units, Fair Price Shops, etc.
 - Convergence of various existing schemes of the Government of India (GoI), such as **Agriculture Infrastructure Fund (AIF), Agricultural Marketing Infrastructure Scheme (AMI), Sub Mission on Agricultural Mechanization (SMAM), Pradhan Mantri Formalization of Micro Food Processing Enterprises Scheme (PMFME), Pradhan Mantri Kisan Sampada Yojana (PMKSY) and Mission for Integrated Development of Horticulture (MIDH)** is a strategic approach for comprehensive development of the Plan.

Implementation Partners and Progress:

- **National Cooperative Development Corporation (NCDC)** with the support of **National Bank for Agriculture and Rural Development (NABARD), Food Corporation of India (FCI)**, etc. is implementing the Pilot Project in different States/ UTs.

- Construction has commenced in 13 PACS in 13 States/ UTs, with 1,711 PACS identified for inclusion in the pilot project.

Committees for Implementation Oversight:

- The Ministry of Cooperation has constituted an **Inter-Ministerial Committee (IMC)**, which holds the authority to adopt guidelines and methodologies for scheme convergence.
- Additionally, a **National Level Coordination Committee (NLCC)** with members from relevant ministries and departments is tasked with steering the comprehensive plan's execution and monitoring progress.
- Further, **State and District Cooperative Development Committees (SCDC and DCDC)** have been constituted at state and district levels to ensure effective coordination and implementation.

Impact on Farmers:

- PACS will set up godowns, providing farmers the ability to store produce and access bridge finance for subsequent crop cycles.
- Option to sell produce at the **farmer's preferred time or sell the entire crop to PACS at Minimum Support Price (MSP)**, preventing distress sales.
- With decentralized storage capacity at the PACS level, **post-harvest losses are minimized**, ensuring that farmers can maximize their earnings by preserving the quality of their produce.
- PACS operating as procurement centers and Fair Price Shops (FPS) contribute to **significant cost savings in the transportation of food grains**.
- The plan ensures the **availability of various agricultural inputs and services** at the local **Panchayat** or village level, reducing the dependency on distant procurement centers.
- Farmers are empowered to **diversify their businesses beyond traditional farming activities**, exploring additional sources of income.

Note:

- The plan contributes to **national food security** by enhancing storage capacity and reducing wastage, ensuring a more robust and reliable food supply chain.

Primary Agricultural Cooperative Societies (PACS)

- PACS are the grassroots level arms of the **short-term co-operative credit structure** headed by the **State Cooperative Banks (SCB) at the state level**.
- PACS deals directly with rural (agricultural) borrowers, gives those loans, collects repayments of loans given and also undertakes distribution and marketing functions.

What are Initiatives Taken by the Ministry of Agriculture to Address Food Grain Shortage?

- **Agriculture Infrastructure Fund (AIF):**
 - AIF envisages the creation of **post-harvest management infrastructure** and community farming assets through incentives and financial support.
 - It includes interest subvention of 3% for a loan up to Rs. 2 Crore per project location for 7 years and reimbursement of credit guarantee fee if the project has credit guarantee cover under **Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE) Scheme**.
- **Pradhan Mantri Annadata Aay Sanrakshana Abhiyan (PM-AASHA):**
 - **PM-AASHA** aims at providing Minimum Support Price (MSP) to farmers for produce of notified oilseeds, pulses & copra.
 - It comprises the **Price Support Scheme (PSS)**, **Price Deficiency Payment Scheme (PDPS)** and **Private Procurement and Stockist Scheme (PPSS)**.
 - **Price Support Scheme (PSS):**
 - Implemented at the request of the concerned State Government.
 - ◆ Exempts procured pulses, oilseeds, and copra from mandi tax.
 - Central nodal agencies undertake procurement directly from pre-registered farmers at MSP when prices fall below MSP.
 - **Price Deficiency Payment Scheme (PDPS):**
 - Involves direct payment of the difference between MSP and the selling/model price.

- Pre-registered farmers selling oilseeds of prescribed Fair Average Quality (FAQ) norms benefit through a transparent auction process in notified market yards.

- **Private Procurement and Stockist Scheme (PPSS):**

- States have the option to implement PPSS for oilseed procurement.
- Procurement is conducted on a pilot basis from pre-registered farmers in selected districts or APMC(s).

- **Market Intervention Scheme (MIS):**

- **MIS** entails procurement of agricultural and **horticultural commodities** that are perishable and for which MSP is not announced, to protect the growers of these commodities from making distress sales in the event of a bumper crop when prices tend to fall below economic level/cost of production.

- **Bhartiya Beej Sahakari Samiti Limited (BBSSL):**

- Under the **Multi-State Cooperative Societies Act, 2002**, BBSSL has been set up as an Umbrella organization for the cultivation, production and distribution of improved seeds under a single brand name.
- This Society will increase the availability of improved seeds to the farmers, boost the productivity of crops and enhance the income of the farmers.

CCPA Issues Guidelines Safeguarding Against Dark Patterns

Why in News?

The **Central Consumer Protection Authority (CCPA)**, India's top consumer watchdog, has recently notified guidelines for **prevention and regulation of Dark Patterns, 2023**.

- These guidelines, issued under the **Consumer Protection Act, 2019**, are designed to protect consumers from deceptive practices employed by online platforms.

What are Dark Patterns?

- Dark patterns, also known as deceptive patterns, refer to **strategies employed by websites and apps to make users perform actions** they did not intend to or discourage behaviors that are not advantageous for the companies.

Note:



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- These patterns often exploit **cognitive biases** and employ tactics such as false urgency, forced actions, hidden costs etc.

What are the Key Guidelines for Prevention and Regulation of Dark Patterns?

- The guidelines prohibit the use of **dark patterns** to mislead or coerce users.
- The guidelines also urge entities to retain users and drive sales using ethical and consumer-centric approaches.
- These guidelines regarding the **dark patterns** extend their applicability to all platforms offering goods and services in India, encompassing advertisers and sellers.
 - E-commerce players, websites, and apps are subject to the regulatory framework established by these guidelines.
- The CCPA has outlined 13 types of dark patterns in its notification. They are:
 - **False Urgency:** Creating a false sense of urgency or scarcity to induce immediate purchases.
 - **Basket Sneaking:** Inclusion of additional items at checkout without user consent, resulting in higher payments.
 - **Confirm Shaming:** Using fear or shame to nudge users into specific actions for commercial gains.
 - **Forced Action:** Compelling users to take actions requiring additional purchases or sharing personal information.
 - **Subscription Trap:** Making cancellation complex, hiding options, or forcing payment details for free subscriptions.
 - **Interface Interference:** Manipulating the user interface to misdirect users from intended actions.
 - **Bait and Switch:** Deceptively serving an alternate outcome than advertised based on user actions.
 - **Drip Pricing:** Concealing prices upfront, revealing them post-confirmation, or preventing service use unless additional items are purchased.
 - **Disguised Advertisement:** Posing advertisements as other content to trick users into clicking.
 - **Nagging:** Persistent interactions disrupting and annoying users for commercial gains.
 - **Trick Question:** Deliberate use of confusing language to misguide users.

- **SaaS Billing:** Generating recurring payments in a software as a service (SaaS) model.
- **Rogue Malwares:** Using ransomware or scareware to mislead users into paying for fake malware removal tools.

What is the Central Consumer Protection Authority (CCPA)?

- CCPA established under the **Consumer Protection Act of 2019**, safeguards and defends consumers' rights, issuing guidelines for effective enforcement and enhancement of consumer rights.
- The objective of the CCPA is to **promote, protect and enforce the rights of consumers** as a class.
- It will be empowered to conduct investigations into violation of consumer rights and institute complaints / prosecution, order recall of unsafe goods and services, order discontinuation of unfair trade practices and misleading advertisements, impose penalties on manufacturers/endorsers/publishers of misleading advertisements.

Free of Cost Digital Tools to Marginalized Communities

Why in News?

Recently, the Minister of State for Education provided details in a written response in the Lok Sabha about the measures taken by the Government to provide marginalized communities with digital tools at no cost.

- The **National Education Policy 2020** calls for investment in **digital infrastructure, online teaching platforms** and tools, virtual labs, digital repositories, online assessments, technology and pedagogy for online teaching-learning etc.

What Government Initiatives Exist for Providing Digital Tools to Marginalized Communities?

- **PM e-Vidhya:**
 - **About:**
 - A comprehensive initiative called **PM e-VIDYA** was initiated as part of **Atma Nirbhar Bharat Abhiyaan** in 2020.
 - It unifies all efforts related to **digital/online/on-air education** to enable **multi-mode access to education**.

Note:

- The **PM eVidya initiative** is available to all the students across all the states **free of cost**.

○ **Key Components of PM eVidya:**

- **Digital Infrastructure for Knowledge Sharing (DIKSHA):** **DIKSHA** is the nation's digital infrastructure for providing quality e-content for school education in States/Union Territories and QR coded Energized Textbooks for all grades.
 - **DIKSHA Portal and Mobile App:** It has been created by the **Ministry of Education** as a storehouse of a large number of **eBooks** and **e-Contents** created by **States/UTs** and **National level organizations**.
 - **PM e-VIDYA DTH TV Channels:** As per the Union Budget announcement for **Financial Year 2022-23**, the **12 DTH Channels** have been expanded to **200 PM e-VIDYA DTH TV Channels** to enable all States to provide **supplementary education** in various **Indian languages** for **classes 1-12**.
 - **CBSE Podcast- Shiksha Vani:** The promotion of the extensive utilization of **radio, community radio**, and the **CBSE podcast "Shiksha Vani"** is actively encouraged.
 - **Digitally Accessible Information System (DAISY):** Special e-content for visually and hearing impaired developed on DAISY and in sign language on **NIOS website/ YouTube**.
 - **Virtual labs and Skilling e-labs:** To promote **crucial critical thinking skills** and to give space for creativity, it has been proposed to establish **750 virtual labs** and **75 Skilling e-labs** by 2023.
 - The Virtual Labs are proposed for **Science and Mathematics subjects** for **Classes 6th – 12th**, and **Skilling e-labs** would provide a simulated learning environment.
 - A vertical on Virtual Labs has been created on **DIKSHA platform**.
- **Samagra Shiksha:**
- ICT and Digital initiatives component of centrally sponsored scheme of Samagra Shiksha covers **Government and Aided schools** having **classes VI to XII**.
- **Sathee Portal:**
- To assist students preparing for **competitive exams** across the country, a **SATHEE portal** has been developed in collaboration with **IIT Kanpur**.

Exit Polls

Why in News?

Recently, the **exit polls** results were released for five states **Madhya Pradesh, Rajasthan, Chhattisgarh, Telangana** and **Mizoram**.

- **Exit polls** in many recent elections have been **unreliable**, providing **conflicting results**.

What are Exit Polls?

- Exit polls are surveys conducted with **voters** as they leave a **polling station** during an **election**.
- The purpose is to **gather information** on how people voted and their **demographic characteristics**.
- These polls provide early indications of **election results** before **official results** are announced.
- An **exit poll** was conducted by the **Indian Institute of Public Opinion** during the **second Lok Sabha elections** in 1957.

How can Accuracy of Exit Polls Can be Judged?

- **Sampling Methods:** The **reliability** of the **sampling methods** used in conducting **exit polls** is crucial. A **well-designed** and **representative sample** is more likely to produce accurate results.
 - Some common parameters for a good, or accurate, opinion poll would be a sample size that is both large and diverse, and a clearly constructed questionnaire without an overt bias.
- **Structured Questionnaire:** Surveys, like exit polls, collect data by interviewing many respondents using a structured questionnaire, either over the phone or in person.
 - According to the Centre for the Study of Developing Societies, "Without a structured questionnaire, the data can neither be collected coherently nor be analyzed systematically to arrive at vote share estimates."
- **Demographic Representation:** Ensuring that the surveyed population is **demographically representative** of the **overall voting population** is essential. If certain groups are **over** or **underrepresented**, it can impact the accuracy of the predictions.
 - A **large sample size** is important but what matters most is how well the sample **represents the larger population**, rather than the **size of the sample**.

Note:



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What are the Criticisms of Exit Poll?

- Exit polls can be **controversial** if the agency conducting them is perceived to be **biased**.
- These surveys can be influenced by the **choice, wording and timing of the questions**, and by the **nature of the sample drawn**.
- Critics argued that many opinion and **exit polls** are **motivated** and **sponsored** by their rivals, and could have a **distorting effect** on the **choices voters** make in a **protracted election**, rather than simply **reflecting public sentiment** or **views**.

How is Exit Poll Regulated in India?

- Section 126A of the **Representation of the People Act, 1951** prohibits conduct of **Exit poll** and dissemination of their results by means of print or electronic media during the period mentioned therein, i.e. between the **hour fixed** for commencement of poll in the **first phase** and **half an hour after** the time fixed for close of poll for the last phase in all the States.
- The **Election Commission** is responsible for regulating the use of **exit polls**. According to the **ECI**, exit polls can only be conducted during a specific period. This period starts from the time when the polling booths close and ends 30 minutes after the last booth has closed.
- Exit polls cannot be conducted during the **voting period** or on **polling day**.
- The **Election Commission** issued guidelines under **Article 324 of the Constitution**, prohibiting **newspapers** and **news channels** from publishing results of **pre-election surveys** and **exit polls**.
- The **EC** also mandated that while carrying the **results of exit and opinion polls**, **newspapers** and **channels** should disclose the **sample size** of the **electorate**, the details of **polling methodology**, the **margin of error** and the background of the **polling agency**.
- The ban on the **publication of exit polls** remains in place until the **last phase of voting** is completed.
- In addition to the ban on the publication of exit polls, the **ECI** also requires that all media outlets that conduct exit polls must **register with the commission**.

All India Judicial Service

Why in News?

Recently, the **President** of India advocated for **All India Judicial Service (AIJS)** to enhance diversity in the judiciary by increasing representation from marginalized social groups.

What is All India Judicial Service (AIJS)?

➤ About:

- AIJS is a proposed **centralized recruitment system for judges** at the level of additional district judges and district judges across all states.
- AIJS aims to centralize the recruitment of judges, similar to the **Union Public Service Commission (UPSC) model**, assigning successful candidates to states.
- Originating from **Law Commission reports in 1958 and 1978**, AIJS seeks to address structural issues like varying pay, faster vacancy filling, and standardized nationwide training.
- The **idea was revisited in 2006** by the Parliamentary Standing Committee, supporting a pan-Indian judicial service.

➤ Constitutional Basis:

- **Article 312 of the Constitution** provides for the establishment of AIJS, similar to central civil services, upon a resolution by the **Rajya Sabha supported by at least two-thirds of its members**.
- However, Article 312 (2) states that the AIJS cannot include any post inferior to that of a district judge, as defined in Article 236.
 - According to Article 236, a district judge can include a city civil court judge, additional district judge, joint district judge, assistant district judge, chief judge of a small cause court, chief presidency magistrate, additional chief presidency magistrate, sessions judge, additional sessions judge, and assistant sessions judge.

➤ Need:

- AIJS would ensure a uniform and **high standard of selection** and training of judges, enhancing the quality and efficiency of the judiciary.
- AIJS would **fill the vacancies of judges** in the lower courts, which are presently around **5,400 vacant positions in lower judiciary** across the nation and **pendency of 2.78 crore cases** in lower judiciary primarily due to inordinate delay in holding regular exams by states.
- AIJS would increase the representation and diversity of judges from different regions, genders, castes, and communities, reflecting the **social composition of the country**.

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- AIJS would reduce the **scope for judicial or executive intervention** in the appointments to the judiciary, ensuring the **independence and accountability of the judges**.
- AIJS would create a pool of talented and experienced judges who can be appointed to the higher judiciary, improving the career prospects and mobility of the judges.
- **Current Status:**
 - As of 2023, there is **no consensus on AIJS** due to diverging opinions among major stakeholders.
 - The AIJS proposal remains an unimplemented initiative, highlighting the challenges in achieving consensus for its establishment.

How are District Judges Recruited Currently?

- The current system involves **Articles 233 and 234** granting states the authority over the appointment of district judges, managed through State Public Service Commissions and High Courts, since HCs exercise jurisdiction over the subordinate judiciary in the state.
- Panels of HC judges interview candidates after the exam and select them for appointment.
- **Article 233** deals with the **appointment of district judges**. Appointments of persons to be, and the posting and promotion of, district judges in any State shall be made by the **Governor of the State** in consultation with the High Court exercising jurisdiction over such State.
- **Article 234** deals with the **recruitment of persons other than district judges** to the judicial service.
- All judges of the lower judiciary up to the level of district judges are selected through the Provincial Civil Services (Judicial) exam. PCS (J) is commonly referred to as the judicial services exam.

What are the Concerns Regarding AIJS?

- It would infringe upon the **federal structure** and the autonomy of the states and the high courts, who have the constitutional right and responsibility to administer the subordinate judiciary.
- It would create a conflict of interest and a dual control over the judges, who would be accountable to both the **central and the state governments**.
- It would disregard the local laws, languages, and customs of the different states, which are essential for the effective functioning of the judiciary.

- It would affect the morale and motivation of the **existing judicial officers**, who would be deprived of the opportunities and incentives for their career advancement.

Fourth Phase Roll-Out of GIAN Scheme

Why in News?

After an eight-year journey, including a brief pause during COVID, the **Ministry of Education** is **preparing to resume the fourth phase of the Global Initiative of Academic Networks (GIAN)**.

- This initiative aims to **bring in distinguished scholars worldwide to teach at Indian universities**.
- The **National Institute of Educational Planning and Administration (NIEPA)**, after evaluating the scheme, recommended its continuation.

What is Global Initiative for Academic Networks (GIAN) Scheme ?

- GIAN is a flagship initiative by the Ministry of Education (MoE), Government of India designed to **foster collaboration and enhance the quality of education and research** in Indian academic institutions.
- **Launched in 2015**, the **primary objective of the GIAN scheme is to provide an opportunity for students and faculty to interact with the best academic and industry experts** from all over the world.
- The **eligibility criteria** for joining the GIAN scheme are as follows:
 - **Faculty members of Indian institutions** of higher education.
 - **Scientists and entrepreneurs** from abroad.
- The courses offered under the GIAN scheme should be **relevant to the Indian context**.
 - The courses should be designed to **provide exposure to the latest developments** in the field.
 - The courses should be **designed to provide hands-on training** to the participants.

What is the Present Status of GIAN Scheme?

- **Government Spending on GIAN Courses:**
 - Since the initiation of the GIAN program, the Central government has allocated a substantial ₹126

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crore towards supporting foreign faculty. **These funds cover travel expenses and honorariums for teaching.**

- Notably, each foreign faculty member receives USD 8,000 (~ ₹7 lakh) for a week-long course and USD 12,000 (~ ₹12 lakh) for a two-week course.
- **Distribution of Courses Across Educational Institutions:**
 - Of the delivered courses, **39% took place in IIT campuses, with the second-largest share occurring in National Institute of Technology (NIT) campuses.**
 - The distribution also included State Universities, Indian Institutes of Information Technology (IIITs), Indian Institute of Sciences (IISc), Indian Institutes of Science Education and Research (IISERs), management institutes, Central universities, and **All India Council of Technical Education's** engineering colleges.
- **Geographic Diversity and Future Plans:**
 - The majority of visiting academicians, **41.4%, were from the US**, followed by experts from the U.K., Germany, Canada, France, Italy, Nordic countries, China, Japan, Taiwan, ASEAN countries, and others.
 - The **Ministry of Education (MoE)** plans to enhance the program's reach by promoting video recording of lectures and establishing an online consortium.

Terms of Reference for 16th Finance Commission

Why in News?

Recently, the **Union Cabinet** has given the green light to the **terms of reference (ToR) for the Sixteenth Finance Commission**.

- This commission holds the critical responsibility of recommending the **formula for revenue distribution between the Centre and the States** for the upcoming five-year period starting from **April 1, 2026**.

What are the Major Terms of Reference for 16th Finance Commission?

- **Division of Tax Proceeds:** Recommending the distribution of taxes between the Union Government and the States under **Chapter I, Part XII of the Constitution**.

- This includes the **allocation of shares among the States** from these tax proceeds.

- **Principles for Grants-in-Aid:** Establishing the principles governing **grants-in-aid** to the States from the **Consolidated Fund of India**.

- This encompasses determining the amounts to be provided to the States as grants-in-aid, specifically under **Article 275 of the Constitution**, for purposes beyond those outlined in the **provisos to clause (1) of that article**.

- **Enhancing State Funds for Local Bodies:** Identifying measures to enhance the **Consolidated Fund of a State**.

- This is aimed at **supplementing the resources available to Panchayats and Municipalities within the State**, based on recommendations made by the State's own Finance Commission.

- **Evaluation of Disaster Management Financing:** The Commission **may review the current financing structures related to Disaster Management initiatives**.

- This involves examining the funds created under the **Disaster Management Act, 2005**, and presenting suitable recommendations for improvements or alterations.

What is the Finance Commission?

➤ About:

- The Finance Commission in India is a constitutional body established under **Article 280 of the Indian Constitution**.
 - Its primary function is to **recommend the distribution of financial resources** between the central government and the state governments.
 - The **Fifteenth Finance Commission** was constituted on **27th November, 2017**. It made recommendations covering the period of six years commencing on **1st April, 2020** through its Interim and Final Reports.
 - ◆ The recommendations of the Fifteenth Finance Commission are valid up to the financial year **2025-26**.

Note:

➤ **Criteria for Devolution:**

Criteria	14th FC (2015-20)	15th FC (2020-21)	15th FC (2021-26)
Income Distance	50.0	45.0	45.0
Area	15.0	15.0	15.0
Population (1971)	17.5	-	-
Population (2011)#	10.0	15.0	15.0
Demographic Performance	-	12.5	12.5
Forest Cover	7.5	-	-
Forest and Ecology	-	10.0	10.0
Tax and fiscal efforts*	-	2.5	2.5
Total	100	100	100

Note: 'Population (1971)' was considered only for the 14th Finance Commission, while 'Population (2011)' and 'Tax and fiscal efforts' were introduced by the 15th Finance Commission. The figures represent the weightage in percentage for each criterion during the specified periods.

➤ **Key Recommendations of 15th Finance Commission:**

- **Share of States in Central Taxes:** The Commission proposed maintaining the **states' share in central taxes at 41% for the 2021-26 period**, a slight reduction from the 42% allocated during 2015-20 by the 14th Finance Commission.
 - This 1% adjustment aims to accommodate the newly formed union territories of Jammu and Kashmir and Ladakh from the central resources.
- **Fiscal Deficit and Debt Levels:** The Commission recommended that the Centre aims to limit its fiscal deficit to **4% of GDP by 2025-26**.
 - For states, it advised specific fiscal deficit limits as a percentage of **Gross State Domestic Product (GSDP)** for different years within the 2021-26 period.
 - States not fully utilizing the sanctioned borrowing limits in the initial four years (2021-25) can access the remaining amount in subsequent years.

○ **Other Recommendations:**

- **Defense and Internal Security Funding:** The report suggests establishing a **Modernisation Fund for Defence and Internal Security (MFDIS)**, non-lapsable and funded primarily through the Consolidated Fund of India and other sources.
- **Centrally Sponsored Schemes (CSS):** Recommendations include setting a **threshold for annual CSS allocations, third-party evaluations, transparent funding patterns**, and stable financial allocations to phase out redundant schemes.

Peace Agreement Between Government of India and UNLF

Why in the News?

Recently, The **Government of India** and **Government of Manipur** signed a **Peace Agreement** with **United National Liberation Front (UNLF)**, which is oldest valley-based insurgent group of Manipur.

What is the United National Liberation Front (UNLF)?

- The **UNLF** was formed in 1964, and is distinct from the insurgent groups active in the **state's Naga-dominated and Kuki-Zomi dominated hills**.

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- The **UNLF** is one of the seven “**Meitei Extremist Organisations**” banned by the Union government under the **Unlawful Activities Prevention Act, 1967**.
- The **UNLF** has been operating both **within** and **outside Indian Territory**.
- It is believed that the **UNLF** initially received training from the **NSCN (IM)**, the **largest insurgent group** among the **Naga factions**.
- It operates in all the **valley areas of Manipur** and some **villages** in the **Kuki-Zomi hill districts**.
- It is a banned group. It mostly operates from **camp**s and **training bases** in **Myanmar’s Sagaing Region, Chin State, and Rakhine State**, with support from the **Myanmar military**.

What is the Purpose of the Peace Agreement?

- The **agreement** is anticipated to bring about a **significant boost** in ushering in a **new era of peace**, particularly in **Manipur** and the **North East region**.
- This marks the first instance where a **Manipuri armed group** from the valley has chosen to abandon violence, returning to mainstream society while committing to respect the **Constitution of India** and abide by the **country’s laws**.
- The agreement will not only bring an end to hostilities between **UNLF** and **security forces** which have claimed precious lives on both sides over the last more than half a century but also provide an **opportunity to address** the longstanding concerns of the community.
- The return of the **UNLF** to the mainstream will also encourage other valley-based armed groups to participate in the peace process.
- A **Peace Monitoring Committee (PMC)** will be constituted to oversee enforcement of the agreed ground rules.

What are the Other Insurgent Groups of Manipur?

- Several other Insurgent groups of Manipur are **Kangleipak Communist Party (KCP)**, **People’s Liberation Army (PLA)**, **Kanglei Yawol Kanna Lup (KYKL)**, **People’s Revolutionary Party of Kangleipak (PREPAK)**, **National Socialist Council of Nagaland - Khaplang (NSCN-K)**.
- A **trilateral Suspension of Operations (SoO) agreement** was established in **2008** involving the **Central government, the state of Manipur, and insurgent groups** from the **Kuki-Zomi region**.

What is the Suspension of Operations (SoO) Pact?

- The **SoO agreement** with **Kuki** was signed in **2008** as a **ceasefire agreement** between the **Indian government** and various **Kuki militant groups** operating in the northeastern states of **Manipur** and **Nagaland**.
- Under the agreement, the **Kuki militant groups** agreed to stop carrying out violent activities and come to designated camps to be monitored by security forces.
- In return, the Indian government agreed to **suspend its operations** against the **Kuki groups**.
- The **Joint Monitoring Group (JMG)** oversees the effective implementation of the pact.
- **Security forces**, including **state** and **central forces**, cannot launch operations, nor can the underground groups.

What are the Administrative Arrangements to Tackle with Insurgent Groups?

- **Ministry of Development of North Eastern Region (DoNER):**
 - It is responsible for the matters relating to the **planning, execution and monitoring of development schemes** and projects in the **North Eastern Region**, to accelerate the **pace of socio-economic development** of the region.
- **Inner Line Permit (ILP):**
 - Restrictions are imposed on the **entry of outsiders** to maintain the **original identity** of indigenous people of **Mizoram, Nagaland and Arunachal Pradesh** entry of outsiders are not allowed without **Inner Line Permit (ILP)**.
- **Constitutional provision**
 - **Article 244 (1)** provides that provisions of the **5th schedule** shall apply to the **administration or control of scheduled areas and scheduled tribes**.
 - **Article 244 (2)** provides that provisions of the 6th schedule shall apply to the administration or control of schedule areas, in the states of **Assam, Meghalaya, Tripura and Mizoram** to create **Autonomous Districts Councils** in these states.
 - In pursuance of these provisions, the various autonomous districts have been created to contain the demands of various ethnic groups like **Karbi Anglong, Khasi hill district, Chakma district** etc.

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Fast Track Special Courts

Why in News?

Recently, the Union Cabinet has approved the continuation of **Fast Track Special Court (FTSCs)** for three more years till 2026.

- Initially commenced in October 2019 for one year, the scheme was extended for an **additional two years until March 2023**.

What is a Fast Track Special Court (FTSCs)?

➤ About:

- FTSCs are specialized courts established in India with the primary aim of **expediting the trial process for cases related to sexual offenses**, particularly those involving rape and violations under the **Protection of Children from Sexual Offences Act (POCSO Act)**.
- The establishment of FTSCs was prompted by the government's recognition of the **alarming frequency of Sexual Offenses** and the prolonged duration of trials in regular courts, which resulted in delayed justice for victims.

➤ Establishment:

- The Central Government enacted the **Criminal Law (Amendment) Act in 2018**, which introduced stricter punishments, including the death penalty for rape offenders.
- Subsequently, the FTSCs were set up to ensure the swift dispensation of justice for such cases.

➤ Centrally Sponsored Scheme:

- The scheme to establish FTSCs was **formulated in August 2019** as a **Centrally Sponsored Scheme** following directions from the **Supreme Court of India** in a suo moto Writ Petition (Criminal).

➤ Ministry:

- Implemented by the **Department of Justice, Ministry of Law & Justice**.

➤ Achievements So far:

- Thirty States/Union Territories have participated in the Scheme, operationalizing 761 FTSCs, including 414 exclusive POCSO Courts, which have resolved over 1,95,000 cases.
- These courts support State/UT Government efforts to provide timely justice to victims of sexual offenses, even in remote and far-flung areas.

What are the Challenges Related to Fast Track Special Court?

➤ Inadequate Infrastructure and Low Disposal Rate:

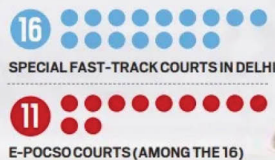
- Special courts in India often suffer from the same challenges as regular courts, as they are usually designated rather than established as new infrastructure.
- This leads to overburdened judges who are assigned other categories of cases in addition to their **existing workload without the necessary support staff** or infrastructure.
- Consequently, the disposal rate of cases in these special courts slows down.
- The envisioned target of clearing around 165 POCSO cases per year per court has significantly fallen short, with each of the over 1,000 FTSCs in the country currently clearing only 28 cases on average annually.
- According to data from the Ministry of Law and Justice till May 2023, Delhi's FTSCs have a disposal rate of only 19%, which is one of the lowest in the country.

A COMPARISON

State/UT	Total Cases	Cases disposed (cumulative)	Cases pending (cumulative)	Disposal rate (in percentage)
Delhi	5,418	1,049	4,369	19
Uttar Pradesh	1,24,778	44,988	79,790	36
Tamil Nadu	10,214	5,178	5,036	50
Bihar	23,546	7,533	16,013	32
Gujarat	14,772	8,245	6,527	55
Maharashtra	20,143	14,326	5,817	67
Jammu & Kashmir	566	126	440	22
Kerala	19,797	12,870	6,927	65
Mizoram	188	125	63	66

-Figures from inception of the scheme in 2019 till May 2023

-Data from an answer to a question in the Rajya Sabha, July 27, 2023



➤ Prolonged Pendency:

- Over **2.43 lakh POCSO cases pending trial** in FTSCs as of 31st January 2023.
- Projections indicate several decades are required to clear backlogs in states like Arunachal Pradesh, Delhi, Bihar, West Bengal, Uttar Pradesh, and Meghalaya.
- Estimated trial durations vary significantly across states, with **projections ranging from 21 to 30 years**.

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➤ **Conviction Rate Challenges:**

- Despite the intended completion of trials within one year, the research reveals a low conviction rate.
 - Out of 2,68,038 cases under trial, only 8,909 resulted in convictions, raising concerns about the efficacy of FTSCs.

➤ **Limited Jurisdiction:**

- These courts are established with a specific jurisdiction, which can limit their ability to deal with related cases. This can lead to delays in justice delivery and a lack of consistency in the application of laws.
 - Ideally, cases in these special courts should be disposed of within a year. However, as of May 2023, Delhi had only disposed of 1,049 cases out of a total of 4,369 pending cases. This indicates a significant lag in meeting the target.

➤ **Vacancies and Lack of Training:**

- The lack of judges due to vacancies affects the courts' capacity to handle cases effectively.
 - As of 2022, lower courts across India had a vacancy rate of 23%.
- Regular judges from normal courts are often deputed to work in FTSCs.
- However, these courts require judges with specialized training to handle cases quickly and effectively.

➤ **Prioritization of Certain Offences Over Others:**

- The establishment of special courts in India is often determined by ad-hoc decisions made by both the judicial and executive branches of government.
- This approach means that certain categories of offences are arbitrarily prioritised for faster disposal over others.

What are the Initiatives to Curb Women and Child Abuse?

- Child Abuse Prevention and Investigation Unit
- Beti Bachao Beti Padhao
- The Juvenile Justice (Care and Protection of Children) Act, 2015
- Child Marriage Prohibition Act (2006)
- Child Labour Prohibition and Regulation Act, 2016

Disclosure of Political Funding

Why in News?

In light of the current political circumstances and concerns regarding donations, the conclusion of the **Supreme Court** hearings on the challenge to **electoral bonds** prompts a critical examination of the potential impact this challenge's resolution may have on **democracy** and the **rule of law** in India.

What is Political Funding?➤ **About:**

- Political funding refers to the financial contributions provided to political parties or candidates to **support their activities, campaigns, and overall functioning.**
- Political funding is crucial for political parties to **effectively participate in democratic processes**, conduct election campaigns, and engage in various political activities.

➤ **Statutory Provisions in India:**

- **Representation of the People Act, 1951: RPA Act** outlines the rules and regulations regarding elections in India, including provisions related to the declaration of election expenses, contributions, and the maintenance of accounts.
- **Income Tax Act, 1961: The Income Tax Act** governs the tax treatment of political parties and their donors.
 - Political parties need to comply with tax regulations, and individuals or entities making political donations may be eligible for tax benefits under certain conditions.
- **Companies Act, 2013: The Companies Act** regulates corporate donations to political parties, specifying the maximum amount a company can contribute, and mandates disclosure of political contributions in financial statements.

➤ **Methods of Raising Political Funding:**

- **Individual Persons: Section 29B of RPA** allows political parties to receive donations from individual persons while allowing taxpayers to claim a 100% deduction

Note:



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- **State/Public Funding:** Here, the government provides funds to parties for election related purposes. State Funding is of two types:
 - **Direct Funding:** The government provides funds directly to the political parties. **Direct funding by tax is prohibited in India. However, direct funding is prohibited in India.**
 - **Indirect Funding:** It includes other methods except direct funding, like **free access to media, free access to public places for rallies, free or subsidized transport facilities.** It is allowed in India in a regulated manner.
- **Corporate Funding:** In India, donations by corporate bodies are governed **under section 182 of the Companies Act, 2013.**
- **Electoral Bonds Scheme:** The electoral bonds system was introduced in 2017 by way of a Finance bill and it was implemented in 2018.
 - They serve as a means for individuals and entities to make donations to registered political parties while maintaining donor anonymity.
- **Electoral Trusts Scheme, 2013:** It was notified by the Central Board of Direct Taxes (CBDT).
 - An Electoral Trust is a Trust set up by companies with the sole objective to **distribute the contributions received by it** from other Companies and individuals to the political parties.

POLITICAL FUNDING

SOURCE OF INCOME

Total income from known and unknown sources of six national parties and 51 recognised regional parties for 11 years from 2004-05 to 2014-15

	Total income	Income from unknown sources	% of total income*
National parties(6)	9,278.30	6,612.42	71
Regional parties(51)	2,089.04	1,220.56	58

* Income from unknown sources

NATIONAL VIEW

Total income of six national political parties from 2004-05 to 2014-15

National party	Total income	From known sources(above ₹20,000)	From other known sources	From unknown sources(below ₹20,000)
INC	3,982.09	400.32	258.38	3,323.39
BJP	3,272.63	917.86	228.86	2,125.91
CPM	892.99	15.04	406.79	471.15
BSP	763.95	0*	315.24	448.71
NCP	351.28	65.24**	43.02	243.03
CPI(M)	15.36	6.73	8.40	0.23
Grand total	9,278.3	1,405.19	1,260.69	6,612.42

*BSP declared that it didn't receive any donations above ₹20,000; **NCP didn't submit details for 2004-05, 2005-06 and 2006-07

Note: INC is Indian National Congress, BJP is Bharatiya Janata Party, CPM is Communist Party of India (Marxist), BSP is Bahujan Samaj Party, NCP is Nationalist Congress Party and CPI is Communist Party of India

Why is There a Need for Disclosure of Political Funding?

- **Global Standards on Political Funding Disclosure:**
 - The amendments to the **Representation of the People Act 1951** in India, allowing for electoral bonds, **have established complete anonymity for political donors.**
 - This stands in **stark contrast to international practices**, where the prevailing requirement is full disclosure of political donations.
 - Across the world, **including the United States, regulations mandate transparency in political funding**, with disclosure requirements dating back to 1910.
 - The **European Union, in 2014**, enacted regulations on the funding of European political parties, incorporating **limits on donations, disclosure mandates**, and immediate reporting for large contributions.
- **Fundamental Requirements in Political Funding Regulations:**
 - Most legal regulations **globally converge on two fundamental requirements** for political party funding:
 - **comprehensive disclosure of donors** above specific minimal amounts and the **imposition of limits or caps on donations.**
 - These measures aim to **ensure transparency, prevent corruption**, and maintain public confidence in the political system and democracy.
- **Upholding Citizen's Trust:**
 - Public disclosure of political funding is imperative as **political parties serve as the foundation of representative democracy.**
 - Transparent financial accounts play a crucial role in upholding citizens' trust in both parties and politicians, **safeguarding the rule of law, and combating corruption within the electoral and political processes.**
 - This transparency **ensures accountability, reinforcing the democratic principles that rely on openness and fairness.**
- **Preventing Undue Influence:**
 - Without disclosure, money can become a tool for some to unduly influence the political process. **Disclosure helps prevent the co-optation of politics by business interests** and widespread vote buying.

Note:



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➤ **Maintaining a Level Playing Field:**

- The equitable playing field gets eroded when one party has indomitable access to excess campaign finance. Disclosure ensures that all parties have equal opportunities.

Exemption From Disclosure Under Electoral Bonds Scheme:

- Through an amendment to the **Finance Act 2017**, the Union government has exempted political parties from disclosing donations received through electoral bonds.
- This means the voters will not know which individual, company, or organization has funded which party, and to what extent.
- However, in a **representative democracy**, citizens cast their votes for the people who will represent them in Parliament.

Supreme Court's Observations:

- Recently, the Supreme Court has instructed the Election Commission of India (ECI) to provide the recent data on funds received by political parties through electoral bonds
- The Indian Supreme Court has long held that the **"right to know"**, especially in the context of elections, is an integral part of the **right to freedom of expression (Article 19)** under the **Indian Constitution**.

What are the Reforms Required in Political Funding?

➤ **Electoral Justice:**

- Electoral justice plays a pivotal role in upholding the core tenets of democracy, ensuring that all

aspects of the **electoral process align with the law and safeguard the enjoyment of electoral rights.**

- This system, essential for a healthy democracy, is instrumental in maintaining and **facilitating free, fair, and genuine elections.**

➤ **Addressing the Issues of Electoral Bonds:**

- Electoral bonds, allowing for undisclosed donor details, pose a threat to democratic transparency and the integrity of free and fair elections.
- **Apart from making them constitutionally sound**, addressing this issue requires a comprehensive approach **that goes beyond legality and focuses on preserving the democratic essence of transparency in the electoral process.**

➤ **Mechanism for Reporting and Independent Audit:**

- This includes the **identification of donors above a specified nominal limit, immediate reporting of significant donations to the election commission.**
- It also entails **publicizing political party accounts, independent auditing of party accounts, and establishing limits on funding and expenditure.**

➤ **State Funding of Elections:**

- State funding of elections refers to a system in which the government provides financial support to political parties and candidates to facilitate their participation in the electoral process.
- This funding is typically derived from public resources and aims to reduce the reliance on private donations, **minimizing the potential influence of vested interests in political campaigns.**



Note:

Economic Scenario

Highlights

- Curb on Sugar Diversion for Ethanol
- Countervailing Duties on Four Indian Products
- India Imposes Onion Export Ban
- FSB's Concerns About Crypto Asset Intermediaries
- Monetary Policy Committee Decisions: RBI
- Critical Minerals
- Primary Agricultural Credit Societies
- GDP Growth Surprise
- Unemployment Rate in Urban Areas
- Risks Associated with the Decommissioning of Coal Plants
- SEBI Board Approves Regulatory Framework
- Sugar's Pressmud for Green Energy Production

Curb on Sugar Diversion for Ethanol

Why in News?

Recently, The Ministry of Consumer Affairs, Food and Public Distribution directed to restricting the use of sugarcane juice/syrup for ethanol production, a key component in **Ethanol Blended Petrol (EBP)**.

- The Indian government has implemented stringent measures to fortify domestic sugar availability. Initially, it imposed a ban on sugar exports.

What is Ethanol Blending?

- **Ethanol:**
 - It is one of the principal **Biofuels**, which is naturally produced by the fermentation of **sugars by yeasts or via petrochemical processes** such as ethylene hydration.
 - Ethanol is 99.9% pure alcohol that can be blended with petrol.
- **Ethanol Blending Programme (EBP):**
 - It is aimed at reducing the country's dependence on **Crude Oil Imports**, cutting carbon emissions and **Boosting Farmers' Incomes**.
 - The Government of India has advanced the target for 20% ethanol blending in petrol (also called E20) to 2025 from 2030.
 - The all-India average blending of ethanol with petrol has risen from **1.6% in 2013-14 to 11.8% in 2022-23**.

Why has the Government Restricted the Diversion of Sugar for Ethanol Production?

➤ Sugar Shortage Concerns:

- There are **concerns over a potential shortfall** in sugar production.
- The move to restrict the diversion of sugarcane juice or syrup for ethanol production **is aimed at addressing this anticipated shortage**.

➤ Prioritising Food Over Fuel:

- The decision reflects a prioritization of food production (sugar) over fuel production (ethanol).
- By emphasizing the production of sugar, a critical commodity in India, the government **aligns with the priority of ensuring Food Security** and availability for consumers.

➤ Managing Supply-Demand Dynamics:

- The government is attempting to manage the delicate balance between supply and demand in the sugar market. By curbing diversion for ethanol production, it seeks to **stabilize sugar availability and potentially mitigate** any price volatility in the market.

What are the Implications of this Move?

➤ Impact on Ethanol Production:

- This decision affects **around 28% of total ethanol production**, reducing the volume of ethanol generated from this high-value feedstock.
- The prohibition on using sugarcane juice or syrup for ethanol production is expected to affect the

Note:



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earnings of sugar mills, particularly as these sources fetch **higher prices compared to other feedstocks used in ethanol production.**

➤ **Challenges for Ethanol Blending Targets:**

- The government aims to raise the ethanol fuel-blending target from **12% to 15% in 2023-24** and has set a target of achieving 20% ethanol blending in petrol by 2025-26.
- However, with the restriction on sugarcane juice/syrup for ethanol production, meeting these targets might become more challenging.

What are the Other Sources of Ethanol Production?

- **Grains:** Corn (maize), barley, wheat, and other cereal grains contain starch, which can be converted into **fermentable sugars for ethanol production.**
- **Cellulosic Biomass:** Agricultural residues (corn stover, wheat straw), forestry residues, dedicated energy crops (switchgrass, miscanthus), and municipal solid waste contain cellulose and hemicellulose that can be **broken down into sugars for ethanol fermentation.**
- **Rice:** Surplus rice, including broken or damaged grains, can also serve as a source for ethanol production. The starch content in rice can be converted into sugars for fermentation.
- **Fruits and Vegetables:** Certain fruits and vegetables with high sugar content, like grapes and potatoes, can be utilized for ethanol production.

Countervailing Duties on Four Indian Products

Why in News?

The **United States and the European Union** have now imposed **countervailing duties (CVDs)** on four Indian products, as a retaliation against the **Remission of Duties and Taxes on Export Products (RoDTEP) scheme** introduced for outbound shipments in January 2021.

- Countervailing investigations concluded with CVD determinations for items like **paper file folders, common alloy aluminum sheet, and forged steel fluid end blocks by the U.S.**, while **specific graphite electrode systems were investigated by the European Commission.**

What is Countervailing Duty?

- **Countervailing Duty: CVD** are tariffs levied on imported goods to offset subsidies made to producers of these goods in the exporting country.
 - CVDs are **meant to level the playing field between domestic producers of a product and foreign producers of the same product** who can afford to sell it at a lower price because of the subsidy they receive from their government.
 - The **World Trade Organization (WTO)** permits the **imposition of countervailing duty by its member countries.**
- **WTO's SCM Agreement:** The **WTO's Agreement on Subsidies and Countervailing Measures (SCM Agreement)** addresses two main aspects: **multilateral regulations regarding subsidies** and the **use of countervailing measures** against injury from subsidized imports.
 - Multilateral disciplines set rules on subsidy provisions and are enforced through the WTO dispute settlement mechanism.
 - **Countervailing duties are imposed unilaterally by a member** after investigating and satisfying criteria under the SCM Agreement.
- **Defining Subsidies:** **"Subsidy"** is defined in the SCM Agreement as a **financial contribution by a government** conferring a benefit. Specificity determines whether a subsidy applies to a particular enterprise, industry, or region.
 - **Subsidies are categorized as prohibited (e.g., export subsidies, local content subsidies) and actionable (subject to challenge or countervailing measures).**
 - Actionable subsidies can cause injury, prejudice, or nullification of benefits.
 - However, transition rules **provide exemptions or extended periods for developing countries and those transitioning to market economies** to phase out certain subsidies.

Who Imposes Countervailing Measures in India?

- **Directorate General of Trade Remedies (DGTR)** under Ministry of Commerce & Industry, is the single national authority for administering all trade remedial measures including **anti-dumping, countervailing duties and safeguard measures.**

Note:

- The Directorate General of Anti-Dumping & Allied Duties (DGAD) which was formed in 1997 has been restructured as DGTR in May 2018 by restructuring and re-designing DGAD into DGTR by incorporating all the trade remedial functions i.e. **Anti-Dumping Duty (ADD), Countervailing Duty, Safeguards Duty (SGD), Safeguards Measures (QRs)** under a single window framework.
- It is a quasi-judicial body that **independently undertakes investigations before making its recommendations** to the Central Government.

What is the RoDTEP Scheme?

- The **RoDTEP (Remission of Duties or Taxes on Export Products)** Scheme aims to offset taxes and duties incurred on exported goods that are not refunded otherwise, ensuring competitiveness in global markets.
- This scheme provides rebates on hidden Central, State, and Local duties that were not refunded under other schemes, **encompassing both direct and prior-stage indirect taxes**.

India Imposes Onion Export Ban

Why in News?

Recently, the Director General of Foreign Trade (DGFT) has announced a **ban on onion exports** until March 2024, issuing a **notification converting the export policy of onions** from 'Free' to 'Prohibited'.

- The current supply shortage, caused by early depletion of 2022-23 rabi season stocks and anticipated lower **kharif** 2023 output, along with increased festive demand, has led to a significant rise in onion prices.
- The government has also **revised the stock limit for wheat**, the stock limit has been halved to 1,000 tonnes for wholesalers, and for retailers to 5 tonnes.

Why has the Government Banned Export of Onion Price?

- **Price Control:**
 - By restricting onion exports, the government aims to prevent price surges or fluctuations within the domestic market.

- To combat spiraling prices, the Centre had imposed a Minimum Export Price of USD 800 per tonne on onions in October 2023. Earlier, in August, the government imposed a 40% export duty on onions.

- Onions have a history of significant price volatility, and an export ban helps in stabilizing prices, making them more affordable for local consumers.

➤ Addressing Scarcity:

- Factors like adverse weather conditions, **lower production, or increased demand can lead to a scarcity** of onions within the country.
- By banning exports, the government ensures that the available supply is directed towards meeting domestic demands first.

➤ Food Security:

- Onions are a staple in Indian cuisine, and any scarcity can impact **food security**. By curbing exports, the government ensures that the **population has access to this essential food item** without facing shortages or unaffordable prices.

What are the Key Facts About Onion?

- Onion is an important horticultural commodities grown worldwide for their culinary purposes and medicinal values.
- India is the **second largest producer** of onion after China.
- Maharashtra, Karnataka, Orissa, Uttar Pradesh, Gujarat, Andhra Pradesh and Tamil Nadu are the major onion producing states.
- Maharashtra **ranks first in Onion production** with a share of **42.53% followed by Madhya Pradesh** with a share of 15.16% in 2021-22 (3rd Advance Estimate).

Why has the Government Put Stock Limits on Wheat?

- The revised stock limits aim to **prevent hoarding practices by entities involved in wheat stocking**. By imposing stricter limits, the government intends to **discourage artificial scarcity** and ensure a fair distribution of wheat across various stakeholders.
- Excessive hoarding can lead to **an imbalance between supply and demand**, causing price fluctuations that may negatively impact consumers.

Note:

- Regulating wheat stocks ensures that sufficient quantities remain available in the market to meet the country's food requirements. It helps maintain food security by preventing shortages and ensuring access to this staple food item for consumers.

What is the Current Scenario of Wheat Distribution Across the Country?

- India is the world's **second-biggest wheat producer after China**. But it accounts for less than 1% of the global wheat trade. It keeps a lot of it to provide subsidised food for the poor.
- Major wheat-growing states in India are **Uttar Pradesh, Punjab, Haryana, Madhya Pradesh, Rajasthan, Bihar and Gujarat**.
- **Major Export Destinations (2022-23)**: Bangladesh, Indonesia, Korea Rep., United Arab Emirates and Yemen Republic.

FSB's Concerns About Crypto Asset Intermediaries

Why in News?

Recently, the **Financial Stability Board (FSB)**'s latest report on **crypto-asset intermediaries** sought measures to enhance **cross-border cooperation** and **information sharing** among local authorities. This is to effectively regulate and address gaps in **Multi-function Crypto-asset Intermediaries (MCIs)** operating globally.

What are Crypto Assets?

- Crypto assets are a digital representation of value that can transfer, store, or trade electronically. This also includes **non-fungible tokens (NFTs)**.
 - NFTs are blockchain-based tokens that each represent a unique asset like a piece of art, digital content, or media. An NFT can be thought of as an irrevocable digital certificate of ownership and authenticity for a given asset, whether digital or physical.
- Crypto assets are a subset of digital assets that use **cryptography** to protect digital data and distributed **ledger technology** to record transactions.

What are the Multi-function Crypto-asset Intermediaries (MCIs)?

- **MCIs** is an individual firm, or groups of affiliated firms that offer a range of **crypto-based services, products and functions** which primarily revolve around operating the trading platform.
 - **Examples** include Binance, Bitfinex and Coinbase.
- The primary source of revenue for these platforms are the **transaction fees** generated from trading-related activities.
- These MCIs may also derive revenue from operating a **blockchain infrastructure** for which they may collect transaction validation fees.

What are the Concerns Related to MCIs as per FSB's Report?

- **Transparency**: The report observes that most **MCIs** are generally **not transparent** about their corporate structure. If they disclose information it is typically for a small part of their business, specific to a jurisdiction.
 - **MCIs** failed to provide a clear account of transactions activities or audit practices.
- **Anti-Competitive Behavior**: Having a large concentration of services in one place may lead to **anti-competitive behavior**, making the system more vulnerable.
 - This concentration could make it **harder for new competitors** to enter the market and increase the costs for users who want to switch to a different service provider.
- **Crypto-Friendly Banks**: The shutting down of banks friendly to crypto assets highlights the widespread risk of having a significant concentration of deposits tied to businesses relying on crypto assets.
 - Market stress in crypto-asset markets led to substantial losses for investors, eroding confidence in these markets.
- **Cryptocurrencies and Fiat currencies**: MCIs rely on banks and payment providers for transaction services, including converting between **cryptocurrencies** and (on-ramp and off-ramp services).
 - If the trading platform stops operating or if the bank fails to offer **real-time operations**, there is a risk of counterparty issues.
 - Additionally, providing loans and credit lines to MCIs by banks involves credit risk, especially when using crypto-based collaterals that may decline in value in the future.

Note:

What is Financial Stability Board (FSB)?

- The FSB is an **international body** that **monitors** and makes **recommendations** about the **global financial system**.
- FSB was established in **2009** under the aegis of **G20**.
- **India** is an active Member of the **FSB** having three seats in its **Plenary** represented by Secretary of Economic Affairs, Ministry of Finance, Deputy Governor of **Reserve Bank of India (RBI)**, Chairperson of **Securities and Exchange Board of India (SEBI)**.

Monetary Policy Committee

Decisions: RBI

Why in News?

Recently, the **Reserve Bank of India (RBI)** in its bimonthly **Monetary Policy Committee (MPC)** Meeting has retained benchmark interest rates unchanged for the **5th time in a row**.

- The key repo rate has been paused for **five consecutive reviews at 6.5%**.

What are the Key Highlights of the MPC Meeting?

- **Policy Rates:**
 - **Policy Repo Rate: 6.5%**
 - Repo rate is the rate at which the central bank of a country (**RBI**) lends money to commercial banks in the event of any shortfall of funds. Here, the central bank purchases the security.
 - **Standing Deposit Facility (SDF): 6.25 %**
 - The SDF is a liquidity window through which the RBI will give banks an option to park excess liquidity with it.
 - It is different from the reverse repo facility in that it does not require banks to provide collateral while parking funds.
 - **Marginal Standing Facility Rate: 6.75%**
 - MSF is a window for scheduled banks to borrow overnight from the RBI in an emergency situation when interbank liquidity dries up completely.
 - Under interbank lending, banks lend funds to one another for a specified term.

- **Cash Reserve Ratio (CRR): 4.50%**

- Under CRR, the commercial banks have to hold a certain minimum amount of deposit (NDTL) as reserves with the central bank.

- **Statutory Liquidity Ratio (SLR): 18.00%**

- SLR is the minimum percentage of deposits that a commercial bank has to maintain in the form of liquid cash, gold or other securities.

- **Projections:**

- **Growth Projection Raised:**

- The GDP growth projection for **2023-24** was raised to **7% from earlier 6.5%**, buoyed by a **robust 7.6% growth** in the second quarter of 2023-24 FY.

- **Inflation Forecast:**

- The Consumer Price Index (CPI) based inflation forecast for the fiscal year **2023-24** has been retained at **5.4%**.

What are Other Initiatives Taken by the RBI?

- **Hiked in UPI Limit for Health and Education:**

- RBI has hiked the UPI limit for Health and Education transactions from **Rs 1 lakh to Rs 5 lakh** per transaction in order to yield substantial operational advantages for both healthcare institutions and patients, according to industry experts.

- **Recurring e-Payment Mandates:**

- The RBI has expanded the limit on recurring e-payment mandates for credit card, insurance premia payments, and mutual fund investments to Rs 1 lakh from Rs 15,000 allows for more substantial periodic transactions.

- **Regulatory Framework for Web-Aggregation:**

- RBI is planning to establish a regulatory framework for **web-aggregation of loan products** to improve customer-centricity and transparency in digital lending.

- **Partnerships with Fintechs:**

- The RBI has sought to get a better grip on the growing incidence of banks and **non-banking finance companies (NBFCs)** partnering with Fintechs by proposing the creation of a **Fintech Repository by April 2024**.
- FinTechs would be encouraged to provide relevant information voluntarily to this Repository.

Note:



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Note:

- **Inflation:** It refers to the sustained increase in the general price level of goods and services in an economy over a period of time, leading to a decrease in the purchasing power of money.
 - **Headline Inflation:** It is the total inflation for the period, comprising a basket of commodities.
 - The food and fuel inflation form one of the components of headline inflation in India.
 - **Core Inflation:** It excludes volatile goods from the basket of commodities tracking Headline Inflation. These volatile commodities mainly comprise food and beverages (including vegetables) and fuel and light (crude oil).
 - Core inflation = Headline inflation – (Food and Fuel) inflation.
- **Inflation Targeting:** It is a monetary policy framework aimed at maintaining a specific target range for inflation.
 - The **Urjit Patel Committee recommended CPI (Consumer Price Index) over WPI (Wholesale Price Index)** as a measure for inflation targeting.
 - The current inflation target also aligns with the committee's recommendation to establish a target inflation rate of 4%, accompanied by an acceptable range of deviation of +/- 2%.
 - The central government, in consultation with the RBI, sets an inflation target, and an upper and lower tolerance level for retail inflation.
- **Liquidity** refers to the ease with which an asset or security can be quickly bought or sold in the market without significantly affecting its price.
 - It signifies the availability of cash or liquid assets to meet financial obligations or make investments. In simpler terms, liquidity is to get your money whenever you need it.

Critical Minerals

Why in News?

Recently, Government of India has made a significant move in the Mining Sector by launching the first-ever auction of **critical minerals**, offering 20 blocks for sale to Private Sectors.

What are the Key Features of the First Auction of Critical Minerals?

- This is the first time that rights related to the mining of lithium ore are being auctioned to private sectors. Other minerals in the blocks include nickel, copper, molybdenum, and rare earth elements (REEs).
 - The mineral blocks are spread across **eight states, with Tamil Nadu having the most blocks (seven)**. Rights for these blocks vary; four blocks are auctioned for Mining Licences (ML), enabling immediate mining operations, while the remaining 16 blocks are auctioned for Composite Licences (CL), allowing geological exploration before mining.

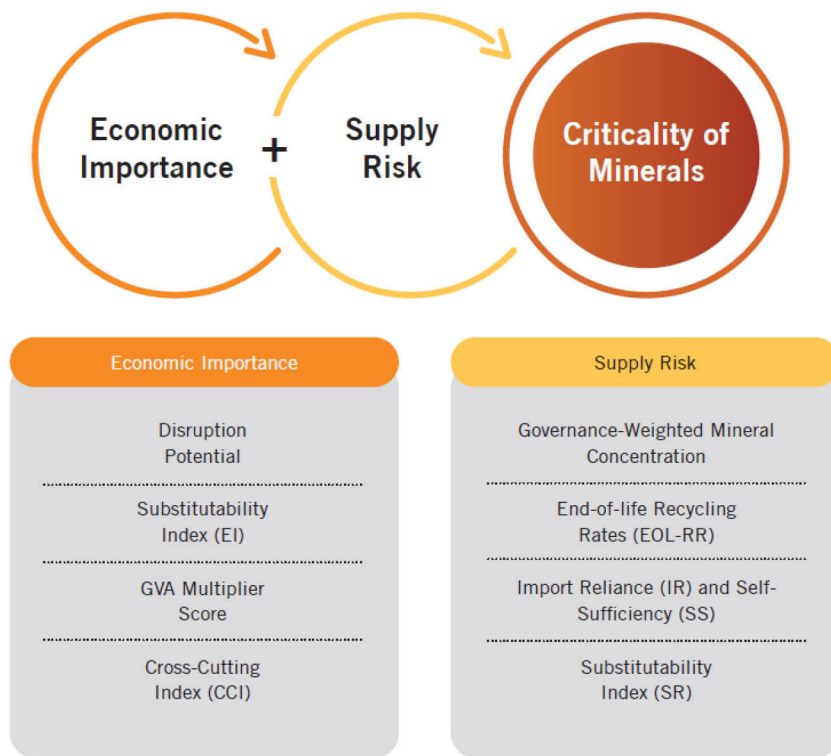
What is the Background of the First Auction of Critical Minerals?

- The ongoing auction follows the government's declaration of 30 minerals as "critical" and amendments to mining laws.
- In July 2023, the government identified 30 minerals as Critical Minerals by amending the **Mines and Minerals (Development and Regulation) Act, 1957**, through the MMDR Amendment Act, 2023, empowering the Central Government to auction blocks of these minerals.
 - The **30 critical minerals** are Antimony, Beryllium, Bismuth, Cobalt, Copper, Gallium, Germanium, Graphite, Hafnium, Indium, Lithium, Molybdenum, Niobium, Nickel, PGE, Phosphorous, Potash, REE, Rhenium, Silicon, Strontium, Tantalum, Tellurium, Tin, Titanium, Tungsten, Vanadium, Zirconium, Selenium and Cadmium.
- The bidding is based on the highest percentage of mineral dispatch value quoted by bidders. Post this auction, a second tranche of critical mineral block auctions is anticipated.
 - The **Geological Survey of India (GSI)** is actively exploring critical mineral reserves across the country.

What are Critical Minerals?

- **Critical Minerals:**
 - Critical minerals are those minerals that are **essential for economic development and national security**, the lack of availability of these minerals or concentration of extraction or processing in a few geographical locations may **lead to supply chain vulnerabilities and even disruption** of supplies.

Note:



➤ Declaration of Critical Minerals:

- It is a dynamic process, and it can evolve **over time as new technologies**, market dynamics, and geopolitical considerations emerge.
- Different countries may have their own unique lists of critical minerals based on their specific circumstances and priorities.
- The US has declared **50 minerals critical in light of their role in national security or economic development**.
- Japan has identified a set of 31 minerals as critical for their economy.
- The UK considers 18 minerals critical, EU (34) and Canada (31).

What is the Significance of Critical Minerals for India?

➤ Economic Development:

- Industries such as high-tech electronics, **telecommunications**, transport, and defense heavily rely on these minerals.
- Additionally, critical minerals are essential for green technologies like solar panels, wind turbines, batteries, and **electric vehicles**.

- Given India's significant domestic demand and potential in these sectors, their growth can lead to job creation, income generation, and innovation.

➤ National Security:

- These minerals **are vital for defense, aerospace, nuclear, and space applications**, necessitating the use of high-quality and reliable materials capable of withstanding extreme conditions and performing complex functions.

➤ Environmental Sustainability:

- They are integral to the transition toward clean energy and a low-carbon economy, enabling the reduction of India's reliance on fossil fuels and greenhouse gas emissions.
- With a commitment to attaining **450 GW of renewable energy** capacity by 2030, these minerals are essential for achieving India's green objectives.

What are the Challenges for India Related to Critical Minerals?

➤ Implications of the Russia-Ukraine Conflict:

- Russia is a **significant producer of various critical minerals**, while Ukraine possesses reserves of lithium, cobalt, graphite, and rare earth elements.

Note:

- The ongoing war between the two countries affects these critical mineral supply chains.

➤ **Limited Domestic Reserves:**

- India has **limited reserves of critical minerals** such as lithium, cobalt, and other rare earth elements.
- Most of these minerals are **imported, making India heavily dependent** on other countries for its supply.

This reliance on imports can create vulnerability in terms of price fluctuations, geopolitical factors, and supply disruptions.

- India heavily relies on imports for critical minerals like lithium and nickel, **with 100% import reliance for lithium and nickel**, and 93% for copper.

Sl. No.	Critical Mineral	Percentage (2020)	Major Import Sources (2020)
1.	Lithium	100%	Chile, Russia, China, Ireland, Belgium
2.	Cobalt	100%	China, Belgium, Netherlands, US, Japan
3.	Nickel	100%	Sweden, China, Indonesia, Japan, Philippines
4.	Vanadium	100%	Kuwait, Germany, South Africa, Brazil, Thailand
5.	Niobium	100%	Brazil, Australia, Canada, South Africa, Indonesia
6.	Germanium	100%	China, South Africa, Australia, France, US
7.	Rhenium	100%	Russia, UK, Netherlands, South Africa, China
8.	Beryllium	100%	Russia, UK, Netherlands, South Africa, China
9.	Tantalum	100%	Australia, Indonesia, South Africa, Malaysia, US
10.	Strontium	100%	China, US, Russia, Estonia, Slovenia
11.	Zirconium(zircon)	80%	Australia, Indonesia, South Africa, Malaysia, US
12.	Graphite(natural)	60%	China, Madagascar, Mozambique, Vietnam, Tanzania
13.	Manganese	50%	South Africa, Gabon, Australia, Brazil, China
14.	Chromium	2.5%	South Africa, Mozambique, Oman, Switzerland, Turkey
15.	Silicon	<1%	China, Malaysia, Norway, Bhutan, Netherlands

Table.1 The net import reliance for critical minerals of India (2020) (Source: A report on 'Unlocking Australia-India Critical Minerals Partnership Potential' by Australian Trade and Investment Commission, July 2021)

➤ **Increasing Demand for Minerals:**

- The manufacturing of renewable energy technologies and the transition to electric vehicles **necessitate larger quantities of minerals such as copper, manganese, zinc, lithium, cobalt, and rare earth elements.**

- The Model Byelaws refer to a set of guidelines or regulations formulated by the Ministry of Cooperation to govern the functioning and operations of **PACS** at the grassroots level.

What is the Purpose of these Bye-Laws?

- These Byelaws are designed to **outline the structure, activities, and functioning of PACS**, aiming to enhance their **economic viability** and expand their role in rural areas.
- The Model Byelaws will enable PACS to diversify their business activities by undertaking more than 25 business activities, including dairy, fishery, floriculture, setting up godowns, procurement of foodgrains, fertilizers, seeds, short-term & long-term credit, custom hiring centers, **Fair Price Shops (FPS)**, community irrigation, Business Correspondent activities, etc.

Primary Agricultural Credit Societies

Why in News?

Recently, the Ministry of Cooperation has introduced **Model Bye laws** aimed at revitalizing **Primary Agricultural Credit Societies (PACS)**.

Note:



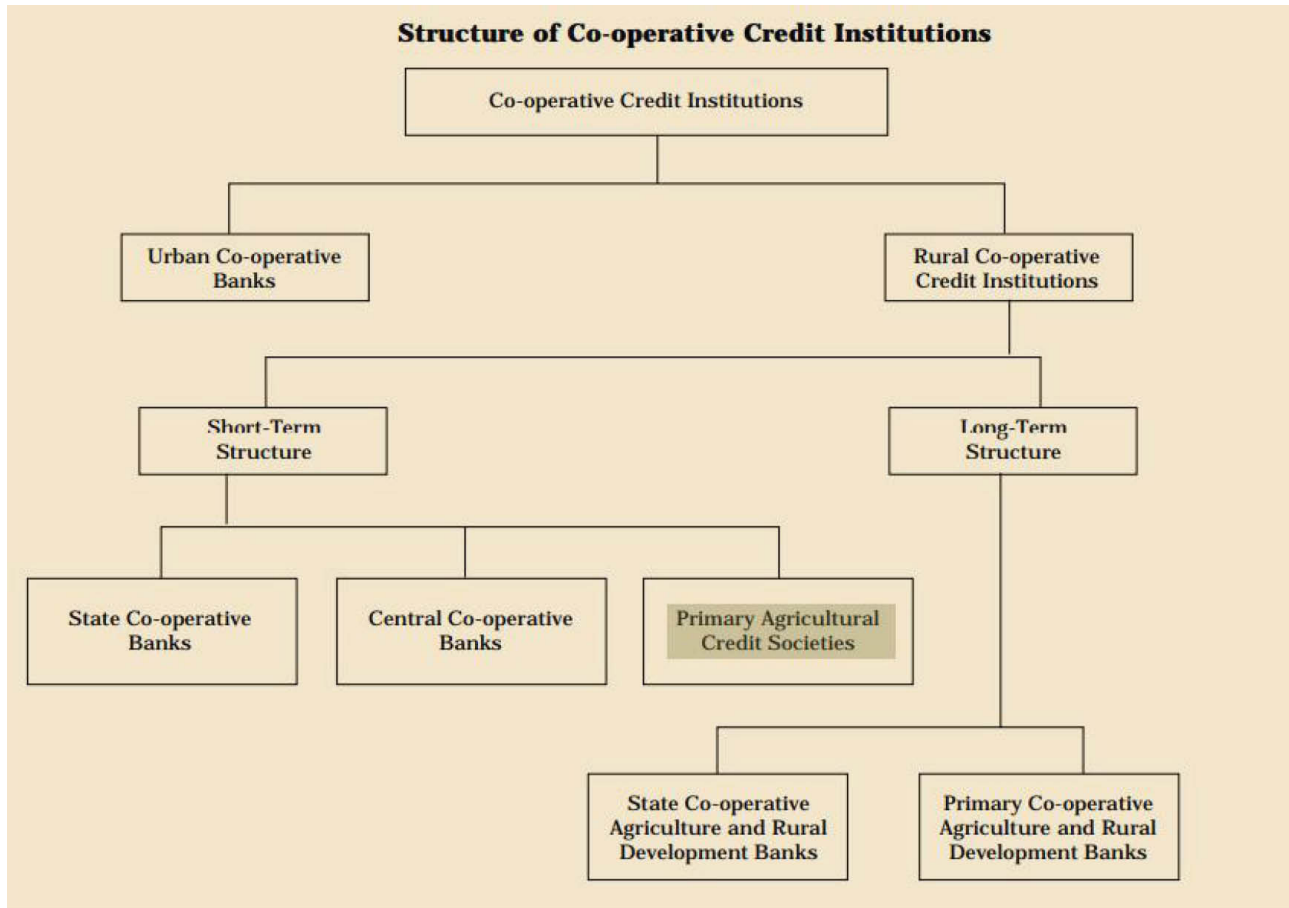
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- Provisions have been made to **make the membership of PACS more inclusive and broad-based**, giving adequate representation to women and **Scheduled Castes/Scheduled Tribes**.

What are Primary Agricultural Credit Societies?

- **About:**
 - PACS are **village level cooperative credit societies** that serve as the last link in a three-tier cooperative credit structure headed by the **State Cooperative Banks (SCB)** at the state level.

- Credit from the SCBs is transferred to the **District Central Cooperative Banks (DCCBs)**, which operate at the district level. The DCCBs work with PACS, which deal directly with farmers.
- PACS provide **short-term, and medium-term agricultural loans** to the farmers for the various agricultural and farming activities.
- The first **PACS was formed in 1904**.



- **Status:**
 - According to a December 2022 report by the Reserve Bank of India, there were 1.02 lakh PACS in the country. However, **only 47,297 of them made a profit by the end of March 2021**.
- **Significance of PACS:**
 - PACS provide small farmers with access to credit, **which they can use to purchase seeds, fertilizers, and other inputs for their farms**. This helps them to improve their production and increase their income.
 - PACS are often **located in rural areas**, which makes it convenient for farmers to access their services.
 - PACS have the capacity to extend credit with minimal paperwork within a short time.

Note:

What are the Issues with the PACS?

- **Inadequate Coverage:**
 - Though geographically active PACS cover about **90% of 5.8 Lakh villages**, there are parts of the country, especially in the north-east, where this coverage is very low.
 - Further, the rural population covered as members is only 50% of all the rural households.
- **Inadequate Resources:**
 - The resources of the PACS are much too inadequate in relation to the short-and medium-term credit needs of the rural economy.
 - The bulk of even these inadequate funds come from higher financing agencies and not through owned funds of societies or deposit mobilization by them.
- **Overdues and NPAs:**
 - Large over-dues have become a big problem for the PACS.
 - As per the RBI report, PACS had reported lending worth Rs 1,43,044 crore and NPAs of Rs 72,550 crore. Maharashtra has 20,897 PACS of which 11,326 are in losses
 - They curb the circulation of loanable funds, reduce the borrowing as well as lending power of societies, and give them the bad image that the societies of defaulting debtors are willful.

GDP Growth Surprise

Why in News?

According to the latest data from the Ministry of Statistics and Programme Implementation (MoSPI), India's **Gross Domestic Product (GDP)** grew by 7.6% in second quarter (Q2) of 2023-24, covering the months of July to September.

- India's economy in Q2 witnessed a decline in agriculture, a surge in manufacturing, and a slowdown in services sectors.

What is the Significance of This Growth Data?

- Not only is this a fairly impressive level of economic growth, it also beats all market expectations.
 - The recent quarterly GDP growth has triggered a flurry of upward revisions in the GDP forecast for the full financial year.

- It appears that India's central bank accurately predicted the country's GDP growth rate for the fiscal year, **despite initially seeming optimistic compared to other economists.**
 - Now, with many experts revising their projections to align with the bank's forecast of 6.5%, the **Reserve Bank of India (RBI)** seems to have made an accurate prediction.
- This also means that **RBI is unlikely to cut interest rates sooner than expected.** Had the growth rate been below market expectations, the probability of a rate cut would have heightened.
- It is also noteworthy that it was exactly three years ago—when MoSPI announced the Q2 GDP data for 2020-21—that India went into a **technical recession**. The upside surprise on growth has given hope that India's economic recovery is now gathering momentum.

REAL GROSS VALUE ADDED

	2019	2020	2021	2022	2023
GVA Total	4.23	-5.12	9.33	5.41	7.42
Agriculture, forestry and fishing	5.32	4.32	4.84	2.49	1.22
Industry	-2.14	3.24	8.11	-0.55	13.18
Mining and quarrying	-5.8	-8.06	10.63	-0.12	9.97
Manufacturing	-3.57	9.01	6.55	-3.83	13.91
Electricity, gas, water supply and other utility services	1.96	-3.93	10.8	5.96	10.06
Construction	1.09	-4.88	10.75	5.66	13.28
Services	7.43	-11.09	11.07	9.35	5.8
Trade, hotels, transport, communication and broadcasting services	6.44	-18.42	13.12	15.63	4.26
Financial services, real estate and professional services	8.38	-5.07	7.05	7.06	6.02
Public administration, defence and other services	7.04	-12.24	16.81	5.59	7.56

Base Year 2011-12

Y-o-Y% change

(All data for Q2)
Source: CMIE

What are the Different Ways of Measuring Economic Growth?

- **Two Ways to Calculate Economic Growth:**
 - **GDP:**
 - It involves **examining people's spending patterns (the expenditure side)**. GDP can be derived from **Gross Value Added (GVA)** by incorporating indirect taxes and subtracting government subsidies.
 - **GVA:**
 - It focuses on the income side of the economy. GVA, as defined by the RBI, is the **value of a sector's output minus the value of its intermediary inputs**. This "value added" is distributed among the primary factors of production—**labor and capital**.

Note:

➤ **Disparity Between the Two Methods:**

- The disparity between the two methods is termed a discrepancy and has sparked controversies, notably during the release of first-quarter GDP data.
- For a nuanced analysis of quarterly economic trends, **GVA numbers are often considered more reliable, while GDP (expenditure data) is preferred for assessing annual trends.**

What Needs to be Done to Make India's Growth Rate More Robust?

- **Boosting Investment and Consumption:** These are the two main drivers of domestic demand, which accounts for about 70% of India's GDP.
 - To increase investment, the government can continue to implement reforms that **reduce policy uncertainty, regulatory hurdles, interest rates, and bad loans.**
 - To increase consumption, the government can support income growth, inflation control, rural development, job creation, and credit availability.
- **Enhancing Manufacturing and Exports:** These are the key sources of value addition, employment, and external demand, which can help India diversify its economy and integrate with the global market.
 - To improve manufacturing and exports, the government can continue to implement initiatives such as the **Atmanirbhar Bharat package, the production-linked incentive scheme, and the national infrastructure pipeline.**
- **Investing in Human Capital and Social Services:** These are the essential factors for improving the living standards and productivity of India's large and young population.
 - To invest in human capital and social services, the government can continue to implement programs that **enhance education, health, skills, nutrition, water, sanitation, energy, housing, and healthcare.**
- **Maintaining Macroeconomic Stability and Resilience:** These are the necessary conditions for sustaining economic growth and coping with various shocks and uncertainties.
 - To maintain macroeconomic stability and resilience, the government can continue to **pursue prudent fiscal and monetary policies** that balance growth and inflation objectives.

Unemployment Rate in Urban Areas

Why in News?

The **Periodic Labour Force Survey (PLFS)**, conducted by the **National Sample Survey Office (NSSO)**, recently released data for **July-September 2023**, shedding light on India's **unemployment** rate in urban areas.

What are the Major Highlights of the Recent PLFS?

- **Urban Unemployment Rate:** The unemployment rate in urban areas showcased a decline from **7.2% (July–September 2022) to 6.6% (July–September 2023)**.
 - **Male:** Decreased from 6.6% to 6% in the given time period.
 - **Female:** Witnessed a more positive trend, marking a decrease from **9.4% to 8.6%** in the given time period.
- **Worker-Population Ratio:** The **worker population ratio**, percentage of employed persons in the population, in urban areas increased from **44.5% in July-September, 2022 to 46% in July-September, 2023** for persons of age 15 years and above.
 - **Male:** Increased from 68.6% to 69.4% during the given time period.
 - **Female:** Increased from 19.7% to 21.9% during the given time period.
- **Labour Force Participation Rate:** The LFPR in urban areas increased from **47.9% in July-September, 2022 to 49.3% in July–September, 2023**
 - **Male:** Saw a marginal uptick from **73.4% to 73.8%** during this period.
 - **Female:** Exhibited a more **substantial increase from 21.7% to 24.0%.**

What is the Periodic Labour Force Survey?

- **About:**
 - Considering the importance of availability of labour force data at more frequent time intervals, **NSSO** launched **Periodic Labour Force Survey** in April 2017.
 - PLFS defines unemployment rate as the percentage of persons unemployed among the persons in the **labour force**.

Note:



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➤ **Objective of PLFS:**

- To estimate the **key employment and unemployment indicators** (viz. **Worker Population Ratio, Labour Force Participation Rate, Unemployment Rate**) in the short time interval of three months for the urban areas only in the '**Current Weekly Status**' (CWS).
- To estimate employment and unemployment indicators in both '**Usual Status**' and CWS in **both rural and urban areas annually**.

What are the Related Key Terms?

- **Labour Force Participation Rate (LFPR):** It represents the **percentage of people aged 15 and above** who are either employed or unemployed but actively seeking work.
- **Worker Population Ratio (WPR):** This measures the percentage of employed individuals within the total population.
- **Unemployment Rate (UR):** It indicates the percentage of unemployed persons among those in the labour force.
- **Regarding Activity Status:**
 - **Principal Activity Status (PS):** The primary activity a person engaged in for a substantial period (during 365 days preceding the survey).
 - **Subsidiary Economic Activity Status (SS):** Additional economic activities performed, apart from the usual primary activity, for at least 30 days in the 365-day period before the survey.
 - **Current Weekly Status (CWS):** This status reflects a person's activities during the immediate past 7 days before the survey date.

What are the Major Issues Related to Unemployment in Urban Areas?

- **Structural Unemployment:** Urban areas often face a **disparity between the skills** possessed by the workforce and the skills demanded by industries.
 - The education system does not **align with the needs of the job market**, leading to a surplus of unskilled or under-skilled workers.
 - **Rapid technological advancements and changes in the economy** have led to the decline of traditional industries, resulting in job losses for many urban workers who lack the necessary skills for emerging sectors.

- **Informal Sector Dominance:** A significant portion of the **urban population is employed in the informal sector**, characterized by **low pay, job insecurity, and lack of social security benefits**.

- This sector often experiences seasonal fluctuations, leading to inconsistent employment opportunities.
- Many workers are **forced to accept jobs that are below their skill levels due to the scarcity of formal employment opportunities**, leading to underutilization of human resources.
- According to IMF, In India in terms of **employment share the unorganized sector employs 83% of the workforce**.
 - Also, there are **92.4% informal workers (with no written contract, paid leave and other benefits)** in the economy.

- **Demographic Challenges:** Rapid urbanization and population influx into cities have **outpaced job creation**, causing a strain on the job market and resulting in higher unemployment rates.

- **Rural-to-urban migration** often leads to an oversupply of labour in cities, contributing to higher unemployment rates among migrant populations, further exacerbating urban poverty.

- **Credential Inflation:** Overemphasis on educational qualifications can lead to **situations where individuals are overqualified for available jobs**, leading to underemployment or unemployment.

What are the Government's Initiatives Related to Employment?

- **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**
- **Rozgar Mela**
- **Indira Gandhi Urban Employment Guarantee Scheme-Rajasthan.**

Note:

Risks Associated with the Decommissioning of Coal Plants

Why in News?

India is progressing slowly towards **Cleaner Energy**. However, this noticeable shift towards cleaner energy sources in electricity generation is causing apprehensions about the risks associated with the decommissioning of **Coal Plants**.

What are the Current Trends in Transition towards Cleaner Energy?

- Financing for new coal power projects has declined over the past five years, while there has been a steady rise in financing for projects based on **Renewable energy sources**.
- Coal continues to dominate the energy mix, there has been a notable increase in renewable energy generation capacity in India.
- Renewables constituted **41% of the total capacity in 2022-23**, marking an increase from 32% in 2011-12. Moreover, the yearly increase in renewable energy capacity has **surpassed that of coal power since 2017**.
- While clean energy in the electricity mix has increased to **about 23%, over 55% of India's current energy needs are still being met by coal**. The acceleration of this transition towards greener energy is essential to keep the global temperature increase below 1.5°C.

What are the Economic Implications of Transition Towards Cleaner Energy?

- **Risks of Stranded Assets:**
 - Stranded assets are at risk of losing value and **becoming liabilities due to unforeseen shifts in market conditions**, regulatory changes, evolving consumer preferences, and technological advancements.
 - Stranded assets are assets that have suffered from unanticipated or premature write-downs, devaluations or conversion to liabilities.
 - This poses potential risks to banks and financial institutions that have direct or indirect ties to the fossil fuel sector.

➤ Financial Implications:

- The financial risk associated with **decommissioning coal plants** in India is relatively high due to the average age of these plants being only 13 years.
- Public sector banks and **Non-Banking Financial Institutions (NBFCs)**, bear a **substantial 90% of the loan burden associated with coal projects**.
 - Moreover, private banks have reduced their financing to coal-fired thermal power plants significantly.

➤ Regional Vulnerabilities:

- Regions like **Chhattisgarh, Odisha, and Jharkhand** have a **high share of stressed assets** (to the tune of 58%, 55% and 27%) in state coal power capacities.
- This places them at a heightened risk of facing financial losses due to asset devaluation as India moves towards sustainable energy practices.

SEBI Board Approves Regulatory Framework

Why in News?

Securities & Exchange Board of India's (SEBI's) board approved a framework for Index Providers to **enhance transparency and accountability in governing and administering** financial benchmarks in the securities market.

What are the New Regulations Framed by SEBI?

➤ Framework for Registration of Index Providers:

- SEBI announced the approval of regulations establishing a framework for the **registration of Index Providers**. This framework will be applicable specifically to **'Significant Indices,'** which SEBI will identify based on objective criteria.
 - The regulatory structure aligns with the **International Organization of Securities Commissions (IOSCO) Principles for Financial Benchmarks**.

➤ Dematerialization Requirement for AIF Investments:

- SEBI introduced a requirement for **Alternative Investment Funds (AIFs)** to hold fresh investments made **after September 2024** in dematerialized form.

Note:



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- However, existing investments are exempt, except in cases mandated by applicable law or when the AIF, **alone or with other SEBI-registered entities**, has control in the investee company.
- The mandate for the appointment of custodians, previously applicable to specific AIF categories, **will now extend to all AIFs**.
- **Amendments to SEBI (Real Estate Investment Trusts) Regulations:**
 - The **SEBI board** approved amendments to the **Real Estate Investment Trusts (REITs) Regulations**, creating a regulatory framework for **Small & Medium REITs (SM REITs)** with an asset value of **at least ₹50 crore**.
 - SM REITs will be able to establish separate schemes for owning **real estate assets through special purpose vehicles (SPVs)**.
- **Flexibility in Social Stock Exchange (SSE) Framework:**
 - SEBI provided flexibility in the framework for the **Social Stock Exchange (SSE)** to boost fundraising by **Not-for-Profit Organizations (NPOs)**.
 - This includes a reduction in the minimum issue size and application size for public issuance of **Zero Coupon Zero Principal Instruments (ZCZP)** by NPOs on SSE, encouraging wider participation, including retail investors.
- **Nomenclature Change and Comfort Measures for NPOs:**
 - SEBI approved a change in the nomenclature from **"Social Auditor" to "Social Impact Assessor"** to convey a positive approach toward the social sector.
 - This measure is intended to **provide comfort to NPOs involved in the SSE** and reinforce SEBI's support for social impact initiatives.

Key Terminologies

- **Index Providers:** These are entities responsible for **creating, maintaining, and calculating the values of financial indices**. A financial index is a statistical measure of the performance of a specific segment of the financial markets.
- **Alternative Investment Fund (AIF):** AIF means any fund established in India which is a privately pooled investment vehicle **which collects funds from sophisticated investors, whether Indian or foreign**, for investing it in accordance with a defined investment policy for the benefit of its investors.

○ Categories

- **Category I AIFs:** These generally **invest in start-ups or early stage ventures** which the government or regulators consider as socially or economically desirable.
 - e.g. venture capital funds, infrastructure funds.
- **Category II AIFs:** These are AIFs which do not fall in Category I and III and which do not undertake leverage or borrowing other than to meet day-to-day operational requirements and as permitted in the **SEBI (Alternative Investment Funds) Regulations, 2012**.
 - e.g. real estate funds, private equity funds.
- **Categories III AIFs:** AIFs which employ diverse or complex trading strategies and may employ leverage including through investment in listed or unlisted derivatives.
 - e.g. hedge funds, private investment in Public Equity Funds.
- **Real Estate Investment Trusts (REITs):** These are investment vehicles **that allow individuals to invest in large-scale, income-producing real estate** without having to directly manage or own the properties.
 - REITs **pool capital from multiple investors to invest in a diversified portfolio of real estate assets**, which may include residential or commercial properties, shopping centers, office buildings, hotels etc.
- **Social Stock Exchange (SSE):** The SSE would **function as a separate segment within the existing stock exchange** and help social enterprises raise funds from the public through its mechanism.
 - It would **serve as a medium for enterprises to seek finance for their social initiatives, acquire visibility and provide increased transparency** about fund mobilisation and utilisation.

What is SEBI?

- **About:**
 - SEBI is a **Statutory Body** (a Non-Constitutional body which is set up by a Parliament) established in 1992 in accordance with the provisions of the **Securities and Exchange Board of India Act, 1992**.
 - The basic functions of SEBI is to **protect the interests of investors in securities** and to promote and regulate the securities market.

Note:

- The headquarters of SEBI is situated in **Mumbai**. The regional offices of SEBI are located in **Ahmedabad, Kolkata, Chennai and Delhi**.

➤ **Background:**

- Before SEBI came into existence, **Controller of Capital Issues** was the regulatory authority, it derived authority from the **Capital Issues (Control) Act, 1947**.
- In 1988, the **SEBI was constituted as the regulator of capital markets** in India under a resolution of the Government of India.
- Initially SEBI was a non statutory body without any statutory power but **became autonomous and given statutory powers by SEBI Act 1992**.

➤ **Structure:**

- SEBI Board consists of a **Chairman and several other whole time and part time members**.
- SEBI also appoints various committees, whenever required to look into the pressing issues of that time.
- **Further, a Securities Appellate Tribunal (SAT)** has been constituted to protect the interest of entities that feel aggrieved by SEBI's decision.
 - **SAT** consists of a **Presiding Officer and two other Members**.
 - It has the same powers as vested in a **civil court**. Further, if any person feels aggrieved by SAT's decision or order can appeal to the **Supreme Court**.



What is IOSCO?

➤ **About:**

- **Founded:** April 1983
- **Headquarters:** Madrid, Spain
 - IOSCO Asia Pacific Hub is located in **Kuala Lumpur, Malaysia**.
- It is the international organization that brings together the world's securities regulators, covering more than 95% of the world's securities markets, and is the global standard setter for the securities sector.
- It works closely with the **G20 (Group of Twenty)** and the **Financial Stability Board (FSB)** in setting up the standards for strengthening the securities markets.

Note:

- The FSB is an international body that monitors and makes recommendations about the global financial system.
- The **IOSCO Objectives and Principles** of Securities Regulation have been endorsed by FSB as one of the key standards for sound financial systems.
- IOSCO's enforcement role extends to matters of interpretation of **International Financial Reporting Standards (IFRS)**, where IOSCO maintains a (confidential) database of enforcement actions taken by member agencies.
 - IFRS is an accounting standard that has been issued by the **International Accounting Standards Board (IASB)** with the objective of providing a common accounting language to increase transparency in the presentation of financial information.
- **Objectives:**
 - To cooperate in **developing, implementing and promoting adherence to internationally recognized and consistent standards** of regulation, oversight and enforcement in order to protect investors, maintain fair, efficient and transparent markets, and seek to address systemic risks;
 - To enhance **investor protection and promote investor confidence** in the integrity of securities markets, through **strengthened information exchange** and cooperation in enforcement against misconduct and in supervision of markets and market intermediaries; and
 - To exchange **information at both global and regional levels** on their respective experiences in order to assist the development of markets, strengthen market infrastructure and implement appropriate regulation.
- **Membership:**
 - IOSCO provides members the platform to **exchange information at the global level and regional level on areas of common interests**.
 - **SEBI is an ordinary member of IOSCO.**

Sugar's Pressmud for Green Energy Production

Why in News?

India is viewing **Pressmud**, a residual byproduct of **Sugar**, as a valuable resource for green energy production by creating **Compressed Biogas (CBG)**.

- India holds a key position in the worldwide sugar economy, emerging as the **foremost sugar producer** since 2021-22, surpassing Brazil. Additionally, it stands as the **second-largest sugar exporter** globally.

What is Compressed Bio-Gas (CBG)?

- CBG is a **Renewable**, environmentally friendly gaseous fuel derived from the anaerobic decomposition of organic materials. It is produced through a process called **Biomethanation** or **anaerobic digestion**, where various organic sources such as agricultural waste, animal manure, food waste, sewage sludge, and other biomass materials are **broken down by bacteria in the absence of oxygen**.
- The resulting biogas primarily consists of **methane (usually over 90%)**, carbon dioxide, traces of hydrogen sulfide, and moisture.
- To convert biogas into CBG, purification steps are employed to remove **impurities such as carbon dioxide, hydrogen sulfide, and moisture**.
- The purified methane gas is then compressed to a high pressure, typically around 250 bar or higher, hence the term "Compressed Biogas."

What is Pressmud?

- **About:**
 - Pressmud, also known as filter cake or press cake, is a **residual byproduct in the sugar industry** that has gained recognition as a valuable resource for green energy production.
 - This byproduct offers Indian sugar mills an **opportunity to generate additional revenue by utilizing it as a feedstock for biogas production through anaerobic digestion**, leading to the creation of **Compressed Biogas (CBG)**.
 - Anaerobic digestion is a process through which bacteria break down organic matter—**such as animal manure, wastewater biosolids, and food wastes**—in the absence of oxygen.
 - Typically, the yield of pressmud ranges from 3-4 % by weight with the **input sugarcane processed in a unit**.

Note: Pressmud has the potential to yield approximately 460,000 tonnes of CBG, valued at Rs 2,484 crore, considering the minimum guaranteed price set by the central government's **Sustainable Alternative Towards Affordable Transportation scheme (SATA)**.

Note:

➤ **Advantages of Pressmud Utilization for CBG Production:**

- **Fewer Complexities:** Its advantageous qualities include consistent quality, simplicity in sourcing, and **fewer complexities compared to other feedstocks.**
- **Simplified Supply Chain:** It eliminates the **complexities associated with the feedstock supply chain**, as found in the case of agricultural residue, where biomass harvesting machinery is required for harvesting and aggregation.
- **Single Sourcing:** The **feedstock is sourced from one or two producers or sugar mills**, as opposed to agricultural residue, which involves **multiple producers / farmers** within a narrow window of 45 days per year.
- **Quality and Efficiency:** Quality consistency and higher conversion efficiency, requiring **less feedstock quantity compared to alternatives** like cattle dung.
 - Approximately 25 tonnes of pressmud are needed to produce a tonne of CBG. In comparison, cattle dung requires 50 tonnes for the same gas output.
- **Cost-effectiveness:** Lower cost (Rs 0.4-0.6 per kilogramme) compared to other feedstocks like agricultural residue and cattle dung. It eliminates **pretreatment costs as it lacks the organic polymer lignin**, unlike agriresidue.

➤ **Challenges Faced by Pressmud Utilization:**

- Pressmud faces challenges such as **escalating prices**, competition for usage in other industries, and **storage complexities** due to gradual decomposition, necessitating innovative storage solutions.
 - As an organic residue, it is **sought after in sectors like animal feed, bioenergy production** (for biogas or biofuels), and agricultural soil amendments. This competition can sometimes

limit its availability or increase its cost for specific applications.

What is India's Pressmud Production landscape?

➤ **Production Statistics:**

- In the fiscal year 2022-23, India's sugar **production reached 32.74 million tonnes, generating about 11.4 million tonnes of pressmud.**

➤ **Sugarcane Growing States:**

- The primary sugarcane-growing states, notably Uttar Pradesh and Maharashtra, contribute **significantly, covering approximately 65 % of India's total sugarcane cultivation area.**
 - Key sugarcane-producing states include Uttar Pradesh, Maharashtra, Karnataka, Tamil Nadu, and Bihar, accounting for a substantial portion of India's overall sugarcane production.

Way Forward

- To harness the full potential of pressmud for CBG production, various interventions are crucial:
 - **State-level Policies:** Implementation of supportive bioenergy policies by states, streamlining approval processes and offering incentives.
 - **Price Control Mechanisms:** Establishing mechanisms to control pressmud prices and encouraging long-term agreements between sugar mills and CBG plants.
 - **Technological Advancements:** Research and development for efficient pressmud storage technologies to prevent methane emissions and minimize gas loss.
 - **Training Initiatives:** Conducting training sessions for CBG plant operators on plant operations, scientific equipment handling, and feedstock characterization.



Note:

International Relations

Highlights

- *Illegal Indian Migration to the U.S.*
- *Italy Withdraws from China's BRI*
- *India Offers Agricultural Line of Credit to Kenya*
- *Gujral Doctrine of Foreign Policy*
- *Sri Lanka's Debt Crisis and Paris Club*

Illegal Indian Migration to the U.S.

Why in News?

Over the past decade, the influx of **illegal Indian Migrants to the U.S.** has seen a remarkable increase, rising from a **modest 1,500 a decade ago to a staggering 96,917 in 2023**, as per the data from the **U.S. Customs and Border Protection**.

- The most significant surge in illegal border crossings by Indians has been witnessed since 2020, marking a departure from historically lower numbers under 10,000.
- Traditionally, the **majority of illegal crossings** occurred in the **U.S.-Mexico border**. However, Indian migrants are increasingly opting for the **northern border, with numbers rising from under 100 in 2014 to over 30,000 in 2023**.

Migrant:

- **The International Organization for Migration** defines a migrant as any person who is moving or has moved across an international border or within a state away from his/her habitual place of residence.
 - Migration is the movement of people from one place to another, either permanently or temporarily.

What are the Reasons for Surge in Illegal Indian Migrants in the USA?

- **Push Factors:**
 - There are several push factors such as **the lack of sufficient job opportunities and economic prospects in India** prompt individuals to seek better employment prospects abroad.

- Social conflicts or lack of confidence in the governance structure in India may drive some individuals to seek a more stable environment elsewhere.

➤ Pull Factors:

- The US's reputation for offering better employment, higher wages, and career advancement **acts as a significant pull factor for migrants**.
- The enticement of **quality education and prestigious academic institutions** in the USA attracts students and families seeking educational opportunities.
 - Desire to reunite with family members or relatives already settled in the USA drives **some migrants to seek illegal entry for proximity to loved ones**.

➤ Global Migration Trends:

- The overall rise in **Global Migration** after the pandemic has contributed to this surge, as individuals **seek better opportunities and security in different countries**.

➤ Visa Backlogs and Alternative Routes:

- Smugglers have **evolved their methods, offering sophisticated and in-demand services** to facilitate illegal entry into America.
- Extreme visa backlogs have **driven individuals to explore alternative**, albeit illegal, pathways to enter the USA due to the prolonged waiting times and limited options for legal entry.

➤ Misinformation:

- Misinformation spread through social media and deceptive travel agencies often misguide desperate migrants, **enticing them to undertake perilous journeys** guided by multiple facilitators across continents.

Note:

- Desperate migrants **might undertake complex, multi-leg journeys** passing through various continents and countries, facing numerous risks and challenges along the way.

What are the Socio-Political and Geo-Political Implications for India Over Surge in Illegal Migrants?

➤ **Bilateral Relations:**

- The issue could impact bilateral ties between India and the USA, potentially affecting trade negotiations, security cooperation, and strategic partnerships.

➤ **Economic Factors:**

- The **potential brain drain** resulting from skilled individuals seeking illegal entry might impact India's economy, particularly in sectors where skilled labour is in demand.

➤ **Brain Drain:**

- The loss of skilled and educated individuals to illegal migration can negatively impact India's economy, depleting the country of talent and expertise.

➤ **Labor Market Challenges:**

- The departure of skilled or semi-skilled workers might create labour shortages in certain sectors, impacting India's workforce and economic productivity.

➤ **Policy Repercussions:**

- India might need to implement stringent policies to address the factors driving illegal migration, potentially diverting resources and attention from other developmental priorities.

Italy Withdraws from China's BRI

Why in News?

Italy has withdrawn from **China's Belt and Road Initiative**, more than four years after becoming the **only G7 nation** to sign up.

- Italy's potential withdrawal from China's BRI stems from a combination of **economic, geopolitical, and strategic factors** that have led the country to reassess its participation.



What are the Reasons for Italy's Withdrawal From BRI?

➤ **Economic Imbalance:**

- Italy had joined the BRI in 2019 at a time it was desperate for investment and infrastructure building, having survived **three recessions in 10 years**.
- However, the anticipated economic benefits haven't materialized as in these four years later, the agreement hasn't done much for Italy.
 - According to figures from the Council on Foreign Relations, Chinese **FDI (Foreign Direct Investment)** in Italy dropped from USD 650 million in 2019 to just USD 33 million in 2021.
 - In terms of trade, since joining BRI, Italy's exports to China increased from 14.5 billion euros to a mere 18.5 billion euros, while Chinese exports to Italy expanded from 33.5 billion euros to 50.9 billion euros.

➤ **Geopolitical Realignment:**

- Italy's reconsideration is part of a broader trend **among European nations to reassess their relationships** with China.
- Concerns over China's increasing influence, geopolitical alignments, and strategic implications, particularly amid **global events like the Russia-Ukraine conflict**, have prompted Italy to reevaluate its stance toward the BRI.
- In April, the **EU-China Comprehensive Agreement on Investment (CAI)** collapsed. Last year, **Estonia and Latvia quit the 17+1**, China's diplomatic push in Central and Eastern European countries. **Lithuania had walked out in 2021.**

Note:



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➤ **Alignment with Western Allies:**

- Italy's inclination to align itself more closely with its Western allies, especially in the G7, might influence its decision regarding the BRI.
- With the G7 presidency upcoming, **Italy might see leaving the BRI as a gesture of solidarity with Western allies.**

➤ **Negative Press and Debt Concerns:**

- The BRI has faced criticism globally for **potential debt traps and lack of transparency in financial dealings.**
- Reports of other countries facing substantial debt burdens due to their participation in the **BRI might be contributing to Italy's Withdrawal.**

How Have India-Italy Relations Been?➤ **Historical and Cultural Links:**

- India and Italy share **ancient ties that date back thousands of years**, with historical connections through trade routes and cultural exchanges.
- Personalities like Rabindranath Tagore and Mahatma Gandhi have had **notable interactions with Italy**, contributing to the historical tapestry of bilateral relations.

➤ **Setbacks in Bilateral Relations:**

- **Italian Marines Case:** In 2012, the case involving two Italian marines accused of killing Indian fishermen off the Kerala coast strained relations. The issue escalated politically and legally, impacting diplomatic ties between the countries. The case was eventually resolved after compensation was paid by Italy to India, closing in 2021.
- **AgustaWestland Allegations:** Corruption allegations regarding the AgustaWestland deal further strained relations. Investigations into unethical dealings and corruption in a major defence deal led to legal battles in both Italy and India.
 - Despite the cancellation of the contract and legal proceedings, the Italian courts dismissed all charges due to insufficient evidence.

➤ **Efforts Towards Repair:**

- **Diplomatic Engagement:** Efforts to mend ties began around 2018. Official visits, cultural exchanges, and high-level engagements between officials from both countries aimed to rebuild relations.

- **Strategic Partnerships:** Indian Prime Minister's visit to Italy for the **G20 summit in 2021** and subsequent engagements with Italian leadership marked significant milestones. Bilateral agreements and strategic partnerships **were established, focusing on various sectors like defense, trade, and technology.**

- **Economic Cooperation:** Bilateral trade has witnessed significant growth, with **Italy emerging as a key trading partner for India** within the EU. The emphasis on economic cooperation, including collaborations in defense and technology, has strengthened ties.

- **Rethinking Engagement with China:** Both India and Italy have reevaluated their engagements with China, especially concerning initiatives like the Belt and Road Initiative (BRI). Italy's rethinking on the BRI, driven by economic imbalances and unmet expectations, aligns with India's opposition to the BRI due to territorial concerns.

➤ **Cooperation in Other Areas:**

- **Science, Technology and Research Collaboration:** In 2021 both countries established Thematic Working Groups as a method of work between the Italian Space Agency (ASI) and the **Indian Space Research Organisation (ISRO)** as well as the creation of the first joint **ASI-ISRO working group in heliophysics.**
 - Heliophysics is the study of the effects of the Sun on the Solar System.
- **Cooperation for Counter-Terrorism and Security:** Both sides pledged to strengthen cooperation in the fight against **terrorism** and transnational crime both at a bilateral level and in multilateral fora.
 - Both nations also agreed to hold the next meeting of the **'India-Italy Joint Working Group on Counter-Terrorism'** to further advance cooperation, exchange of expertise and capacity building.
- **Regional Cooperation and Connectivity:** India and Italy have acknowledged the potential of new international organisations such as the **Coalition on Disaster Resilient Infrastructures (CDRI)** and the **International Solar Alliance (ISA).**
 - India welcomed Italy joining ISA after the universalisation of ISA.

Note:

India Offers Agricultural Line of Credit to Kenya

Why in news?

Recently, India has announced a **USD 250 million line of credit** to Kenya for modernisation of its **agricultural sector** during the recent visit of Kenya's President to India.

- A **line of credit (LOC)** is a predetermined **borrowing limit** that is accessible whenever necessary. The borrower can withdraw funds as required until reaching the established limit, and once repaid, the funds can be borrowed again in the case of an open line of credit.

What are the Key Highlights of the Recent Visit of Kenya's President?

- India and Kenya signed **five pacts** providing for cooperation in a **range of areas** including **sports, education** and **digital solution**, and unveiled a joint vision document to scale up **maritime engagement**

in the **Indian Ocean region**.

- India also raised the issue of two Indian nationals who **went missing** in the **east African country** last year.
- Both sides agreed to strengthen **bilateral ties** in the field of **defense, trade, energy, digital public infrastructure** and **healthcare**.
- Both sides deliberated on defense cooperation and emphasized on **military exercises, capacity building** as well as linking the **defense industries** of both the countries.
- Kenya invited Indian companies to take advantage of the conducive and attractive environment to invest in Kenya, especially in **agriculture, manufacturing, pharmaceutical, health, green energy** and **green mobility sectors**.
- Terrorism is the most serious challenge and both sides have decided to increase **counter-terror cooperation**

What are the Key Points Related to Kenya?

- **Kenya** is located in **East Africa**. Its terrain rises from a low coastal plain on the **Indian Ocean** to mountains and plateaus at its center.



Note:

- Kenya's location between the **Indian Ocean** and **Lake Victoria** means that people from all over **Africa** and the **Middle East** have traveled and traded across it for centuries.
 - This has created a diverse culture with many ethnic groups and languages.
- The bones of one of the earliest human ancestors ever found were discovered in **Kenya's Turkana Basin**.
 - **Lake Turkana**, the **world's largest desert lake**, is part of the **Omo-Turkana basin**, which stretches into four countries: **Ethiopia, Kenya, South Sudan** and **Uganda**.
- **UN-Habitat** maintains its headquarters at the **United Nations Office** at **Nairobi, Kenya**.

Gujral Doctrine of Foreign Policy

Why in the News?

Recently, the **11th death anniversary** of the precursor of **Gujral doctrine**, **IK Gujral**, the **12th Prime Minister of India** has been marked on November 30.

- He is the only Prime Minister with a foreign policy approach identified with his name the **Gujral Doctrine**.

Who is Inder Kumar Gujral?

- Inder Kumar Gujral was sworn in as the **12th Prime Minister of India** from **April 1997** to **May 1998**.
- IK Gujral can be remembered for two significant contributions to **Indian foreign policy**:
 - He propounded the '**Gujral doctrine**' when he was the **Union minister of External Affairs** from **1996 to 1997**.
 - Despite international pressure, Gujral firmly refused to sign the **Comprehensive Test Ban Treaty (CTBT)** in **October 1996**.

What is the Gujral Doctrine?

- The **Gujral doctrine** delineated its approach towards India's neighbors, which later came to be known as the **Gujral Doctrine**. This consisted of **five basic principles**. It was outlined at a speech in **Chatham House** in **London** in **September 1996**.
- The five basic principles of **Gujral Doctrine**:
 - India, surrounded by neighbors such as **Nepal, Bangladesh, Bhutan, Maldives, and Sri Lanka**,

doesn't seek reciprocity but instead offers assistance wholeheartedly, guided by **goodwill** and **trust**.

- **South Asian** nations won't tolerate the use of their territory to harm the interests of another country in the region.
- None will interfere in the **internal affairs** of another.
- All **South Asian Countries** must respect each other's **territorial integrity** and **sovereignty**.
- Nations will settle all their disputes through **peaceful bilateral negotiations**."
- The **Gujral Doctrine** believed that **India's significant size** and **population naturally** positioned it as a key player in **South East Asia**.
- To enhance its standing and reputation, the doctrine advocated adopting a non-dominant approach towards smaller neighboring countries. It, thus, recognises the supreme importance of friendly, cordial relations with neighbors.
- It also stressed the significance of maintaining ongoing dialogue and refraining from unnecessary provocations, such as commenting on the internal affairs of other nations.

How Successful was the Gujral Doctrine?

- Gujral's approach to foreign policy helped strengthen trust and **cooperation in India's neighborhood**.
- The **Water-Sharing Treaty, 1977** between **India** and **Bangladesh** expired in **1988**, and negotiations failed due to inflexibility on both sides. The resolution of the **water-sharing dispute** with **Bangladesh** came in just **three months** in **1996-97**.
- India obtained **Bhutanese approval** for a **canal project to increase water flow** to the **Ganga**.
- This almost coincided with the treaty with **Nepal** for taming the **Mahakali river** for the **generation of hydel power**.
- It was followed by agreements with **Sri Lanka** for expanding development cooperation.
- Also, it led to the starting of composite dialogue with Pakistan.
 - The composite dialogue was based on the principle that entire spectrums of relationships came under sincere problem-solving dialogues.
 - Cooperation must begin on agreed terms in agreed areas (trade, travel, culture etc.) even as certain disputes remain unresolved.

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What are the Criticism of Gujral Doctrine?

- **Lenient approach toward Pakistan:** Gujral doctrine was criticized for going too soft on **Pakistan**, and leaving India vulnerable to the threats of the future, including the many terror attacks.
- **Security Concerns:** It was perceived by some as being too idealistic and neglecting India's security concerns. Critics argued that the doctrine did not adequately address the security challenges posed by some of India's neighbors, especially in the context of historical conflicts and ongoing geopolitical issues.
- **Failure to Address Bilateral Issues:** The Gujral Doctrine did not effectively address long standing bilateral issues between India and its neighbors. **For example**, issues like **territorial disputes**, and **cross-border terrorism** were not given sufficient attention according to some critics.
- **Domestic Opposition:** Some argued that the **emphasis on goodwill** and **non-reciprocity** might be perceived as **weakness** and could be **exploited by adversaries**.

Sri Lanka's Debt Crisis and Paris Club

Why in News?

Recently, Sri Lanka has reached a preliminary debt restructuring deal with India and the **Paris Club Group**, paving the way for it to revive a stalled **IMF (International Monetary Fund)** loan programme.

- It will help Sri Lanka, which defaulted on its debts in 2022, to **secure the next tranche of a USD 3 billion IMF lending package** agreed in March 2023.
- When a country defaults on its debt, it means that the **government is unable to meet its financial obligations** to its creditors. This failure can manifest in various ways and has significant implications.

What is Sri Lanka's Debt Scenario?

- Sri Lanka has foreign debts of about USD 46 bn, the largest share of which is owed to Chinese lenders, with Japan, India and commercial bondholders also large creditors.
- Sri Lanka has yet to reach a deal with the commercial bondholders, which could yet slow down progress on the country's economic recovery.

- Sri Lanka in May 2022 became the first country in the **Asia-Pacific** to **default on its debts in two decades**, the result of domestic economic mismanagement and a surge in global inflation following the coronavirus pandemic and **Russia's invasion of Ukraine**.
- A sharp drop in foreign currency reserves led to **shortages of imported food, fuel and medicine**, devastating living standards on the island and triggering mass protests in 2022.

What is the Paris Club?

➤ About:

- The Paris Club is a group of **mostly western creditor countries that grew from a 1956 meeting** in which Argentina agreed to meet its public creditors in Paris.
 - It describes itself as a forum where official creditors meet to solve payment difficulties faced by debtor countries.
- Their objective is to find sustainable debt-relief solutions for countries that are unable to repay their bilateral loans.

➤ Members:

- The members are: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Israel, Japan, Netherlands, Norway, Russia, South Korea, Spain, Sweden, Switzerland, the United Kingdom and the United States.
- All 22 are members of the group called **Organisation for Economic Co-operation and Development (OECD)**.

➤ Involved in Debt Agreements:

- According to its official website, Paris Club has reached **478 agreements with 102 different debtor countries**.
- Since 1956, the debt treated in the framework of Paris Club agreements amounts to USD 614 billion.

➤ Recent Developments:

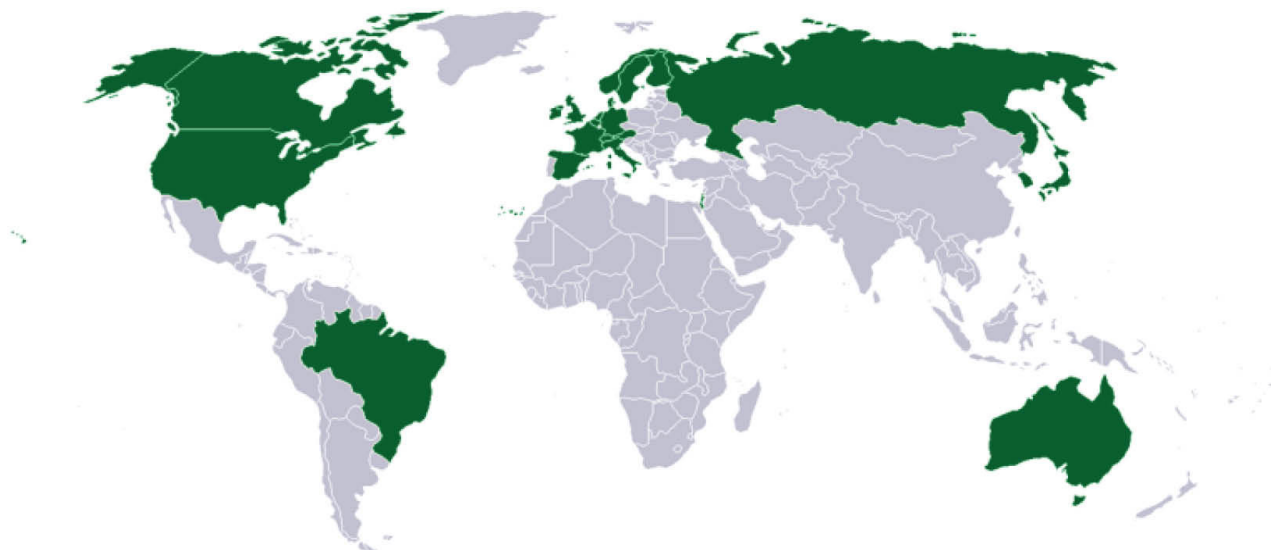
- The Paris group countries dominated bilateral lending in the last century, but their **importance has receded over the last two decades** or so with the emergence of China as the world's biggest bilateral lender.
- In Sri Lanka's case, for instance, India, China, and Japan are the **largest bilateral creditors**.

Sri Lanka's debt to China is 52% of its bilateral debt, 19.5% to Japan, and 12% to India.

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How is India Helping Sri Lanka with Debt Management and Economic Development?

➤ **Role in Debt Restructuring:**

- India has played a role in collaborating with the **International Monetary Fund (IMF)** and creditors to help Sri Lanka in restructuring its debt.
- India became the first country to hand over its letter of support for financing and debt restructuring of Sri Lanka.

➤ **Connectivity and Renewable Energy:**

- Both countries have agreed on a joint vision that emphasises comprehensive connectivity, including People to People connectivity, **renewable energy**.
- Indian companies are developing renewable energy projects in the northeast of Sri Lanka, indicating growing collaboration in the **energy sector**.

➤ **Economic and Technology Cooperation Agreement (ETCA):**

- Both countries are exploring the possibility of an **ETCA** to integrate their economies and foster development.

➤ **Agreement on a Multi-Project Petroleum Pipeline:**

- Both India and Sri Lanka have agreed to establish a multi-product petroleum pipeline from the southern part of India to Sri Lanka.
- This pipeline aims to ensure an affordable and reliable supply of energy resources to Sri Lanka. Recognition of energy's critical role in economic development and progress is driving the focus on establishing the petroleum pipeline.

➤ **Adoption of India's UPI:**

- Sri Lanka has also adopted India's UPI service, which is a significant step towards enhancing fintech connectivity between the two countries.
- The **use of rupee for trade settlement** is further helping Sri Lanka's economy. These are concrete steps to help Sri Lanka's economic recovery and growth.

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Social Issues

Highlights

- Human Trafficking
- Mental Health Initiatives in India
- Global Status Report on Road Safety 2023: WHO
- Regional Overview of Food Security and Nutrition 2023
- Bihar Reservation Law and Breaching 50% Limit
- Universal Declaration of Human Rights
- India Nears Kala Azar Elimination
- Snakebite Envenoming
- NCRB's Crime in India 2022 Report
- 2023 World Malaria Report
- World AIDS Day 2023
- Decline in Muslim Enrollment in Higher Education

Human Trafficking

Why in News?

Operation Storm Makers II, orchestrated by **Interpol**, has illuminated the **expanding network of fraud schemes associated with human trafficking**.

- It mobilized law enforcement in 27 countries across Asia and other regions to target human trafficking and migrant smuggling.

What are the Major Highlights of Operation Storm Makers II?

- **Arrests and Charges:** The operation resulted in the apprehension of 281 individuals across various countries on charges spanning **human trafficking, passport forgery, corruption, telecommunications fraud, and sexual exploitation**.
- **Rescues and Investigations:** 149 human trafficking victims were rescued, initiating over 360 investigations, a substantial number of which are currently under active pursuit by law enforcement agencies.
- **Telangana Case:** According to Interpol, the Telangana police registered one of the **first cases in India of human trafficking committed for the purpose of forcing victims to commit cyber fraud**.
 - An accountant was lured to a Southeast Asian country and forced into participating in online fraudulent schemes **under inhumane conditions**.
 - His release was secured after a ransom payment.

Note: Interpol or the International Criminal Police Organization (ICPO) is the world's largest international police organization. Interpol's mission is to help police around the world work together to make the world safer.

- It has 196 member countries. India is one of the oldest members of Interpol and joined the organization in 1949.
- It uses a secure network that allows countries to contact each other and the General Secretariat. It also allows them to access Interpol's databases and services in real-time.

What is the Status of Human Trafficking in India?

- **About Human Trafficking:**
 - Human trafficking refers to the **illegal trade and exploitation of people**, typically for the purposes of forced labour, sexual exploitation, or involuntary servitude.
 - It involves the **recruitment, transportation, transfer, harbouring, or receipt of individuals** through **threat, force, coercion, abduction, fraud, or deception** for the purpose of exploiting them.
- **Status in India:**
 - According to the **National Crime Records Bureau (NCRB)**, India identified over 6,500 human trafficking victims in 2022, with **60% of them being women and girls**.
- **Constitutional & Legislative Provisions related to Trafficking in India:**
 - **Constitutional Prohibition: Article 23** prohibits **human trafficking and begar (forced labour without payment)**.

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- **Immoral Traffic (Prevention) Act, 1956 (ITPA):** This legislation serves as the primary law aimed at preventing trafficking specifically for commercial sexual exploitation.

- **Protection of Children from Sexual Offences (POCSO) Act, 2012:** Enacted on 14th November 2012, this act is dedicated to shielding children from sexual abuse and exploitation.

- It provides clear definitions for various forms of sexual abuse, encompassing penetrative and non-penetrative assaults, as well as sexual harassment.

- **Other Specific Legislations:** Various other laws target trafficking in women and children, including the **Prohibition of Child Marriage Act, 2006**, the **Bonded Labour System (Abolition) Act, 1976**, the **Child Labour (Prohibition and Regulation) Act, 1986**, the **Transplantation of Human Organs Act, 1994**, and pertinent sections in the Indian Penal Code, such as Sections 372 and 373 that address the selling and buying of girls for prostitution.

- **State-Specific Legislation:** States have also enacted specific laws to tackle trafficking. For instance, The **Punjab Prevention of Human Smuggling Act, 2012**, is one such state-level legislation aimed at addressing this issue.

➤ **Related International Convention:**

- **UN Convention (UNTOC):** India ratified the **UN Convention on Transnational Organized Crime (UNTOC)** which includes a Protocol specifically addressing the Prevention, Suppression, and Punishment of Trafficking in Persons, particularly Women and Children.

- **Legislative Action:** The **Criminal Law Amendment Act, 2013**, was enacted to align with the Protocol's provisions, offering a precise definition of human trafficking.

- **SAARC Convention on Trafficking:** India ratified the **SAARC Convention on Preventing and Combating Trafficking in Women and Children for Prostitution**.

- **Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW):** Also known as the International Bill of Rights for Women. It was adopted in 1979 by the United Nations General Assembly (UNGA).

- **India ratified CEDAW in 1993.**

What are the Major Causes and Impacts of Human Trafficking?

➤ **Causes:**

- **Poverty and Economic Disparities:** Economic hardships drive individuals into vulnerable situations, making them susceptible to promises of better opportunities that traffickers exploit.
- **Lack of Education and Awareness:** Limited education and awareness about the risks of trafficking leave individuals **unaware of the tactics used by traffickers**, making them easy targets.
- **Conflict, Instability, and Displacement:** Areas affected by conflict, political instability, or **natural disasters** create environments ripe for exploitation as people seek refuge or stability elsewhere.
- **Social Marginalization and Discrimination:** Marginalized groups, including women, children, migrants, and minorities, are often more vulnerable due to social discrimination and lack of support structures.
- **Demand for Cheap Labor and Services:** Industries seeking low-cost labor or services sometimes turn a **blind eye to exploitative practices**, perpetuating trafficking for labor exploitation.
- **Online Exploitation and Technology:** Technological advancements have facilitated **online recruitment**, making it easier for **traffickers to lure victims through various deceptive means**.

➤ **Impacts:**

- **Trauma and Psychological Effects:** Victims endure severe psychological trauma, including **depression, anxiety** and a sense of betrayal, leading to long-term mental health issues.
- **Physical Health Complications:** Victims often suffer physical abuse, neglect, and inadequate healthcare, leading to various health complications and long-term injuries.
- **Loss of Freedom and Rights:** Trafficked individuals **lose their autonomy and basic human rights**, often living in constant fear, subjected to control and exploitation.
- **Social Stigma and Isolation:** Survivors face **social stigma and ostracization**, making it challenging to reintegrate into society even after being rescued.
- **Global Consequences:** Human trafficking **fuels a global criminal network**, affecting countries' social fabric, economies, and international relations, undermining global human rights efforts.

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Mental Health Initiatives in India

Why in News?

Recently, the Ministry of Health and Family Welfare has shed light on the initiatives aimed at addressing **mental health** concerns in the country.

What are the Highlighted Mental Health Initiatives?

- **National Mental Health Programme (NMHP):**
 - The **NMHP**, initiated in 1982 and restructured in 2003, aims to **modernize mental health facilities and upgrade psychiatric wings** in medical institutions.
 - Additionally, the **District Mental Health Programme (DMHP)** since 1996 has focused on community mental health services at the primary healthcare level, spanning 716 districts.
 - DMHP provides outpatient services, counselling, psycho-social interventions, and support for severe mental disorders at community health and primary health centres.
 - Together, they constitute a comprehensive strategy for mental health care in India.
- **National Tele Mental Health Programme:**
 - NTMHP was launched in October 2022, to further improve access to quality mental health counselling and care services in the country.
 - **National Institute of Mental Health and Neuro Sciences (NIMHANS)**, Bengaluru is the National Apex Centre, coordinated activities of **Tele MANAS** across India.
 - 25 States/UTs have established 36 **Tele Mental Health and Normalcy Augmentation Systems (MANAS)** Cells for extending mental health services.
 - Handling a total of 63,806 calls on the helpline number.
- **NIMHANS and iGOT-Diksha Collaboration:**
 - NIMHANS provides psychosocial support and training through the **(iGOT)-Diksha platform**.
 - Online training for health workers conducted by NIMHANS on the (iGOT)-Diksha platform.

➤ Ayushman Bharat – HWC Scheme:

- The **Ayushman Bharat - Health and Wellness Centres (AB-HWCs)** are part of the **Ayushman Bharat Programme**.
 - The program aims to provide a wider range of services, including preventive, promotive, curative, rehabilitative, and palliative care (a specialized medical approach that **aims to improve the quality of life for people with serious illnesses**).
- Operational guidelines on **Mental, Neurological, and substance use disorders (MNS)** at **Health and Wellness Centres (HWC)** have been released under the ambit of Ayushman Bharat.

➤ Addressing Pandemic-Induced Mental Health Challenges:

- The Government has established a **24/7 helpline offering psychosocial support to various population segments**.
 - Issuance of guidelines and advisories catering to **different societal groups**.
- Advocacy through diverse media platforms to manage stress and anxiety, fostering a supportive environment.

➤ Financial Support for Mental Health Institutions:

- The District Mental Health Programme receives a fund allocation of Rs. 159.75 Crore for States/UTs under the **National Health Mission for 2022-23**.

Other Initiatives Related to Mental Health

- **World Mental Health Day.**
- Kiran Helpline.
- Rashtriya Kishor Swasthya Karyakram.

Global Status Report on Road Safety 2023: WHO

Why in News?

Recently, the **World Health Organization (WHO)** has released a report titled **The Global Status Report on Road Safety 2023**, revealing critical findings and insights regarding road traffic fatalities and safety across the globe.

What are the Key Highlights of the Report?

➤ Road Traffic Fatalities:

- Road traffic deaths worldwide **decreased by 5% between 2010 and 2021**, totaling 1.19 million fatalities annually.

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- 108 UN member nations reported a drop in road traffic deaths during this period.
- India **witnessed a 15% increase in fatalities**, rising from **1.34 lakh in 2010 to 1.54 lakh in 2021**.
- **Countries with Significant Reductions:**
 - Ten countries **succeeded in reducing road traffic deaths by over 50%**: Belarus, Brunei Darussalam, Denmark, Japan, Lithuania, Norway, Russian Federation, Trinidad and Tobago, United Arab Emirates and Venezuela.
 - Thirty-five more countries made notable progress, reducing deaths by 30% to 50%.
- **Regional Distribution of Deaths:**
 - 28% of global road traffic deaths occurred in the **WHO South-East Asia Region**, **25%** in the **Western Pacific Region**, 19% in the African Region, 12% in the Region of the Americas, 11% in the Eastern Mediterranean Region, and 5% in the European Region.
 - Low- and middle-income **countries bear a disproportionate burden**, with 90% of deaths occurring in these nations despite having only 1% of the world's motor vehicles.
- **Vulnerable Road Users:**
 - 53% of all road traffic **fatalities are vulnerable road users**, including pedestrians (23%), riders of powered two- and three-wheelers (21%), cyclists (6%), and users of micro-mobility devices (3%).
 - Pedestrian **deaths rose by 3% to 274,000**, while cyclist deaths increased by nearly 20% to 71,000 between 2010 and 2021.
 - However, deaths among car and other 4-wheeled light vehicle occupants slightly decreased, **making 30% of global fatalities**.
- **Progress on Safety Standards and Policies:**
 - Just six countries have laws that meet WHO best practice for all risk factors (speeding, drink-driving, and use of motorcycle helmets, seatbelts and child restraints) while 140 countries (two-thirds of UN Member States) have such **laws for at least one of these risk factors**.
 - A limited number of countries have legislation covering key vehicle safety features and require safety inspections for road users.
- **Call for Action:**
 - Global Motor-Vehicle Fleet Growth is expected to double by 2030, urging the need for robust safety regulations and infrastructure improvements.

- The report sets a baseline for efforts to meet the United Nations Decade of Action 2021–2030 target to halve road traffic deaths by 2030.

What are the Initiatives Related to Road Safety?

➤ Global:

○ **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 **Sustainable Development Goal 3.6** i.e., to halve the number of global deaths and injuries from road traffic accidents by 2030.

○ **Decade of Action for Road Safety 2021-2030:**

- The **UN General Assembly** adopted resolution "Improving global road safety " with the ambitious target of preventing at least 50% of road traffic deaths and injuries by 2030.
- The Global Plan aligns with the **Stockholm Declaration**, by emphasizing the importance of a holistic approach to 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.

○ **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 for the control of land within the National Highways, right of way and traffic moving on the National Highways and also for removal of unauthorized occupation thereon.
- **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.

Regional Overview of Food Security and Nutrition 2023

Why in News?

Recently, the **Food and Agriculture Organisation (FAO)** of the United Nations has launched the **Asia-Pacific Regional Overview of Food Security and Nutrition 2023: Statistics and Trends**, which said 74.1% of Indians were unable to afford a healthy diet in 2021.

What are the Key Highlights of the Report?

➤ Global:

- The prevalence of undernourishment in the Asia and the Pacific region decreased to 8.4% in 2022 from 8.8% of the previous year, equivalent to around 12 million fewer undernourished people than in 2021, but 55 million more than in 2019, prior to the Covid-19 pandemic.
- With 370.7 million undernourished people, the Asia and the Pacific region represents **half of the world's undernourished people**.
- Southern Asia accounts for **almost 314 million of the region's undernourished people**. This represents 85 % of undernourished people in the Asia and the Pacific region.
- There are more **severely food insecure individuals in Southern Asia** than any other subregions.
- Women across the subregions, except for Eastern Asia, tend to be more food insecure than men.

➤ Indian:

- **Inability to Afford Healthy Diet:** 74.1% of Indians were unable to afford a healthy diet in 2021, in 2020, the percentage was 76.2.

- Comparison with Neighboring Countries: Pakistan had 82.2% and Bangladesh had 66.1% of their populations facing difficulties in accessing healthy food.
- **Regional Nutrition and Food Security:** 16.6% of India's population is undernourished.
 - India has a **lower prevalence of moderate or severe and severe Food Insecurity** compared to the world since 2015.
- **Children's Health: Stunting** affected 31.7% of children under five, while wasting (low weight for height) was prevalent in 18.7% of children under five.
 - The WHO global nutrition target for childhood wasting is less than 5%.
 - Stunted growth and **development are the result of poor maternal health** and nutrition, inadequate infant and young child feeding practices, and repeated infections interacting with a variety of other factors over a sustained period.
- **Women's Health:** 53% of the country's women aged between 15 to 49 had anaemia, which was the largest prevalence rate in India in 2019.
 - Anaemia impairs health and well-being in women and increases the risk for adverse maternal and neonatal outcomes.
- **Obesity and Nutrition Indicators:** 1.6% of the country's adults are obese as of 2000, according to the FAO. The figure has increased to 3.9% by 2016.
- **Exclusive Breastfeeding:** On exclusive breastfeeding among infants 0–5 months of age, India has improved the prevalence with a percentage of 63.7%, which is higher than the world prevalence – 47.7%.
 - India has the highest prevalence of **low birthweight in the region (27.4%), followed by Bangladesh and Nepal**.

What is the Food and Agriculture Organization?

➤ About:

- FAO is a specialised agency of the **United Nations** that leads international efforts to defeat hunger.
- **World Food Day** is celebrated every year around the world on 16th October. The day is celebrated to mark the anniversary of the founding of the FAO in 1945.

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- It is one of the UN food aid organisations based in Rome (Italy). Its sister bodies are the **World Food Programme** and the International Fund for Agricultural Development (IFAD).
- **Initiatives Taken:**
 - **Globally Important Agricultural Heritage Systems (GIAHS).**
 - Monitors the **Desert Locust** situation throughout the world.
 - The **Codex Alimentarius Commission or CAC** is the body responsible for all matters regarding the implementation of the Joint FAO/WHO Food Standards Programme.
 - The **International Treaty on Plant Genetic Resources for Food and Agriculture** was adopted by the Thirty-First Session of the Conference of the FAO in 2001.
- **Flagship Publications:**
 - The State of World Fisheries and Aquaculture (SOFIA).
 - The State of the World's Forests (SOFO).
 - **The State of Food Security and Nutrition in the World (SOFI).**
 - The State of Food and Agriculture (SOFA).
 - The State of Agricultural Commodity Markets (SOCO).

Bihar Reservation Law and Breaching 50% Limit

Why in News?

Recently, Bihar Reservation Laws were passed in Bihar Assembly, **increasing the quantum of reservations in jobs** and education in the State to 75%, breaching the 50% Rule upheld by the **Supreme Court (SC).**

- This has sparked debate around the **permissible limits of reservations in India**, particularly in view of the "50%" limit prescribed by the Supreme Court of India in the Mandal Commission case (Indra Sawhney, 1992).

What are the Key Highlights of the Bihar Reservation Laws?

- These laws are the **Bihar Reservation of Vacancies in Posts and Services (for Scheduled Castes, Scheduled Tribes and Other Backward Classes) Amendment Act-2023** and the **Bihar (in admission in educational institutions) Reservation Amendment Act, 2023.**

- Under the amended Act, there will be a total of 65% reservation in both the cases, including 20% for **Scheduled Castes**, **2% for Scheduled Tribes**, 18% for Backward Classes and 25% for Extremely Backward Classes.
- Apart from this, EWS (people from economically weaker general category) already approved under the Central Act will continue to get 10 % reservation.

What is the 50% Rule?

- **About:**
 - The 50% rule, historically upheld by the Supreme Court, dictates that reservations for jobs or education in India **should not exceed 50% of the total seats or positions.**
 - Initially established by a seven-judge bench in the 1963 M.R. In The Balaji case, reservations were considered an **"exception" or "special provision"** under the constitutional framework, thereby restricted to a maximum of 50% of available seats.
 - However, the understanding of reservations evolved in 1976 when it was acknowledged that reservations are not an exception but a component of equality. Despite this shift in perspective, **the 50% limit remained unchanged.**
 - A nine-judge bench in the **Mandal commission case in 1990** reaffirmed the **50% limit and held that it is a binding rule**, and not merely a matter of prudence. However, it is not a rule without exceptions
 - States **may surpass the limit in specific circumstances**, notably to provide reservations to communities marginalized and excluded from the social mainstream, **irrespective of geographical location.**
 - Moreover, the Supreme Court's recent affirmation of the 103rd Constitutional Amendment validates an additional 10% reservation for **Economically Weaker Sections (EWS).**
 - This means that the **50% limit applies only to non-EWS reservations**, and States are permitted to reserve a total of 60% of the seats/posts including EWS reservations.
- **Other States Crossing the Limit:**
 - Other States that have already surpassed the 50% limit, even excluding the EWS quota, are **Chhattisgarh (72%), Tamil Nadu (69%, under a**

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1994 Act protected under the ninth Schedule of the Constitution), and several north-eastern States including Arunachal Pradesh, Meghalaya, Mizoram and Nagaland (80% each).

- Lakshadweep has a **whopping 100% reservations for Scheduled Tribes**.
- Previous attempts by Maharashtra and Rajasthan have been struck down by the courts.

Constitution and Reservation

- **77th Constitutional Amendment Act, 1995:** The Indra Sawhney verdict had held there would be reservation only in initial appointments and not promotions.
 - However, addition of the article 16(4A) to the Constitution, empowered the state to make provisions for reservation in matters of promotion to SC/ST employees, if the state feels they are not adequately represented.
- **81st Constitutional Amendment Act, 2000:** It introduced Article 16(4B), which says unfilled SC/ST quota of a particular year, when carried forward to the next year, will be treated separately and not clubbed with the regular vacancies of that year.
- **85th Constitutional Amendment Act, 2001:** It provided for the reservation in promotion that can be applied with 'consequential seniority' for the government servants belonging to the SCs and STs with retrospective effect from June 1995.
- **103rd amendment to the Constitution (2019): 10% reservation for EWS (Economically Weaker Section).**
- **Article 335:** It says that the claims of SCs and STs shall be taken into consideration constitutively with the maintenance of efficiency of administration, in the making of appointments to services and posts in connection with the affairs of the Union or of a State.

Universal Declaration of Human Rights

Why in News?

Human Rights Day is observed annually on **10th December** to commemorate the approval of the **Universal Declaration of Human Rights (UDHR)** by the **UN General Assembly** in 1948.

- This year 2023 marks the **75th anniversary** of the UDHR.
- 2023 Theme: **Freedom, Equality and Justice for All.**

What is Human Rights?

- These are rights **inherent to all human beings, regardless of race, sex, nationality, ethnicity, language, religion, or any other status.**
- These include the **right to life and liberty, freedom from slavery and torture, freedom of opinion and expression, the right to work and education, and many More.**
- Nelson Mandela had stated '**To deny people their human rights is to challenge their very humanity**'.
- **Article 1 of Universal Declaration of Human Rights (UDHR)** states that "all human beings are born free and equal in dignity and rights."
 - **And Article 2** says that everyone is entitled to all the rights and freedoms the declaration sets out, "without distinction of any kind, such as race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status."
- **Articles 12 to 35 of the Indian Constitution** provide for the Right to Equality, Right to Freedom, Right Against Exploitation, Right to Freedom of Religion, Cultural & Educational Rights, Saving of Certain Laws and Right to Constitutional Remedies.

What is Universal Declaration of Human Rights (UDHR)?

- **About:**
 - The 30 rights and freedoms include civil and political rights, like the right to life, liberty, free speech and privacy and economic, social and cultural rights, like the right to social security, health and education, etc.
 - India took an active part in the drafting of the UDHR.
 - The UDHR is not a treaty, so it does not directly create legal obligations for countries.
 - The UDHR, together with the **International Covenant on Civil and Political Rights** and its two Optional Protocols (on the complaints procedure and on the death penalty) and the **International Covenant on Economic, Social and Cultural Rights** and its Optional Protocol, form the so-called International Bill of Human Rights.

Note:



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- This declaration, established as a common standard of achievement for all peoples and nations, played a foundational role in shaping the international order that emerged after the devastation of **World War II**.
- **Achievements:**
 - **The Non-Binding Nature of the Declaration:**
 - The UDHR, established in 1948, **is not a legally binding treaty in itself**. However, its principles have been widely adopted and integrated into the legal frameworks of numerous countries.
 - **Influence and Global Impact:**
 - The UDHR's significance transcends its non-binding status, having served as a catalyst for over 70 human rights treaties globally. Its influence is evident in movements such as **decolonization, anti-apartheid, and various freedom struggles worldwide**.
 - Without the UDHR, **a fragmented landscape with differing standards could have emerged**, creating a potentially more challenging situation.
- **The Universal Standard and Ongoing Relevance:**
 - Despite some criticisms asserting its inapplicability to specific religions, cultures, or regions, UNDR's arising from agreements building on the 1948 declaration, underscores its enduring relevance.
 - The **Vienna Declaration and Program of Action in 1993**, for instance, further solidified the principles set forth in the UDHR.

India Nears Kala Azar Elimination

Why in News?

India stands on the brink of **eliminating visceral leishmaniasis**, commonly known as **kala azar**. With a marked decline in reported cases and deaths, the nation has come close to meeting the **elimination target set by the World Health Organization (WHO)**.

- Bangladesh, India's neighbour, was the **first country validated by the WHO for eliminating kala azar as a public health problem**.

What is Kala-Azar?

- **About:**
 - **Visceral leishmaniasis commonly known as kala-azar**, is a **slow-progressing indigenous disease** caused by a protozoan parasite of genus *Leishmania*.

- It is also known as **Black Fever or Dumdum Fever**.
- In India ***Leishmania donovani*** is the only parasite causing this disease.

➤ Transmission and Symptoms:

- It is transmitted by sandflies. Sandflies of the **genus *Phlebotomus argentipes*** are the only known vectors of kala-azar in India.
- It causes **fever, weight loss, and spleen and liver enlargement**. If left untreated, it can be fatal in 95% of cases.

➤ Recorded Cases in India:

- India documented **530 cases and four deaths in 2023**, a decline from previous years.
- Additionally, there were 286 cases of **post-kala azar dermal leishmaniasis (PKDL)**.

➤ Post Kala-azar Dermal Leishmaniasis (PKDL):

- This condition arises when *Leishmania donovani* infiltrates and thrives within skin cells, resulting in the formation of skin lesions.
- In some instances of kala-azar, **PKDL emerges after treatment**, but now it is believed that PKDL might occur without going through the visceral stage. However, more data is needed to understand how PKDL develops.
- The visceral stage refers to the initial phase of visceral leishmaniasis (kala-azar), where the **parasite affects internal organs**.

➤ Treatment:

- In India, the primary treatment for kala-azar involves administering **injectable liposomal amphotericin B**.
- For PKDL, the standard treatment consists of **12 weeks of oral miltefosine**, with the dosage adjusted based on the patient's age and weight.

➤ Strategies for Elimination in India:

- **Effective Spraying:** Rigorous monitoring of **indoor residual spraying** to curb sandfly breeding and disease spread.
- **Wall Plastering:** Using **Gerrard soil for wall plastering** to minimize sandfly breeding areas.
- **Treatment Compliance:** Ensuring completion of PKDL treatment through the **ASHA (Accredited Social Health Activist) network**.

Note:

Note: WHO has set a target of **2030 to eliminate Kala-azar**. The **WHO's Neglected Tropical Diseases Road map** also includes this target.

- Government of India launched a centrally sponsored **Kala-azar control Programme in 1990-91**. The **National Health Policy (2002)** envisaged kala-azar Elimination by 2010 which was revised later to 2015. Now **Kala-azar is targeted for elimination by 2023 in India**.

Snakebite Envenoming

Why in News?

Recently, a team of experts from a United Kingdom university have set up a pilot study in Burujhari village in Odisha, India to help it reduce the number of fatalities from **Snakebite Envenoming (SE)** and will look into solutions like an Early Warning System for snakes.

- India has the **biggest burden of deaths due to Snake Bites in the world**, with most of the cases in rural India.
- **WHO (World Health Organization)** formally listed Snakebite Envenoming as a **highest-priority Neglected Tropical Disease (NTD)** in June 2017.

What is Snakebites Envenoming?

- **About:**
 - SE is a potentially life-threatening disease that typically results from the **injection of a mixture of different toxins (venom) following the bite of a Venomous Snake** and can also be caused by having venom sprayed into the eyes by certain species of snakes that have the ability to spit venom as a defence measure.
 - Snakebite poses a **significant daily health risk in rural tropical and subtropical regions of Africa**, the Middle East, Asia, Oceania, and Latin America, particularly for the hundreds of millions of people in rural and peri-urban communities reliant on agriculture and subsistence activities for survival
- **Impact:**
 - Many snakebite victims, mostly in developing countries, **suffer from long-term complications such as deformities**, contractures, amputations, visual impairment, renal complications and psychological distress.

➤ **Deaths from SE:**

- According to the **World Health Organization (WHO)**, around 81,410 to 137,880 people around the world die **each year because of snakebites**.

➤ **WHO's Roadmap for SE:**

- WHO launched its roadmap in 2019 with an aim to halve death and disability from snakebite by 2030.
 - In order to create a sustainable market for antivenoms there is a need for a 25% increase in the number of competent manufacturers by 2030.
 - WHO has planned a pilot project to create a global antivenom stockpile.
 - Integrating snakebite treatment and response into national health plans in affected countries, including better training of health personnel and educating communities.

➤ **Indian Initiatives:**

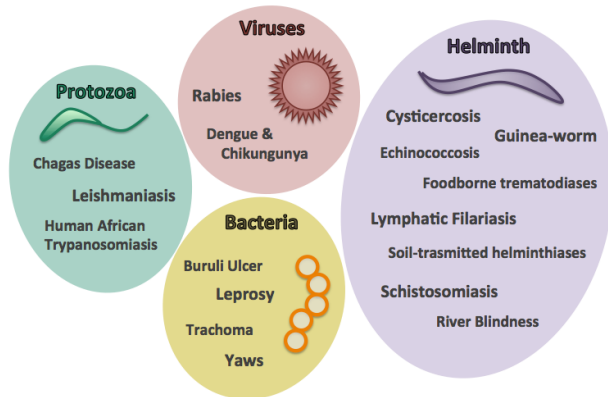
- Much before the WHO roadmap was launched, researchers from **Indian Council of Medical Research (ICMR)** started community awareness and health system capacity building from the year 2013.
 - In alignment with **WHO's Snakebite Envenoming Strategy and the United Nations' Sendai Framework for Disaster Risk Reduction**, India ratified a **National Action Plan in 2015** to combat this issue.

What are Neglected Tropical Diseases (NTDs)?

- NTDs are a **group of infections that are most common among marginalized communities** in the developing regions of Africa, Asia and the Americas.
- They are caused by a variety of **pathogens** such as viruses, bacteria, protozoa and parasitic worms.
- NTDs are especially common in tropical areas where people do not have access to clean water or safe ways to dispose of human waste.
- These diseases generally receive less funding for research and treatment than malaises like **tuberculosis, HIV-AIDS and malaria**.
 - **Examples of NTDs are: snakebite envenomation, scabies, yaws, trachoma, Leishmaniasis and Chagas disease etc.**

Note:

Neglected Tropical Diseases



NCRB's Crime in India 2022 Report

Why in News?

The **National Crime Records Bureau (NCRB)** has recently unveiled its annual report titled **"Crime in India for 2022,"** providing a comprehensive overview of crime trends across the nation.

What are the Key Highlights of NCRB's Crime in India 2022 Report?

➤ Overall Crime Statistics:

- A total of over 58,00,000 **cognizable crimes** were registered, comprising both the **Indian Penal Code (IPC)** and **Special & Local Laws(SLL)** crimes.
 - The registration of cases witnessed a **4.5% decline** compared to 2021.

➤ Crime Rate Decline:

- The crime rate per lakh population dropped from **445.9 in 2021 to 422.2 in 2022**.
 - This decline is considered a more reliable indicator, considering the **impact of population growth on absolute crime numbers**.

➤ Safest City:

- Kolkata emerged as the **safest city in India for the third consecutive year**, recording the **least number of cognisable offences** per lakh population among metropolises.
 - **Pune (Maharashtra)** and **Hyderabad (Telangana)** secured the second and third positions, respectively.

➤ Rise in Cyber Crimes:

- Cybercrime reporting **surged by 24.4%**, totalling 65,893 cases, a significant surge from 52,974 cases in 2021.
- Cyber fraud constituted the majority of cases (64.8%) of registered cases, followed by **extortion** (5.5%), and **sexual exploitation** (5.2%).
 - The crime rate under this category rose from 3.9 in 2021 to 4.8 in 2022.

➤ Suicides and Causes:

- In 2022, India witnessed a **significant surge in suicides**, totalling over 1.7 Lakh cases, reflecting a concerning **increase of 4.2% compared to 2021**.
- The **suicide rate also rose by 3.3%**, calculated as the number of suicides per lakh of the population.
 - Major causes included **'Family Problems,' 'Marriage Related Problems,' Bankruptcy and indebtedness, 'Unemployment and professional issues' and Illness'.**
- **Maharashtra reported the highest number of suicides**, followed closely by Tamil Nadu, Madhya Pradesh, Karnataka, Kerala, and Telangana.
- **Daily wage earners constituted a significant portion**, accounting for 26.4% of the total suicides.
 - **Agricultural workers and farmers** were also disproportionately affected, forming a substantial part of the suicide statistics.
 - This was followed by unemployed persons, who comprise 9.2% of all suicides reported in India in 2022. Among all suicides reported in the year, **over 12,000 were of students.**

➤ Escalating Crimes Against SCs and STs:

- The Crime in India report highlighted an overall increase in crimes and atrocities against **Scheduled Castes (SC)** and **Scheduled Tribes (ST)** persons.
- States like **Rajasthan, Madhya Pradesh, Chhattisgarh, and Telangana** experienced a surge in such cases in 2022.
- **Madhya Pradesh and Rajasthan** persist as key contributors, consistently ranking among the top five states with the highest occurrences of crimes and atrocities against SC and ST communities.
- Other states witnessing elevated levels of such offences include **Bihar, Uttar Pradesh, Odisha, and Punjab.**

Note:



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➤ **Crimes Against Women:**

- A total of 4,45,256 cases of crime against women were reported in 2022, marking a 4% increase from 2021.
- Dominant categories included 'Cruelty by Husband or His Relatives,' 'Kidnapping & Abduction of Women,' and 'Assault on Women with Intent to Outrage Her Modesty.'

➤ **Crimes Against Children:**

- Cases of crimes against children showed an increase of 8.7% compared to 2021.
 - A majority of these cases related to **kidnapping and abduction** (45.7%) and 39.7% were filed under the Protection of Children from Sexual Offences Act.

➤ **Crime against Senior Citizens:**

- Cases of crimes against senior citizens rose by 9.3% to 28,545 cases compared to 26,110 cases in 2021.
 - A bulk of these cases (27.3%) related to hurt followed by theft (13.8%) and forgery, cheating, and fraud (11.2%).

➤ **Animal Attacks on the Rise:**

- The NCRB report reveals a concerning trend in the number of **people dying or getting injured due to animal attacks**.
 - A significant **19% increase** in such incidents was recorded in 2022 compared to 2021.
 - **Maharashtra reported the highest number of cases**, Uttar Pradesh, Odisha, Tamil Nadu, Chhattisgarh, and Madhya Pradesh followed with varying numbers of reported cases.
- In addition, the number of **animal/reptile and insect bites cases** also increased by **16.7%**.
 - The highest number of bite cases were reported from Rajasthan followed by Madhya Pradesh, Tamil Nadu and Uttar Pradesh, respectively.

➤ **Environment-Related Crime:**

- The total number of **environmental crimes in India decreased by around 18% in 2022**, compared to 2021.
 - **Environment-related offenses include** violations under seven acts :
 - The Forest Act, 1927, Forest Conservation Act, 1980, The Wildlife Protection Act, 1972, The Environmental (Protection) Act, 1986, Air (Prevention and Control of Pollution)

Act, 1981, Water (Prevention & Control of Pollution) Act, 1974, The Noise Pollution (Regulation and Control) Rules, 2000, National Green Tribunal Act, 2010.

- The cases registered for violating the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 have increased by around **42%**.
- Violations registered under the Environmental (Protection) Act, 1986 also have increased by around **31%**.
- **Forest offences** increased in four states **Andhra Pradesh, Karnataka, Maharashtra** and **Haryana**.
- **Wildlife offences** increased in five states including **Bihar, Punjab, Mizoram, Rajasthan and Uttarakhand**.
 - **Rajasthan**, with the maximum number (30%) of wildlife crime cases in the country, recorded a **50%** increase in such offenses in 2022 compared to 2021.

➤ **Offences Against the State:**

- Offences against the State exhibited a slight increase in 2022 compared to the previous year.
 - There was approximately a 25% rise in cases registered under the Unlawful Activities Prevention Act (UAPA) during this period.
- Conversely, cases under the sedition Section of the **IPC** experienced a significant decline.
 - The decrease in sedition cases may be attributed to the Supreme Court's decision in May 2022 to keep sedition cases in abeyance (hold).

➤ **Rise in Economic Offences:**

- Economic offences are categorized into **criminal breach of trust, forgery, cheating, fraud (FCF), and counterfeiting**.
 - **FCF accounted for the majority of cases** (1,70,901 cases), followed by criminal breach of trust (21,814 cases) and counterfeiting (670 cases).
- The Crime in India report disclosed that government authorities confiscated fake Indian currency notes (FICN) totaling over Rs.342 crore in 2022.

➤ **Crimes Against Foreigners:**

- 192 cases registered against foreigners, a **28% increase from 150 cases in 2021**.
 - 56.8% of victims were from the Asian continent, while 18% were from African countries.

Note:



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➤ High Chargesheeting Rates:

- States with the **highest charge sheeting rates under IPC crimes** are **Kerala, Puducherry, and West Bengal**.
- Chargesheeting rate reflects cases where police reached the stage of framing charges against the accused, out of the total true cases (where a charge sheet was not laid but a final report submitted as true, plus the total cases charge-sheeted).

What is the National Crime Records Bureau?

- NCRB was set up in 1986 to function as a **repository of information on crime and criminals** to assist the investigators in linking the crime to the perpetrators based on the recommendations of the **Tandon Committee, National Police Commission (1977-1981) and the Ministry of Home Affairs (MHA) Taskforce (1985)**.
- It is part of the **MHA and is headquartered in New Delhi**.
- It also acts as a **“national warehouse” for the fingerprint records** of Indian and foreign criminals, and assists in locating interstate criminals through fingerprint search.
- The NCRB has four divisions: Crime and Criminal Tracking Network and Systems (CCTNS), Crime Statistics, Finger Prints, and Training.
- **NCRB Publications:**
 - **Crimes in India, Accidental Deaths and Suicides, Prison Statistics, and Reports on Missing Women and children in India.**
 - These publications serve as principal reference points on crime statistics not only for police officers but also for criminologists, researchers, media and policymakers not only in India but abroad as well.

2023 World Malaria Report

Why in News?

The **2023 World Malaria Report**, recently released by the **World Health Organization (WHO)**, sheds light on the alarming **malaria** situation in India and globally.

What are the Key Highlights of the Report?

➤ Global Malaria Overview:

- The 2023 World Malaria Report reveals a global surge with an estimated **249 million cases in 2022, surpassing pre-pandemic levels**.
- **Covid-19** disruptions, **drug resistance**, humanitarian crises, and **climate change** pose threats to the global malaria response.
- Twenty-nine countries accounted for 95% of malaria cases globally.
- Four countries, **Nigeria (27%), the Democratic Republic of the Congo (12%), Uganda (5%), and Mozambique (4%)**, accounted for almost half of all malaria cases globally.

➤ India's Malaria Scenario:

- In 2022, **India** accounted for a staggering **66% of malaria cases** in the **WHO South-East Asia Region**.
- **Plasmodium vivax**, a protozoal parasite, contributed to almost 46% of cases in the region.
- Despite a **55% reduction in cases since 2015**, India remains a significant contributor to the global malaria burden.
- India faces challenges, including a surge in cases in 2023 linked to unseasonal rainfall.
- **India and Indonesia accounted for about 94% of all malaria deaths** in the WHO South-East Asia Region.

➤ Regional Impact:

- **Africa bears the highest malaria burden**, accounting for 94% of cases and 95% of global malaria deaths in 2022.
- The WHO South-East Asia Region, including India, managed to contain malaria over the last two decades, with a **77% reduction in cases and deaths since 2000**.

➤ Climate Change and Malaria:

- Climate change emerges as a major driver, affecting malaria transmission and overall burden.
- Changing climate conditions enhance the sensitivity of the malaria pathogen and vector, facilitating its spread.
- WHO emphasizes the substantial risk climate change poses to malaria progress, necessitating sustainable and resilient responses.

➤ Global Eradication Goals:

- WHO aimed to reduce malaria incidence and **mortality rates by 75% in 2025 and 90% in 2030**.

Note:



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- The world is off-track, with a **55% gap for 2025 incidence reduction and 53% for fatality rate reduction**.

➤ **Challenges in Malaria Eradication:**

- Funding gaps for malaria control increased from USD 2.3 billion in 2018 to USD 3.7 billion in 2022.
- Research and development funding hit a 15-year low at USD 603 million, raising concerns about innovation and progress.

➤ **Malaria Vaccine Advancements and Achievements:**

- The report emphasizes notable progress in malaria prevention through the phased introduction of the **WHO-recommended malaria vaccine, RTS,S/AS01**, in African nations.
 - Rigorous evaluations in Ghana, Kenya, and Malawi reveal a significant **decrease in severe malaria and a 13% reduction in early childhood deaths**, affirming the vaccine's effectiveness.
 - This achievement, combined with existing interventions like bed nets and indoor spraying, forms a comprehensive strategy, leading to improved overall outcomes in these regions.
- In October 2023, WHO recommended a second safe and effective malaria vaccine, **R21/Matrix-M**.
 - The availability of two malaria vaccines is expected to increase supply and make broad-scale deployment across Africa possible.

➤ **Call for Action:**

- WHO emphasizes the need for a substantial pivot in the fight against malaria, calling for increased resources, strengthened political commitment, data-driven strategies, and innovative tools.
- Sustainable and resilient malaria responses aligning with climate change mitigation efforts are deemed essential for progress.

What is Malaria?

- Malaria is a life-threatening mosquito borne blood disease caused by **plasmodium parasites**.
 - There are 5 Plasmodium parasite species that cause malaria in humans and 2 of these species – **P. falciparum and P. vivax** – pose the greatest threat.
- Malaria is predominantly found in the tropical and subtropical areas of Africa, South America as well as Asia.

- Malaria is spread by the bite of an **infected female Anopheles mosquito**.
 - The **mosquito becomes infected** after biting an infected person. The malaria parasites then enter the bloodstream of the next person the mosquito bites. The parasites travel to the liver, mature, and then infect **red blood cells**.
- Symptoms of malaria include fever and flu-like illness, including shaking chills, headache, muscle aches, and tiredness. Notably, **malaria is both preventable and curable**.

What are the Initiatives Related to Malaria?

➤ **Global:**

○ **WHO's Global Malaria Program(GMP):**

- The WHO's GMP is responsible for coordinating WHO's global efforts to control and eliminate malaria.
- Its work is guided by the **"Global technical strategy for malaria 2016–2030"** adopted by the **World Health Assembly** in May 2015 and updated in 2021.
 - The strategy sets the target of reducing global malaria incidence and mortality rates by **at least 90% by 2030**.

○ **Malaria Elimination Initiative:**

- Spearheaded by the **Bill and Melinda Gates Foundation**, this initiative focuses on eradicating malaria through diverse strategies such as treatment accessibility, mosquito population reduction, and technology development.
- **E-2025 Initiative:**
 - The WHO launched the **E-2025 initiative** in 2021. The initiative aims to stop the transmission of malaria in 25 countries by 2025.
 - The WHO has identified **25 countries that have the potential to eradicate malaria by 2025**.

➤ **India:**

○ **National Framework for Malaria Elimination 2016-2030:**

- Aligned with WHO's strategy, aims to **eliminate malaria across India by 2030** and maintain malaria-free zones.

Note:



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- **National Vector-Borne Disease Control Programme:**
 - Addresses various **vector-borne diseases**, including malaria, through prevention and control measures.
- **National Malaria Control Programme (NMCP):**
 - To combat devastating effects of Malaria, the NMCP was launched in 1953 built around three key activities - insecticidal residual spray (IRS) with DDT; monitoring and surveillance of cases; and treatment of patients.
- **High Burden to High Impact (HBHI) Initiative:**
 - Initiated in four states (West Bengal, Jharkhand, Chhattisgarh, and Madhya Pradesh) in 2019, focusing on malaria reduction through insecticidal net distribution.
- **Malaria Elimination Research Alliance-India (MERA-India):**
 - Established by the **Indian Council of Medical Research (ICMR)**, collaborates with partners on malaria control research.

World AIDS Day 2023

Why in News?

Every year on 1st December, **World AIDS Day** is commemorated globally to raise awareness about Human Immunodeficiency Virus (HIV)/Acquired Immuno Deficiency Syndrome (AIDS) and honor those who have succumbed to it.

- World Aids Day was first observed in 1988 when the **World Health Organisation (WHO)** recognised the day.
- The theme for World AIDS Day 2023 is '**Let communities lead.**'

What is HIV/AIDS Disease?

- **About:**
 - Human immunodeficiency virus (HIV) is an infection that attacks the body's immune system.
 - AIDS is the late stage of HIV infection that occurs when the body's immune system is badly damaged because of the virus.
 - HIV attacks **CD4, a type of White Blood Cell (T cells)** in the body's immune system.
 - T cells are those cells that move around the body detecting anomalies and infections in cells.

- After entering the body, **HIV multiplies itself and destroys CD4 cells**, thus severely damaging the human immune system. Once this virus enters the body, it can never be removed.
- The CD4 count of a person infected with HIV reduces significantly. In a healthy body, CD4 count is between 500- 1600, but in an infected body, it can go as low as 200.

➤ Transmission:

- HIV can spread through multiple sources, by coming in direct contact with certain body fluids from a person infected with HIV, who has a detectable viral load. It can be blood, semen, rectal fluid, vaginal fluid or breast milk.

➤ Symptoms:

- Once HIV converts into AIDS then it may present in initial symptoms like **unexplained fatigue, fever, sores around genitals or neck, pneumonia etc.**

➤ Prevalence of HIV AIDS:

- It is estimated that **globally 39 million persons are living with HIV (Human Immunodeficiency Virus)**.
- In India the figure is 2.4 million.
- There were 1.3 million new HIV infections in 2022 globally and 63,000 in India.
 - In 2022, 650,000 persons died due to these conditions globally. In India, AIDS caused 42,000 deaths. Many of these **opportunistic infections are preventable and treatable.**

What are the India's Efforts to Prevent HIV?

- **HIV and AIDS (Prevention and Control) Act, 2017:** According to this act, the central and state governments shall take measures to prevent the spread of HIV or AIDS.
- **Access to ART:**
 - India has made **Antiretroviral Therapy (ART)** affordable and accessible to over 90 per cent of people living with HIV in the world.
- **Memorandum of Understanding (MoU):**
 - The Ministry of Health and Family Welfare signed a MoU with the Ministry of Social Justice and Empowerment in 2019 for enhanced HIV/AIDS outreach and to reduce the incidence of social stigma and discrimination against victims of drug abuse and Children and People Living with HIV/AIDS.

Note:

➤ Project Sunrise:

- **Project Sunrise** was launched by the Ministry of Health and Family Welfare in 2016, to tackle the rising HIV prevalence in north-eastern states in India, especially among people injecting drugs.

➤ Pre-Exposure Prophylaxis (PrEP):

- Offering PrEP medications to individuals at high risk of contracting HIV can significantly reduce the chances of infection when taken consistently.

Decline in Muslim Enrollment in Higher Education

Why in News?

According to a report prepared from the analysis of data from the **Unified District Information System for Education Plus (UDISE+)** and the **All India Survey of Higher Education (AISHE)**, the enrollment in higher education among Muslim students **has dropped significantly**.

What is the UDISE Plus Report?

- It is a **comprehensive study that provides information on enrollment and dropout rates** of school students, number of teachers in schools, and information on other infrastructural facilities like toilets, buildings and electricity.
- It was **launched in 2018-2019 to speed up data entry**, reduce errors, improve data quality and ease its verification.
- It is an application to collect the school details about factors related to a school and its resources.
- It is an updated and improved version of UDISE, which was initiated in **2012-13 by the Ministry of Education**.

What is the All India Survey for Higher Education?

- AISHE is an initiative by the Ministry of Education. The annual web-based survey aims to determine the **state of higher educational institutions in India and find areas for improvement**. Students enrolled in higher educational institutions will respond to the AISHE survey.
- This survey can rate their college on different categories like teachers, exam results, education finance, programmes, student enrolment, and infrastructure. The data collected in this survey is **used to make informed policy decisions and conduct better research in higher education**.

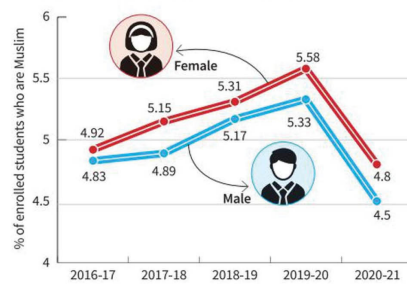
What are the Key Highlights of the Report on Dropout Among Muslims?

➤ Enrollment Data:

- There is a significant drop of over **8.5% in enrollment of Muslim students (age group 18-23)** in higher education in 2020-21.
- Enrollment decreased from 21 lakh students in **2019-20 to 19.21 lakh in 2020-21**.
 - From 2016-17 to 2020-21, there was an overall increase in enrollment, but a decline in the latest year, marking a decrease of 1,79,147 students from 2019-20 to 2020-21.

Fewer Muslim students

The share of Muslims among students enrolled in higher education in 2021-22 was the lowest in five years. The share of both male and female students recorded a five-year low. This was a reversal in a rising trend recorded between 2016-17 and 2019-20.



➤ Relative Enrollment Percentage:

- The percentage of Muslim students enrolled in higher education compared to the total student population **saw a slight decrease from 4.87% in 2016-17 to 4.64% in 2020-21**.

➤ Enrollment Pattern across Education Levels:

- Across States and Union Territories, a consistent trend is observed where Muslim student representation **gradually declines from Class 6 onwards**, reaching its lowest in Classes 11 and 12.
- Enrollment percentage of Muslim students **drops from 14.42% in upper primary (Class 6-8) to 10.76% in higher secondary (Class 11-12)**.

● State Disparities:

- States like **Bihar and Madhya Pradesh have relatively low Gross Enrolment Ratio** for Muslim students, which indicates that many Muslim children in these States are still out of the education system.
- Assam (29.52%) and West Bengal (23.22%) recorded **high dropout rates among Muslim students**, while Jammu and Kashmir recorded 5.1% and Kerala 11.91%.

Note:



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➤ **Recommendations:**

- There is a need for enhancing **scholarships, grants, and financial aid** explicitly tailored for Muslim students to alleviate financial burdens and increase access to higher education.
 - Many Muslim students come **from low-income families and struggle to afford the cost of higher education.**
- Implementing inclusive policies and targeted support is crucial to bridge the education gap and provide equal opportunities for all students, irrespective of religious background or economic status.

What are the Major Schemes in India for the Welfare of Minorities?

- **Pre-Matric Scholarship Scheme, Post-Matric Scholarship Scheme, Merit-cum-Means based Scholarship Scheme:** For educational empowerment of students, through **Direct Benefit Transfer (DBT) mode.**
- **Naya Savera- Free Coaching and Allied Scheme:** The Scheme aims to provide free coaching to students/ candidates belonging to economically weaker sections of minority communities for preparation of entrance examinations of technical/ professional courses and competitive examinations.
- **Padho Pardesh:** Scheme of **interest subsidy** to students of economically weaker sections of minority communities on educational loans for overseas higher studies.
- **Nai Roshni:** Leadership development of women belonging to minority communities.

- **Seekho Aur Kamao:** It is a skill development scheme for youth of 14 - 35 years age group and aiming at improving the employability of existing workers, school dropouts etc.
- **Pradhan Mantri Jan Vikas Karyakram (PMJVK):** It is a Scheme designed to address the development deficits of the identified Minority Concentration Areas.
 - The areas of implementation, under PMJVK, have been identified on the basis of minority population and socio-economic and basic amenities data of Census 2011 and will be known as Minority Concentration Areas.
- **USTTAD (Upgrading the Skills and Training in Traditional Arts/Crafts for Development):** Launched in May 2015 aims to preserve the rich heritage of traditional skills of indigenous artisans/craftsmen.
 - Under this scheme **HunnarHaats** are also held all over the country to provide a nation-wide marketing platform to Minority artisans & entrepreneurs and to create employment opportunities.
- **Prime Minister-Virasat Ka Samvardhan (PM Vikaas):** New PM Vikas has been added to the Ministry of Minority Affairs' Budget in 2023.
 - It is a skilling initiative focussing on the skilling, entrepreneurship and leadership training requirements of the minority and artisan communities across the country.
 - The scheme is intended to be implemented in conjunction with the **'Skill India Mission'** of the Ministry of Skill Development & Entrepreneurship and through integration with the Skill India Portal (SIP).

Note:

Science & Technology

Highlights

- Web Browsers
- Chandrayaan-3 Propulsion Module Returns to Earth's Orbit
- Six Exoplanets Found Orbiting Around HD 110067
- Global Positioning System
- Do Other Countries Have GNSS?
- Fast Radio Bursts

Web Browsers

Why in News?

Web browsers are our digital passports to the vast universe of the internet, making it easy for us to explore and **access web pages with just a click**.



What are Web Browsers?

➤ About:

- The web browser is an application software to explore **www (World Wide Web)**. It provides an **interface between the server and the client and requests to the server** for web documents and services.
- It works as a compiler to render HTML (Hypertext Markup Language) which is used to design a webpage.
- Whenever we search for anything on the internet, the browser loads a web page written in **HTML, including text, links, images**, and other items such as stylesheet and JavaScript functions.

- Google Chrome, Microsoft Edge, Mozilla Firefox, and Safari are examples of web browsers.
- **Origin:**
 - In the nascent days of the internet, browsing was a **text-based venture until Tim Berners-Lee** introduced the **World Wide Web in 1990**, alongside the inaugural web browser, **'WorldWideWeb'**.
 - The transformative **Mosaic browser in 1993** brought images into the web landscape, **revolutionizing user interaction**.
 - Netscape Navigator's advent further **enhanced browsing by introducing bookmarks and user-friendly features**, sparking the 'Browser Wars' between it and Internet Explorer.
- **The Evolutionary Leaps:**
 - The monotony of **Internet Explorer's dominance was broken by Mozilla Firefox** in 2004-2005, propelling innovation with tabbed browsing and add-ons, setting new standards.
 - Google's Chrome, with its speed and minimalism, emerged in 2008, triggering a revitalization of the browser market.
 - Other contenders such as Apple's Safari and Microsoft Edge (a successor to Internet Explorer) evolved, providing diverse options tailored to user preferences.
- **Anatomy of Web Browsers:**
 - **Request and Response:** Initiating a website visit **triggers a sequence of digital communication**, akin to dispatching and receiving messages via a network of servers.
 - **Deconstructing the Response:** Webpage information **arrives in files encoded in HTML, CSS (Cascading Style Sheets), and JavaScript**, each playing a pivotal role in constructing the final web page.

Note:

- **HTML** provides the **architectural blueprint of a webpage**. Similar to the skeletal framework of a building, made with iron bars, bricks, and cement, **HTML defines the structure of the page**, outlining elements like headings, paragraphs, images, and links.
- **CSS** is considered to be the **interior designer of the digital world**. This information **imparts style and aesthetics to the HTML structure** by controlling attributes like **colour schemes, fonts, spacing, and positioning**.
- **JavaScript** is the **dynamic engine, making web pages interactive and responsive**. Analogous to the electrical system in a building, JavaScript breathes life into static content. It allows interactive elements like pop-ups, forms, animations, and real-time updates, creating an engaging user experience.
- **Rendering:** The browser assembles the webpage by decoding HTML structure, applying CSS for aesthetics, and executing JavaScript for interactivity, all within seconds.
- **Data Management:** **Cookies** store browsing data for seamless navigation, while the cache retains frequently accessed files, accelerating page loading times.
- **Security Measures:** Browsers employ encryption protocols like HTTPS and warning systems to shield and alert users against potential threats.

What is the Future of Browsing?

- As technology hurtles forward, web browsers evolve in tandem. They are embracing **cutting-edge technologies like WebAssembly**, a format that enables near-native performance within the browser environment.
- Support for **Virtual Reality (VR)** and **Augmented Reality (AR)** experiences is also on the horizon, promising immersive online interactions.
- Additionally, privacy features are being bolstered, providing users with greater control over their digital footprint.
- Web browsers are the unsung heroes of our digital endeavours, translating code into the dynamic web pages that form the backbone of our online experiences.
- By unravelling the intricate tapestry of processes that underlie their operation, we gain a newfound appreciation for the seamless magic they conjure with every click.

Chandrayaan-3 Propulsion Module Returns to Earth's Orbit

Why in News?

- Recently, scientists successfully brought the **Propulsion Module (PM)** of the **Chandrayaan-3 mission**, which brought the **Vikram lander** within **100 km** of the **Moon's surface** before detaching.
 - This historic event involved a controlled descent to the **lunar surface** and a successful return to **Earth orbit**.

What is Mission Chandrayaan?

- India has launched a total of three Chandrayaan Missions i.e., **Chandrayaan-1**, **Chandrayaan-2** and **Chandrayaan-3**.
- **Chandrayaan-1:**
 - India's **first mission to the Moon** was **Chandrayaan-1** launched successfully in **2008**. It was designed to orbit the Moon and make observations with instruments on board.
 - **Key Findings of Chandrayaan-1:**
 - Confirmed presence of **lunar water**.
 - Evidence of **lunar caves** formed by an ancient lunar lava flow.
 - **Past tectonic activity** was found on the **lunar surface**.
 - The faults and fractures discovered could be features of **past interior tectonic activity** coupled with meteorite impacts.
- **Chandrayaan-2:**
 - **Chandrayaan-2** is an integrated **3-in-1 spacecraft** consisting of an orbiter of the **Moon**, **Vikram (after Vikram Sarabhai)** the lander and **Pragyan (wisdom)** the rover, all equipped with scientific instruments to study the moon.
 - **Launched: 22th July 2019**
 - **Lander Vikram:** It remains stationary after touching down, and mainly studies the moon's atmosphere and seismic activity.
 - **Rover Pragyan:** The Rover, a **six-wheeled solar-powered vehicle**, detaches itself and slowly crawls on the surface, making observations and collecting data.

Note:

- Chandrayaan-2's lander had **crashed**, or made a **hard landing**, on the **Moon's surface** because of its **high velocity**.

- However, its **orbiter** is functioning very well and this will communicate with **Chandrayaan-3** lander.

➤ Chandrayaan-3:

- It was **India's third lunar mission** and second attempt at achieving a **soft landing** on the **moon's surface**.
- **Launched:** July 14, 2023.
- **Objectives:**
 - To demonstrate Safe and Soft Landing on Lunar Surface
 - To demonstrate Rover roving on the moon
 - To conduct In-situ scientific experiments.
- It consists of an indigenous **Lander module (LM)**, **Propulsion module (PM)** and a **Rover** with an objective of developing and demonstrating new technologies required for Interplanetary missions.

What is the Chandrayaan-3 Propulsion Module?

- **Chandrayaan-3:** It utilized a lightweight **Propulsion Module** for the **lander's journey** to the Moon instead of a complete orbiter.
- **SpectroPolarimetry of Habitable Planet Earth (SHAPE):** The **Chandrayaan-3 propulsion module** carried a single instrument called **SHAPE**.
 - It was an experimental payload designed to study **Earth's characteristics** that make it habitable, aiming to identify habitable exoplanets.
- **Pragyaan Rover:** The **propulsion module** separated from the **lander**, which carried the **Pragyaan rover**. It was anticipated to orbit the Moon for an additional **six months**, with **SHAPE** observing Earth.

How Does the Propulsion Module Return to Earth Orbit?

- The experiment allows **ISRO** to work towards developing a **software module** to plan going forward.

- Taking **fuel availability** and **safety** into account, designed the **best trajectory** for the Earth return.
- The **SHAPE payload** is operated whenever Earth is visible, including a special operation.

Six Exoplanets Found Orbiting Around HD 110067

Why in News?

A recent study published in **Nature** has unveiled the discovery of **six exoplanets** orbiting a nearby **bright star**, **HD 110067**, located in the **Coma Berenices constellation**.

- These planets referred to as 'sub-Neptunes', were detected and characterized by using data from two space telescopes: **National Aeronautics and Space Administration's (NASA) Transiting Exoplanet Survey Satellite (TESS)** and **European Space Agency's (ESA) CHaracterising ExOPlanet Satellite (CHEOPS)**.

Note:

- CHEOPS is ESA's first space mission dedicated to studying bright, **nearby stars that are already known to host exoplanets**, in order to make high-precision observations of the planet's size as it passes in front of its host star.

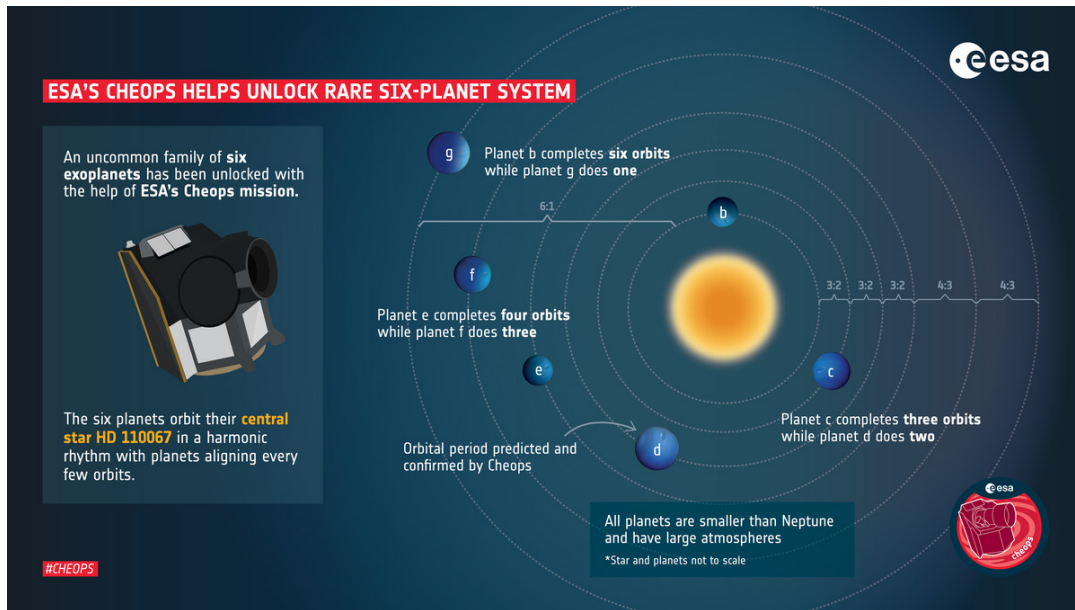
What are the Key Facts about Sub-Neptunes?

- The six exoplanets in the HD 110067 system are classified as '**sub-Neptunes**.'
 - **Planets with radii between that of the Earth and Neptune are referred to as 'sub-Neptunes'.**
 - Calculations of their masses and densities indicate the presence of relatively low-density atmospheres, **potentially rich in hydrogen.**
- All six planets are in **resonant orbits**, in which the planets exert regular forces on each other as they orbit.
 - This feature suggests that the system remains practically unchanged since its birth, at least four billion years ago.
- The planets are named **HD 110067 b, c, d, e, f, and g**, in order of increasing distance from the star.

Note:

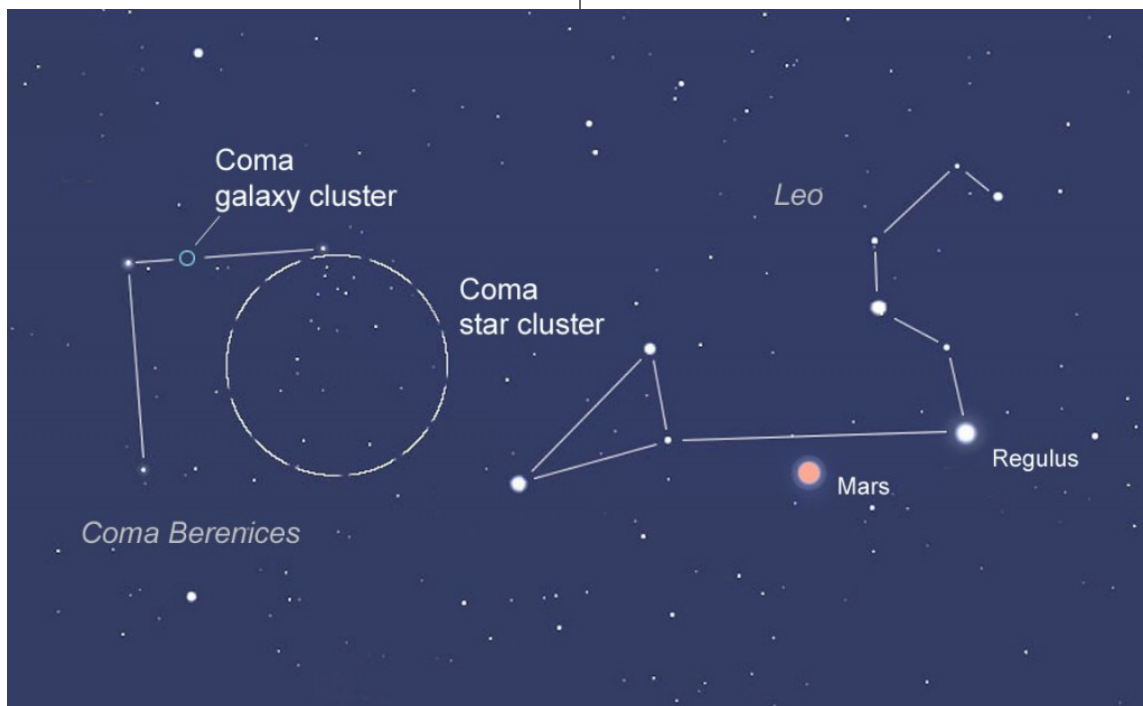


drishti



HD 110067

- The star is called HD 110067, and it is located about 100 light-years away from Earth, located in the Coma Berenices constellation.
- It is visible from the Northern Hemisphere, and it is the brightest star found to host more than four transiting exoplanets to date.
 - The Coma Berenices constellation, also known as Berenice's Hair, is a medium-sized constellation in the **northern celestial hemisphere**. It's visible in both hemispheres, but is most easily seen in the northern hemisphere during spring and summer.



Note:

What is an Exoplanet?

- Exoplanets are **planets that orbit other stars and are beyond our solar system.**
 - The first confirmation of detection of exoplanets occurred in 1992.
- According to NASA, to date, more than 5,000 exoplanets have been discovered.

Global Positioning System

Why in News?

Global Positioning System (GPS) is one of few everyday technologies that have had the kind of revolutionary impact on civilian, military, scientific, and urban realms, redefining our sense of location and impacting diverse sectors globally.

What is the Global Positioning System?

- **About:**
 - The GPS, initiated by the U.S. Department of Defense in 1973, comprises three main segments,
 - **Space:** Detailing the space segment, the **24 satellites in six orbits** ensure global coverage, allowing receivers to access signals from at least four satellites simultaneously—a fundamental necessity for accurate positioning.
 - All six orbits are positioned at **an altitude of 20,200 km** above the Earth, and **each orbit has four satellites at all times.** Each satellite completes two orbits in a single day.
 - **Control:** The control segment, managed by ground-based stations, ensures satellite performance and signal accuracy, adhering to the **Standard Positioning Service (SPS)** standards published in 2020. Key stations across the globe manage and monitor the system's integrity.
 - The **SPS standard** tells application developers and users anywhere in **the world what they can expect from the GPS system.**
 - **User:** User segment encompasses diverse sectors from agriculture to military operations, with an estimated 6.5 billion **GNSS (Global Navigation Satellite System)** devices worldwide in 2021, expected to surge to 10 billion by 2031, underscoring its pervasive influence.

➤ Functionality of GPS:

- GPS operates through **satellite-transmitted radio signals** at specific frequencies (L1 and the L2 frequencies at 50 bits/second), received and triangulated by GPS receivers, enabling precise location determination in three dimensions of space and one of time.

➤ Precision and Adjustments:

- Error adjustments, including relativistic effects on satellite clocks and relative velocities, are factored in to enhance accuracy, highlighting the meticulousness of GPS calculations.
- Satellites maintain precise time for GPS by using atomic clocks. These clocks are critical because even tiny timing differences **could lead to substantial location errors.**

Do Other Countries Have GNSS?

- Several countries operate their own Global Navigation Satellite Systems (GNSS) alongside the GPS. Such systems are currently operated by **Australia, China, the European Union (EU), India, Japan, South Korea, Russia, and the U.K.**
 - Of these, Russia's **GLONASS**, the EU's Galileo, and China's BeiDou systems are global.
- India mooted its own Indian Regional Navigation Satellite System in 2006, later rechristened **Navigation with Indian Constellation (NavIC)**. Its space segment **consists of seven satellites:** three in geostationary orbits and four in geosynchronous orbits.
 - As of May 2023, the minimum number of satellites (four) could facilitate ground-based navigation. The master control facilities are located in Hassan in **Karnataka and Bhopal in Madhya Pradesh.**
 - The NavIC satellites use rubidium atomic clocks and transmit data in the **L5 and the S bands**, with newer satellites also transmitting in the L1 band.
- India also operates the **GPS-Aided Geo Augmented Navigation (GAGAN)** system, which was developed and established by the **Indian Space Research Organisation (ISRO)** and the Airports Authority of India.
 - GAGAN's primary purpose is "safety-of-life civil aviation applications catering to the Indian airspace" and for providing "correction and integrity messages for GPS".

Note:

Fast Radio Bursts

Why in the News?

Recently, scientists are trying to understand a new aspect of **Fast Radio Bursts (FRBs)**, which are **mysterious radio signals** coming from **distant galaxies**.

- **Laser Interferometer Space Antenna (LISA)**, which is scheduled to launch in the early 2030s, will aid in studying **FRBs and mysterious radio signals**.

What are Fast Radio Bursts (FRBs)?

- **Fast Radio Bursts (FRBs)** are **powerful and brief bursts** of **radio frequency emissions** originating from **deep space**. These mysterious and intense signals last **only milliseconds** but release an amount of energy comparable to **hundreds of millions of suns**.
- **Astronomers** have proposed that **magnetars**, a type of **neutron star** formed from the remnants of **exploding stars**, could be a probable origin for **FRBs**.
- The **rotation of magnetars** is **comparatively slower** than that of other **neutron stars**.
- **Neutron stars** are formed when a **massive star** collapses. The very central region of the **core collapses**, **crushing** together every **proton and electron** into a **neutron**. These newly-created **neutrons** can stop the **collapse**, **leaving behind a neutron star**.
- A **magnetar** possesses a **magnetic field** over a **thousand times stronger** than that of other **neutron stars**, and it is a **trillion times** more powerful than **Earth's magnetic field**.

How are Neutron Stars Involved in the Genesis of FRBs?

- The occurrence of **FRBs** might result from the **collision of two neutron stars**.
- The collision could generate two distinct signals: **gravitational waves**, which cause **ripples in space-time**, and **FRBs**.
 - **Neutron star mergers** have been known to be accompanied by **electromagnetic counterparts** in the past.

- The **Laser Interferometer Gravitational-wave Observatory (LIGO)** in the **US** and the **Virgo instrument** in **Italy** made a **groundbreaking observation** by detecting **gravitational waves** from the **collision of two neutron stars** for the first time in **2015**.

What is Laser Interferometer Space Antenna (LISA)?

- LISA is a planned **space-based gravitational wave observatory** led by the **European Space Agency (ESA)** and **National Aeronautics and Space Administration (NASA)**.
- LISA is designed to **detect and observe gravitational waves** by measuring the minute changes in the distance between **three spacecraft** in a **triangular formation**, caused by the **passage of gravitational waves** through space.
- This **space-based observatory** is anticipated to provide valuable insights into cosmic events, such as the **mergers of massive black holes** and other astrophysical phenomena, contributing to our understanding of the universe.

What is LIGO?

- **About:**
 - **LIGO** stands for **Laser Interferometer Gravitational-Wave Observatory**.
 - It is a groundbreaking observatory designed to detect and study **gravitational waves**.
 - It is providing a new way to explore the **universe** by observing the **ripples in space-time** caused by events such as the **collision of black holes** or **neutron stars**.
- **First Detection of Gravitational Waves:**
 - The **LIGO** in the **US** first detected **gravitational waves** in **2015**, which led to a **Nobel Prize in Physics** in **2017**.
 - These gravitational waves were produced by the **merger of two black holes**, which were about **29 and 36 times** the mass of the **Sun**, **1.3 billion years** ago.
 - **Black hole mergers** are the source of some of the strongest **gravitational waves**.

Note:

Environment & Ecology

Highlights

- Limitations of CCS and CDR
- India's Coal Plants: SO₂ Emission Control
- Saiga Antelope
- 28th Conference of Parties To the UNFCCC
- Second Phase of LeadIT
- Diel Vertical Migration and Carbon Sequestration
- UNEP's Action Plan for Cooling Sector
- Coastal Erosion
- World Bank's Plan to Combat Methane Emissions
- Ethical, Social and Cultural Risks of Climate Engineering

Limitations of CCS and CDR

Why in News?

The draft decisions taken at **COP28** in Dubai, the UAE have recommended the abatement and removal of carbon emissions using **Carbon Capture and Storage (CCS)** and **Carbon-Dioxide Removal (CDR)** technologies.

- The unabated fossil fuels mean **the combustion of these fuels** without using CCS technologies to capture their emissions.
- Draft decision texts point to a need to “phase out” such unabated fossil fuels.

What are CCS and CDR?

- Carbon Capture and Storage (CCS):
 - CCS refers to technologies that can capture carbon dioxide (CO₂) at a source of emissions **before it is released into the atmosphere**.
 - These sources **include the fossil fuel industry** (where coal, oil and gas are combusted to generate power) and industrial processes like steel and cement production.
- Carbon-Dioxide Removal (CDR):
 - CDR takes the **forms of both natural means like afforestation or reforestation** and technologies like **direct air capture**, where machines mimic trees by absorbing CO₂ from their **surroundings and storing it underground**.
 - There are also **more complex CDR technologies like enhanced rock weathering**, where rocks are **broken down chemically**; the resulting rock particles can **remove CO₂ from the atmosphere**.

- Other technologies like bioenergy with carbon capture and storage (BECCS) capture and store CO₂ from burning biomass, like wood.

How well do CCS and CDR need to work?

- The **IPCC's Sixth Assessment Report (AR6)** heavily relies on these **technologies for projections in achieving the goal of limiting global warming to 1.5 degrees Celsius**.
- IPCC's assessed scenarios, with over a 50% chance of limiting warming to 1.5 degrees Celsius, rely on the assumption that the world can sequester 5 billion tonnes of CO₂ by 2040. This sequestration **scale surpasses India's current annual CO₂ emissions**.
- There's no pathway in AR6 to achieve the 1.5 degrees Celsius target without the **integration of CDR technologies**.
- Given current emission rates, there's a significant **risk of surpassing the 1.5 degrees Celsius threshold** within seven years. Mitigating emissions solely through direct measures (like renewable energy adoption) would be nearly **impossible at this stage, requiring substantial reliance on CDR**.

What are the Challenges of CCS and CDR?

- **Rebound Emissions Concerns:**
 - There are concerns that the **existence of CCS and CDR could inadvertently create** more room for continued emissions.
 - This phenomenon might lead to increased emissions **or prolonged reliance on fossil fuels** instead of transitioning to renewable energy sources.

Note:

- **Fossil Fuel Dependency:**
 - In some cases, CCS has been used to extract more oil by injecting captured CO₂ into oil fields, potentially prolonging reliance on **fossil fuels rather than transitioning away from them**.
- **Land Equity Concerns:**
 - CDR methods like afforestation, reforestation, BECCS, and direct air capture are constrained by their need for land.
 - Land in the Global South is often considered to be **'viable' and/or 'cost-effective' for planting trees** and deploying other large-scale CDR methods.
 - As a result, such CDR projects can adversely affect land rights of indigenous communities and **biodiversity and compete with other forms of land-use**, like agriculture that is crucial for ensuring food security.
- **Technological and Financial Hurdles:**
 - The scale-up of CCS and CDR technologies poses significant technological challenges, including **high costs, limited infrastructure**, and the need for substantial innovation to make these technologies more effective and affordable.

India's Coal Plants: SO₂ Emission Control

Why in News?

Recently, an analysis by the **Centre for Research on Energy and Clean Air (CREA)** has found less than 8% of India's coal-based power plants have installed the SO₂ emission reduction technology recommended by the Union Ministry of Environment, Forest and Climate Change (MoEF&CC) to keep **Sulfur Dioxide (SO₂) emissions** in check.

- According to a 2019 **Greenpeace study**, India is the largest emitter of SO₂ in the world.

What are the Technologies to Reduce SO₂ Emissions?

- **Flue Gas Desulfurization (FGD):**
 - **FGD** is the process of removing sulphur compounds from the exhaust emissions of fossil-fueled power stations.

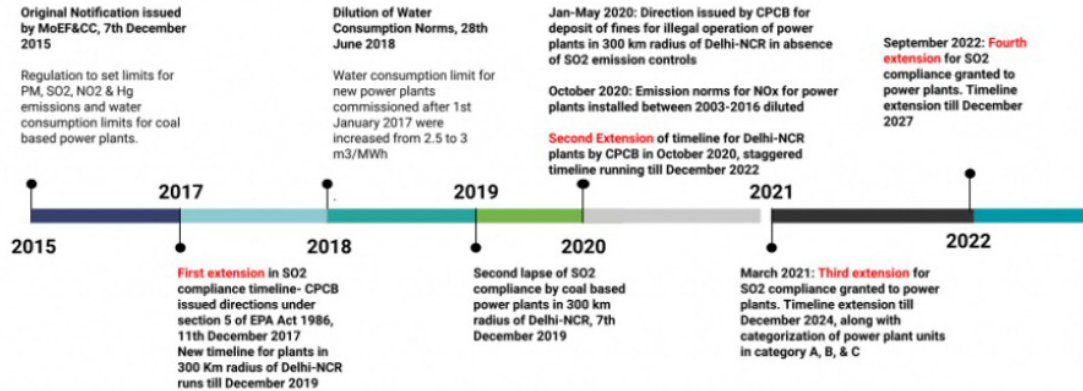
- This is done through the addition of absorbents, which can remove up to **95%** of the **sulphur dioxide** from the **flue gas**.
- Flue gas is the material emitted when fossil fuels such as **coal, oil, natural gas**, or **wood** are burned for heat or power.
- **Circulating Fluidized Bed Combustion (CFBC):**
 - CFBC Boiler is an **environment-friendly** power facility to reduce the discharge of pollutants such as **nitrogen oxide** and **sulphur oxide** by injecting **air and lime** at the same time for burning.
 - A **bed of solid particles** is said to be **fluidized** when the **pressurised fluid** (liquid or gas) is passed through the medium and causes the **solid particles** to behave like a **fluid** under certain conditions. **Fluidization** causes the transformation of the state of solid particles from **static to dynamic**.

What are the Key Findings of the Study?

- Only a combined capacity of **16.5 Gigawatts (GW)** of coal plants have installed **FGDs** and **Circulating Fluidised Bed Combustion (CFBC)** boilers equivalent to **5.9 GW** across India.
- The **CREA analysis** found that **92 %** of the country's coal power plants function without FGDs.
- Blanket extension of the deadline for all **coal power plants** without checking on their progress by **MoEF&CC** and **Central Pollution Control Board (CPCB)** played a major role in derailment of emission controls from coal-based electricity generation units.
 - The **MoEF&CC** introduced emission standards in **2015** for regulating **PM, SO₂, NOx, and Hg (Mercury)** emissions.
 - The deadline has been extended four times for units in Delhi and the National Capital Region (NCR) and three times for most other units across the country.
- India's energy generation installed capacity stands at **425 GW**. The thermal sector holds a predominant position within the overall installed capacity, encompassing **coal (48.6%), gas (5.9%), lignite (1.6%)** and a minimal share (**<0.2%**) from diesel.

Note:

Timeline of Emission Standard notification, its dilutions, and extensions for coal-based power stations over the past seven years



What is the Categorisation of Power Plants for Installing FGD?

- In 2021, the MoEF&CC divided the categories of coal-power plants based on geography to enforce deadlines.
 - **Category A** is demarcated to coal-based power plants within a 10-kilometer radius of the National Capital Region (NCR) and of cities with a million-plus population.
 - **Category B** is within a 10 km radius of critically polluted areas or non-attainment cities.
 - **Category C** is the remaining plants throughout the country.
 - The majority of the country's power plants belong to Category C, with the longest deadlines.

Centre for Research on Energy and Clean Air (CREA)

- CREA is an independent research organisation focused on revealing the **trends, causes, and health impacts**, as well as the solutions to air pollution.
- It uses **scientific data, research and evidence** to support the efforts of governments, companies and campaigning organisations worldwide in their efforts to move towards **clean energy** and **clean air**.

Way Forward

- **Accelerate FGD Implementation:**
 - Prioritise and expedite the installation of **FGD** technology in coal-based power plants. Encourage and incentivize the adoption of this technology to ensure compliance with emission standards set by the **MoEF&CC**.

➤ Expand CFBC Implementation:

- Provide support and incentives for power plants to adopt **CFBC technology**, aiming for a broader implementation to enhance environmental sustainability.

➤ Stricter Enforcement and Monitoring:

- Strengthen regulatory mechanisms for monitoring and enforcing emission standards. Implement strict penalties for non-compliance with deadlines and emission regulations.

➤ Research and Development (R&D):

- Invest in **research and development** to explore and implement advanced technologies that go beyond current standards. Foster innovation in clean energy solutions and emission control technologies to make coal-based power generation more sustainable.

Saiga Antelope

Why in News?

The **International Union for Conservation of Nature (IUCN) Red List** has recently reclassified the status of the **Saiga Antelope (*Saiga tatarica*)** from **Critically Endangered** to **Near Threatened**.

- This significant update reflects positive conservation efforts and offers a hopeful outlook for the survival of the Saiga antelope species.

What are the Key Facts about Saiga Antelope?

➤ About:

- The saiga antelope is a **large, nomadic, migratory herbivore** that lives across the Eurasian Steppe.

Note:

- It's found in Kazakhstan, Mongolia, the Russian Federation, Turkmenistan, and Uzbekistan.
- It belongs to the family of Bovidae (order Artiodactyla).
- The Saiga has two subspecies: *Saiga tatarica tatarica* (found in most of the range) and *Saiga tatarica mongolica* (found only in Mongolia).
- Typical habitat consists of **flat open areas** covered with low-growing vegetation, allowing animals to run quickly.
- They have an **unusual hanging nose**, which makes them look like a camel, although they are goat-sized, and male saigas have horns.



➤ Decline in Saiga Population:

- The Saiga, which has roamed the earth since the last **Ice Age**, faced a drastic decline in its population by more than 95% within a decade after the collapse of the **Soviet Union in 1991**.
- The decline was primarily **due to poaching for the species' meat and horn**. The horn is used in **Chinese Traditional Medicine**.
- In 2015, a major epidemic killed more than 200,000 animals, which was a blow to the species' promising recovery.

➤ Conservation:

- Conservation efforts have led to a **positive change in the global Red List status of the Saiga antelope**.
 - **Kazakhstan** has shown commendable leadership in species recovery, implementing **anti-poaching initiatives**, law enforcement measures, and establishing State Protected Areas.
 - The Convention on the **Conservation of Migratory Species of Wild Animals (CMS)** has facilitated cooperation among governments and civil society organizations for the conservation of the Saiga antelope.

- The Saiga antelope population has soared to **over 1.9 million**, with the Mongolian subspecies witnessing a notable increase, reaching 15,540 individuals in the 2023 census.
- **Ongoing Challenges:**
 - **Poaching**, illegal trade, disease, **climate change**, disturbance, and infrastructure development continue to pose challenges.

28th Conference of Parties To the UNFCCC

Why in News?

Recently, the **28th Conference of Parties (COP28)** to the **United Nations Framework Convention on Climate Change (UNFCCC)** was held in **Dubai, United Arab Emirates**.

What are the Key Highlights of the COP28?

➤ Loss and Damage (L&D) Fund:

- COP28, member countries reached an agreement to operationalize the **Loss and Damage (L&D)** fund aimed at compensating countries grappling with climate change impacts.
 - The **World Bank** will be the "interim host" of the fund for four years, aligning with UNFCCC and the **Paris Agreement**.
- All developing countries are eligible to apply, and every country is "invited" to contribute voluntarily.
 - A specific percentage is earmarked for **Least Developed Countries and Small Island Developing States**.

➤ Global Stocktake TextDraft:

- The **Global Stocktake (GST)** is a periodic review mechanism established under the **Paris Agreement in 2015**.
- The fifth iteration of the **Global Stocktake (GST) text** was released at COP28 and adopted with no objection.
- The fourth draft of the **GST** text was unveiled at COP28.
 - The text proposes eight steps to keep the global temperature rise within the ambit of 1.5 degrees Celsius:
 - **Tripling renewable energy capacity** globally and doubling the global average annual rate of energy efficiency improvements by 2030;

Note:

- Accelerating efforts towards the **phase-down of unabated coal power**;
 - **Rapidly phasing down unabated coal** and limitations on permitting new and unabated coal power generation;
 - Accelerating efforts globally **towards net zero emissions energy** systems, utilizing zero and low carbon fuels well before or by around mid-century;
 - Accelerating **zero and low emissions technologies**, including, inter alia, renewables, nuclear, abatement and removal technologies, including such as **carbon capture** and utilization and storage, and low carbon **hydrogen production**, to enhance efforts towards substitution of unabated fossil fuels in energy systems;
 - Transitioning away from **fossil fuels** in energy systems, in a just, **orderly and equitable manner**, accelerating action in this critical decade, so as to achieve **net zero by 2050 in keeping with the science**;
 - Reducing both **consumption and production of fossil fuels**, in a **just, orderly and equitable manner** to achieve net zero by, before, or around 2050 in keeping with the science;
 - Accelerating and substantially **reducing non-CO₂ emissions**, including, in particular, methane emissions globally by 2030;
 - Accelerating **emissions reductions from road transport** through a range of pathways, including development of infrastructure and rapid deployment of zero and low emission vehicles;
 - **Phasing out of inefficient fossil fuel** subsidies that encourage wasteful consumption and do not address energy poverty or just transitions, as soon as possible.
- The fifth iteration text maintains continuity with **COP26 in Glasgow**, balancing global aspirations of countries like India with diverse energy needs.
 - India argues that it needs to **continue using coal to meet its developmental needs** and emphasizes the importance of adhering to **nationally determined contributions (NDCs)**.
 - Nearly 200 countries agreed to **“transition away from fossil fuels in energy systems”** at the COP28.
 - The agreement is the first time countries have made this pledge. The deal aims to signal to **policymakers and investors** that the world is **committed to breaking away from fossil fuels**.
 - The concerns of countries like **India on a phase-down of coal usage**. Countries have already agreed on a phase-down of **“unabated” coal at COP26 in Glasgow**.
 - The initial language proposed here had sought to put further restrictions on the launch of new coal-fired power plants, which was objected to by India and many other countries. The new text retains the **language from Glasgow**.
 - Developing and poor countries are **expressing dissatisfaction with the latest draft of the Global Stocktake (GST) at COP28**, calling for significant changes.
 - Several countries, including India, are extremely opposed to any mandate to cut **methane emissions**, mainly because one of the major sources happens to be **agriculture and livestock**.
 - Cutting methane emissions could involve tweaking agricultural patterns which could be **extremely sensitive in a country like India**.
 - Possibly in deference to the concerns of such countries, the **agreement does not mention any targets for methane emission** cuts for the year 2030, although a group of about 100 countries had made a voluntary commitment, in **Glasgow in 2021**, to reduce their methane emissions by **30% by 2030**.
 - This pledge is known as the **Global Methane Pledge**. However, **India is not a part of the Global Methane Pledge**.
 - The draft does not mention the **“phase-out of fossil fuels”** but includes stronger language on coal usage. This is **problematic for countries heavily dependent on coal, such as India and China**.
 - India has expressed strong **opposition to the inclusion of the term ‘rapid’ in the context of coal use**. This stands in contrast to the negotiations at **COP26 in Glasgow**, where India and China **worked to dilute the coal phaseout term to ‘phase down.’**
 - India, relying on **coal for about 70% of its power generation**, aims to add 17 gigawatts of coal-based power generation capacity.

Note:



- India argues that it needs to **continue using coal to meet its developmental needs** and emphasizes the importance of adhering to **nationally determined contributions (NDCs)**.
- Developing countries call on rich nations to achieve negative carbon emissions, not just reaching net zero by 2050. They emphasize principles of **common but differentiated responsibilities and respective capabilities (CBDR-RC)** in combating climate change.
- Developing countries argue that rich nations, having consumed over **80% of the global carbon budget**, should allow developing nations their fair share of future emissions.
- **Global Renewables and Energy Efficiency Pledge:**
 - The Pledge stipulates that signatories commit to work together to **triple the world's installed renewable energy generation** capacity to at least **11,000 GW by 2030** and to collectively double the **global average annual rate of energy efficiency** improvements from around 2% to over 4% every year until 2030.
- **The Global Cooling Pledge for COP 28:**
 - It includes 66 national government signatories committed to working together to reduce **cooling-related emissions** across all sectors by at least 68% globally relative to 2022 levels by 2050.
- **Climate Finance:**
 - **The United Nations Conference on Trade and Development (UNCTAD)** estimates that wealthy nations owe developing countries USD 500 billion in 2025 under the **New Collective Quantified Goal (NCQG) for climate finance**.
 - The NCQG was confirmed by developed countries under the **Paris Agreement in 2015**.
 - The goal is to set a new collective quantified goal before 2025. The goal will start from a floor of USD 100 billion per year.
 - This includes USD 250 billion for mitigation, USD 100 billion for adaptation, and USD 150 billion for loss and damage.
 - The figure is expected to increase to USD 1.55 trillion by 2030.
 - The current climate finance goal of USD 100 billion per year has not been met, and developing countries are facing debt distress.
- Experts call for reform of the global financial architecture to address structural issues and promote sustainable development.
- **Global Goal on Adaptation (GGA):**
 - The draft text on the Global Goal on Adaptation (GGA) was introduced. It was established under the **Paris Agreement to enhance climate change adaptation** by increasing awareness of and funding towards countries' adaptation needs in the context of the **1.5/2°C goal** of the Paris Agreement.
 - The draft text addresses critical issues:
 - Climate-Induced Water Scarcity Reduction.
 - Climate-resilient food and Agriculture Production.
 - Strengthening Resilience Against Climate-Related Health Impacts.
- **Declaration to Triple Nuclear Energy:**
 - The declaration launched at COP28 aims to **triple global nuclear energy capacity by 2050**.
 - Endorsed by 22 national governments, the declaration calls for support from shareholders of international financial institutions. It encourages shareholders to **advocate for the incorporation of nuclear energy in energy lending policies**.
- **Powering Past Coal Alliance (PPCA):**
 - PPCA is a coalition of national and sub-national governments, businesses and organizations working to advance the transition from **unabated coal power generation to clean energy**.
 - PPCA at COP28 welcomed new national and subnational governments, and called for cleaner energy alternatives.
- **Coal Transition Accelerator:**
 - France, in collaboration with various countries and organizations, introduced the Coal Transition Accelerator.
 - Objectives include **knowledge-sharing, policy design**, and financial support to facilitate just transitions from coal to clean energy.
 - The initiative aims to leverage best practices and lessons learned for effective coal transition policies.
- **Coalition for High Ambition Multilevel Partnership (CHAMP) for Climate Action:**
 - A total of 65 national governments signed CHAMP commitments to enhance cooperation, where applicable and appropriate, with subnational governments in the planning, financing, implementation, and monitoring of climate strategies.

Note:



UNFCCC

Conference of Parties (COP)

- Supreme decision-making body of UNFCCC
- Meets in **Bonn**, the Secretariat (unless a Party offers to host the session)
- Meets **every year** (unless the Parties decide otherwise)
- First COP – held in **Berlin**, Germany (1995)

COPs and Their Major Outcomes

COP 3 (1997)

Kyoto, Japan

Adopted **Kyoto Protocol** (legally bind developed countries to **reduce emission targets**)

COP 7 (2001)

Marrakech, Morocco

Marrakech Accords signed (set stage for ratification of **Kyoto Protocol**)

COP 8 (2002)

New Delhi, India

- **Delhi Declaration** (development needs of the poorest countries)
- **Technology transfer** for climate change (CC) mitigation)

COP 15 (2009)

Copenhagen, Denmark

Developed countries pledged up to **\$30 billion in fast-start finance** (for 2010-12)

COP 14 (2008)

Poznan, Poland

- **Adaptation Fund under Kyoto Protocol launched**
- **Poznan Strategic Programme on Technology Transfer**

COP 13 (2007)

Bali, Indonesia

Bali Road Map and Bali action plan (on shared vision, mitigation, adaptation, technology and financing)

COP 16 (2010)

Cancun, Mexico

- **Cancun Agreements** (assist developing nations in dealing with CC)
- Established: **Green Climate Fund**

COP 18 (2012)

Doha, Qatar

Doha Amendment to Kyoto Protocol (reducing GHG emissions by 18% compared to 1990 levels)

COP 19 (2013)

Warsaw, Poland

- **Warsaw Framework for REDD Plus**
- **Warsaw International Mechanism for Loss and Damage**

COP 24 (2018)

Katowice, Poland

Rulebook for Paris Agreement (actions to be taken as per NDCs)

COP 21 (2015)

Paris, France

- **Paris Agreement** (global temp. well below 2°C above pre-industrial times)
- **Climate finance** by rich countries
- **yearly \$100bn funding pledge** by rich countries)

COP 26 (2021)

Glasgow, UK

- India announced **Net Zero Targets 2070**
- India called for **"phase-down"** of coal-based power
- **Glasgow Breakthrough Agenda** (by 41 countries + India)

COP 27 (2022)

Sharm-el-Sheikh, Egypt

- **Loss & Damage Fund**
- **USD 3.1bn plan for early warning systems**
- **G7-led 'Global Shield Financing Facility'** for countries suffering climate disasters
- **African Carbon Market Initiative**
- **Action for Water Adaptation and Resilience (AWARE)** initiative
- **Mangrove Alliance** (in partnership with India)
- **India's Long-Term Low Emission Development Strategy**

➤ **India Led Initiatives at COP28:**

- **Global River Cities Alliance (GRCA):**
 - It was launched at COP 28, led by the **National Mission for Clean Ganga (NMCG)** under the **Ministry of Jal Shakti**, Government of India.
 - The GRCA is a unique alliance covering 275+ global river-cities in 11 countries.
 - Partner countries include Egypt, Netherlands, Denmark, Ghana, Australia, Bhutan, Cambodia, Japan and river-cities of The Hague (Den Haag) from the Netherlands, Adelaide from Australia, and Szolnok of Hungary.
 - GRCA highlights **India's role in sustainable river-centric development** and climate resilience.
 - The GRCA platform will facilitate knowledge exchange, river-city twinning, and dissemination of best practices.
- **Green Credit Initiative:**
 - India launched the Green Credit Initiative here at COP28, to create a participatory **global platform for exchange of innovative environmental programs and instruments**.
 - There are two main priorities of the initiative are **water conservation** and **afforestation**.
 - The main purpose of this initiative is to **boost voluntary environmental activities** like tree plantation, water conservation, **sustainable agriculture**, and **waste management** by **incentivizing** it for big corporations and private companies, bringing about a change in the **climate issues** faced by the country.

Second Phase of LeadIT

Why in News?

Recently, at the **Leadership Group for Industry Transition (LeadIT) Summit 2023** hosted by India and Sweden at the **Conference of Parties (COP 28)** in the United Arab Emirates, the Ministry of Environment, Forest and Climate Change announced the **three pillars of the second phase of LeadIT (2.0)**.

What is the Leadership Group for Industry Transition (LeadIT)?

➤ **About:**

- LeadIT is a global initiative that aims to accelerate the transition of challenging sectors such as steel, cement, chemicals, aviation, and shipping to **low-carbon pathways**.

- The LeadIT gathers countries and companies that are committed to action to achieve the **Paris Agreement**.
- It was launched by the governments of Sweden and India at the **United Nations Climate Action Summit in 2019** and is supported by the **World Economic Forum**.
- The LeadIT Secretariat is responsible for managing the work of the Leadership Group.

➤ **Members:**

- LeadIT, boasting **38 members**, encompasses countries and companies. Notably, **India is an active participant**.
- LeadIT members subscribe to the notion that energy-intensive industries can and must progress on low-carbon pathways, aiming to **achieve net-zero carbon emissions by 2050**.

What are the Key Highlights of the Second Phase of LeadIT?

➤ **Mission**

- Facilitate the creation of policies and regulations backing an inclusive industry transition through **public-private partnerships**. Mobilise resources, support knowledge-sharing, and accelerate pathways to achieve net-zero industry emissions by 2050.

➤ **LeadIT Pillars:**

- **Global Forum for a Just and Equitable Industry Transition:**
 - Ensuring continuous dialogue and engagement between governments and industry.
 - This pillar is dedicated to sustaining LeadIT's engagement with multilateral groups (e.g., **UN Climate Action**, **United Nations Framework Convention on Climate Change (UNFCCC)** COP presidencies), facilitating knowledge sharing among members, and vigilantly monitoring the transition's pace.
- **Technology Transfer and Co-development:**
 - This pillar is dedicated to facilitating business-to-business technology transfer and building national institutional capacity for innovation.
- **Industry Transition Partnerships:**
 - The LeadIT Secretariat aids members in creating industry transition partnerships, supporting emerging markets and developing economies in their pursuit of green industrial transitions.

Note:



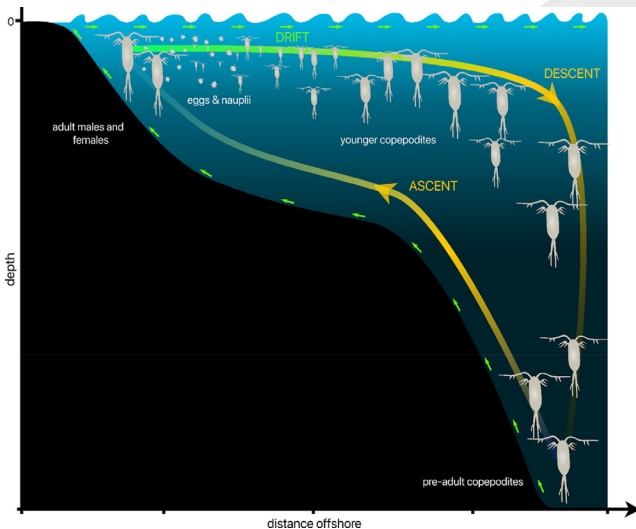
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- These partnerships involve mapping, coordinating, and strengthening technical and financial international assistance to enhance effectiveness.
- The ultimate goal is to establish enabling conditions for a pipeline of bankable low-carbon industrial projects.

Diel Vertical Migration and Carbon Sequestration

Why in News?

Deep-sea creatures, like zooplankton, ascend at night in **Diel Vertical Migration (DVM)** for nourishment and safety. This synchronised journey showcases nature's marvels and significantly influences Earth's **Carbon Cycle**.



What is Diel Vertical Migration (DVM)?

- DVM is a synchronised movement of marine organisms, often seen in deep-sea creatures like zooplankton, as they migrate vertically in the water column, ascending towards the **surface at night and descending to deeper levels during the day**.
 - This pattern helps these organisms **find food while avoiding predators**, showcasing a strategic survival tactic.
- At dusk, organisms from the **mesopelagic layer (Deeper Layer or Twilight Zone)** rise to the safety of the **epipelagic zone (Upper Layer)**, capitalising on darkness to feed on microscopic phytoplankton while evading diurnal predators.

- This synchronised migration, finely attuned to natural light cycles, **stands as the planet's largest biomass migration**, occurring daily across all oceans.

How DVM's help in Carbon Sequestration?

- Organisms inhabiting the mesopelagic layer actively extract substantial carbon from upper ocean layers while **feeding on surface plankton**, transporting it to deeper waters.
- Within the twilight zone, migratory animals contribute to the food chain, passing on consumed carbon to their predators. The resultant carbon-rich waste sinks to the ocean floor, becoming a crucial carbon sink, **trapping carbon dioxide and aiding in atmospheric carbon concentration regulation**.

What is Carbon Sequestration?

About:

- Carbon sequestration is **the long-term storage of carbon in plants, soils, geologic formations, and the ocean**.
- Carbon sequestration occurs both naturally and as a result of anthropogenic activities and typically refers to the storage of carbon.

Types:

- **Terrestrial Carbon Sequestration:** Terrestrial carbon sequestration is the process **through which CO_2 from the atmosphere is absorbed by trees and plants through photosynthesis** and stored as carbon in soils and biomass (tree trunks, branches, foliage, and roots)
- **Geologic Carbon Sequestration:** CO_2 can be stored, **in oil reservoirs, gas reservoirs, unmineable coal seams, saline formations and shale formations with high organic content**.
- **Ocean Carbon Sequestration:** Oceans absorb, release and store large amounts of **CO_2 from the atmosphere**. This can be done in two ways—enhancing the productivity of ocean biological systems through Iron fertilization, and injecting CO_2 into the deep ocean.
 - The dumping of iron stimulates phytoplankton production, **which in turn leads to enhanced photosynthesis** from these microorganisms, helping in CO_2 absorption.

Note:

UNEP's Action Plan for Cooling Sector

Why in News?

The **United Nations Environment Programme (UNEP)** has proposed an action plan aimed at significantly **reducing emissions from the global cooling sector** in its recent report titled **"Keeping it Chill: How to meet cooling demands while cutting emissions."**

- This initiative carries the potential to make a substantial impact on the predicted 2050 **greenhouse gas emissions**, reducing them by 60%.
- The report is released in support of the **Global Cooling Pledge**, a joint initiative between the United Arab Emirates as host of the **Conference of Parties (COP28)** and the **Cool Coalition**.

Note:

- The Cool Coalition is a global network of partners working to provide efficient, climate-friendly cooling for all.
- The UNEP launched the Cool Coalition at the First Global Conference on Synergies between the **2030 Agenda for Sustainable Development Goals** and the **Paris Agreement**.
 - India is a member of the Cool Coalition.

What is UNEP's Proposed Action Plan for Sustainable Cooling?

- **Nature-Based Solutions:**
 - Recommendations include **passive cooling measures** like shading, ventilation, insulation, green roofs, and reflective surfaces, and reintroducing nature to urban areas.
 - Passive cooling can reduce the need for **mechanical cooling and save energy and emissions**.
- **Efficiency Standards:**
 - Emphasizes the importance of **higher energy efficiency technologies and practices** for cooling equipment, such as air conditioners, refrigerators, and fans.
 - Higher-energy efficiency cooling can **reduce the energy consumption and emissions of cooling devices** and lower the costs for users and utilities.

➤ Phasedown of Refrigerants:

- This refers to the use of alternative substances to cool devices, such as **hydrocarbons, ammonia, or carbon dioxide**, instead of **hydrofluorocarbons (HFCs)**, which are potent greenhouse gases.
 - HFCs are a group of **synthetic gases** primarily used for cooling and refrigeration. HFCs, classified as **"super-pollutants,"** possess potent greenhouse gas properties, **capable of trapping heat hundreds to thousands of times more than carbon dioxide**.
 - Despite their significant impact, they are short-lived climate pollutants, with an average **atmospheric lifespan of 15 years**.
- Low-global warming potential refrigerants can reduce the direct emissions of cooling devices and contribute to the phase-down of HFCs under the **Kigali Amendment to the Montreal Protocol**.
- Urges a **faster phasedown of climate-warming refrigerants and air conditioning**.

Why Address the Cooling Sector?

- The cooling sector plays a crucial role in **combating rising temperatures**, ensuring **food safety**, **industrial cooling** processes, and driving productive economies.
- However, without intervention, the growing demand for cooling equipment could lead to a substantial increase in electricity consumption and emissions.
 - The cooling sector accounts for a **substantial 20% of global electricity consumption**.
- If current policies continue, the installed capacity of cooling equipment globally will triple, resulting in a **more than doubling of electricity consumption by 2050**.
 - This could lead to **emissions between 4.4 billion and 6.1 billion tonnes of carbon dioxide equivalent (CO₂e) in 2050**, accounting for over **10% of global projected emissions that year**.

What are the Benefits of Sustainable Cooling?

- Passive cooling techniques and efficient cooling equipment can save consumers **USD 17 trillion between 2022 and 2050**.
 - It is projected to reduce peak power requirements by **1.5-2 terawatts (TW)**, **avoiding substantial power generation investments**.

Note:



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- Increasing the adoption of **low-global warming potential technologies** in new equipment and effectively managing refrigerant life cycles can reduce **HFC emissions by 50% in 2050**.
- **Decarbonizing** the power grid can further **reduce sectoral emissions by 96%**.

What are the Initiatives Related to Sustainable Cooling?

- **Global:**
 - **National Cooling Action Plans (NCAPs):**
 - Presently, **more than 40 countries, including India, have developed NCAPs**, and 25 others are at various stages of preparing theirs as well.
 - Though India and China have included implementation mechanisms in their NCAPs, the rollout has been slow.
 - **Global Cooling Pledge:**
 - At the **28th Conference of Parties (COP28)** the United Nations Framework Convention on Climate Change, the host country United Arab Emirates and the Cool Coalition launched the Global Cooling Pledge.
 - Over 60 countries signed up to the Pledge with commitments to reduce the climate impact of the cooling sector.
 - **Kigali Amendment Acceleration:**
 - The Kigali Amendment is an international agreement to reduce the production and consumption of HFCs.
 - The amendment is part of the Montreal Protocol on Substances that Deplete the **Ozone Layer**.

- The Kigali Amendment aims to reduce HFC production and consumption by 80–85% by 2047.
 - This is expected to prevent the emissions of up to 105 billion tonnes of CO₂ of greenhouse gases, avoiding up to 0.5 degree Celsius of global temperature rise by 2100.

➤ **India:**

- **India Cooling Action Plan (ICAP).**
- **Bureau of Energy Efficiency (BEE) Star Rating Programme.**

The Global Climate 2011-2020: WMO

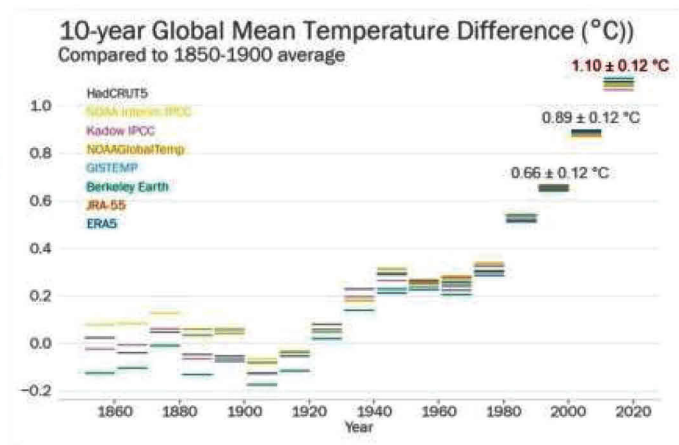
Why in News?

Recently, the **World Meteorological Organisation (WMO)** has published a report titled- **The Global Climate 2011-2020: A Decade of Acceleration**, concerning the alarming acceleration of climate change and its multifaceted impacts across the planet.

What are the Key Highlights of the Report?

- **Temperature Trends:**
 - The decade 2011-2020 emerged as the warmest on record for both land and ocean.
 - Global mean temperature soared to **$1.10 \pm 0.12^\circ\text{C}$ above the 1850-1900 average**, with each decade since the 1990s surpassing previous ones in warmth.
 - Record high temperatures were reported in numerous countries, with 2016 (due to an **El Niño event**) and 2020 standing out as the warmest years.

2011-2020 warmest decade on record for both the land and ocean by a clear margin.



Note:

➤ **Greenhouse Gas Emissions:**

- Atmospheric concentrations of major **greenhouse gases (GHG)** continued to rise, **especially CO₂**, **reaching 413.2 ppm in 2020**, primarily due to fossil fuel combustion and land-use changes.
- The decade witnessed an **increase in average growth rates of CO₂**, highlighting the pressing need for sustainable emissions reduction to stabilize the climate.

➤ **Oceanic Changes:**

- Ocean warming rates accelerated **significantly, with 90% of accumulated heat stored in the ocean**. Warming rates doubled in the **upper 2000m depth from 2006-2020**, impacting marine ecosystems.
- Ocean acidification due to CO₂ absorption posed challenges for marine organisms, affecting their shell and skeleton formation.

➤ **Marine Heatwaves and Sea Level Rise:**

- **Marine Heatwaves** increased in frequency and intensity, **affecting about 60% of the ocean's surface** between 2011 and 2020.
- Global mean sea level rise **accelerated to 4.5mm/yr from 2011-2020**, mainly due to ocean warming and ice mass loss.

➤ **Glacier and Ice Sheet Loss:**

- **Glaciers** globally thinned by **about 1 meter/year between 2011 and 2020**, with unprecedented mass loss, affecting water supplies.
- Greenland and Antarctic ice sheets **lost 38% more ice compared to 2001-2010**, contributing significantly to rising sea levels.

➤ **Arctic Sea Ice Decline:**

- Arctic sea ice continued its decline during the summer melt season, with a mean seasonal minimum extent 30% below the 1981-2010 average.

➤ **Ozone Hole and Successes:**

- The Antarctic ozone hole diminished in the **2011-2020 period, credited to successful international action** under the **Montreal Protocol**.
- Efforts led to reduced chlorine entering the stratosphere from ozone-depleting substances.

➤ **Impact on Sustainable Development Goals (SDGs):**

- Extreme weather events hindered progress toward SDGs, impacting food security, human mobility, and socioeconomic development.

- Improved early warning systems reduced casualties but **economic losses from extreme events escalated**.
- The 2011-2020 decade was the first since 1950 when there was not a single **short-term event with 10,000 deaths or more**.

What are the WMO's Recommendations for Mainstreaming Action on Climate and Development Goals?

- Enhancing collective resilience against **current and future global crises through collaboration and cooperation** with international organizations and their partners
- Strengthening **science-policy-society** interaction to advance synergistic action
- **Promoting institutional capacity-building** and cross-sectoral and international collaboration at national, institutional, and individual levels, especially for the global South.
- **Ensuring policy coherence** and coordination among policymakers across sectors and departments for **enhancing climate and development synergies** at the national, sub-national, and multi-national levels.

What is WMO?

➤ **About:**

- It is an **intergovernmental organization** with a membership of 192 Member States and Territories. India is a member.
- It originated from the International Meteorological Organization (IMO), which was established after the 1873 Vienna International Meteorological Congress.

➤ **Establishment:**

- Established by the ratification of the **WMO Convention on 23rd March 1950**, WMO became the **specialized agency of the United Nations** for meteorology (weather and climate), operational hydrology and related geophysical sciences.

➤ **Headquarters:**

- Geneva, Switzerland.

Coastal Erosion

Why in News?

The Union Minister of State for Environment, Forest, and Climate Change, in a written reply to Lok Sabha, shared

Note:

insights on **shoreline changes across the entire Indian coastline** from multi-spectral satellite images and field-surveyed data from 1990 to 2016 conducted by the **National Centre for Coastal Research (NCCR)**.

- **NCCR**, an attached office of the **Ministry of Earth Sciences, Government of India**, has been mandated to carry out all **multidisciplinary research** under the central domain: **Marine Pollutions, Coastal processes** and **Hazards, Coastal Habitats and Ecosystem** and **Capacity Building** and **Training**.

What are the Key Observations of NCCR Regarding Coastal Erosion?

- Some stretches of **India's shoreline** are subject to varying degrees of **erosion** due to **natural causes** or **anthropogenic activities**.
- The **shoreline analysis** suggests that **34%** of the coast is eroding, **28%** is accreting and **38%** is in a stable state.
- The **state-wise analysis** suggests that in the **West Bengal (63%)** and **Pondicherry (57%)** coasts, erosion exceeds more than **50%**, followed by **Kerala (45%)** and **Tamil Nadu (41%)**.
- **Odisha (51%)** is the only coastal state which is having more than **50%** of accretion.
- The receding coastline will cause **loss of land/habitat** and the **livelihood of fishermen** in terms of losing the space for **parking boats, mending nets** and **fishing operations**.

What Government Measures have been Taken to Combat Coastal Erosion?

- **Hazard Line:** The **Ministry of Environment, Forest & Climate Change (MoEFCC)** has delineated the **hazard line** for the entire coast of the country.
 - The hazard line is indicative of the **shoreline changes**, including **sea level rise** due to climate change.
 - This line is to be used by agencies in **Coastal States** as a tool for **Disaster Management** including planning of adaptive and mitigation measures.
- **Coastal Zone Management Plans:** The hazard line features in the new **Coastal Zone Management Plans** of the coastal States/Union territories approved by the MoEFCC.
- **Coastal Regulation Zone Notification, 2019 :** MoEFCC has notified **Coastal Regulation Zone Notification, 2019** with a view to conserve and protect **coastal stretches, marine areas** and to ensure **livelihood security** to the fisher and other local communities.

- The coastal regulations, however, permit setting up of erosion control measures in the coast.
- **No Development Zones (NDZ):** The notification also provides for **NDZ** along various categories of coastal areas to protect **India's coastline** from encroachment and erosion.

- **Flood Management Scheme:** This scheme is the **Ministry of Jal Shakti**, including **anti-sea erosion schemes** planned and executed by the State Governments with their own resources as per priorities of States.

- The Union Government renders assistance to states which is **technical, advisory, catalytic** and **promotional** in nature.

- **Coastal Management Information System (CMIS):**
 - It has been initiated under the **Central Sector Plan Scheme "Development of Water Resources Information System"**.

- **CMIS** is a data collection activity carried out to collect **near shore coastal data** which can be used in **planning, design, construction** and **maintenance** of site specific coastal protection structures at vulnerable Coastal stretches.

- **Coastal Erosion Mitigation:** These measures have been taken up at **Puducherry** and **Chellanam in Kerala**, which helped in **restoration** and **protection of coastal areas** lost at **Puducherry** and flooding at **Chellanam Fishing Village**.

- Technical support has been extended to the coastal States in the design of **coastal protection measures** at vulnerable stretches and preparation of **Shoreline Management Plans**.

World Bank's Plan to Combat Methane Emissions

Why in News?

In an initiative to combat the rising threat of **methane emissions**, the **World Bank** has announced plans to launch a series of country-led programs, **to reduce up to 10 million tons** of methane over the course of their investment lifespans.

What is the Plan Unveiled by World Bank?

- **Need For the Plan:**
 - Methane accounts for approximately **19 % of global greenhouse gas emissions (GHGs)**, making it a substantial contributor to climate change.

Note:

- Rice production accounts for 8%, livestock 32%, and waste 18% of all human-driven methane emissions, making targeted efforts in these areas crucial.
 - Methane has a much higher global warming potential (GWP) than carbon dioxide.
 - Despite methane being 80 times more potent than carbon dioxide in terms of warming the planet, it has received less attention and funding.
- **World Bank's Planning:**
 - The World Bank is set to roll out a **minimum of 15 country-led programs** within the next 18 months.
 - According to the World Bank, the move is a **step in addressing the alarming increase in global temperatures** and supporting communities most vulnerable to the impacts of climate change.
 - These programs will specifically target methane emissions, **employing strategic interventions to curb environmental degradation** and promote sustainable practices.
- **World Bank's Triple Win Approach:**
 - The ambitious programs will focus on slashing methane emissions from various sources, **including rice production, livestock operations, and waste management.**
 - The comprehensive approach to methane reduction outlined by the World Bank **emphasizes triple wins** - reducing emissions, enhancing resilience, and empowering livelihoods.
- **Funding Mechanism:**
 - Currently, finance for methane abatement constitutes **less than 2%** of global climate finance.
 - The World Bank envisions a substantial increase in financing for methane reduction through public and private sector channels **between 2024 and 2030.**
 - The institution is set to collaborate with Germany, Norway, the United States, the UAE, and the private sector to implement effective solutions and reduce methane emissions across the entire energy value chain.
- **Partnership Platforms:**
 - Complementing its efforts, the World Bank is launching **two partnership platforms:**
 - The **Global Methane Reduction Platform for Development (CH4D)** focusing on methane abatement in agriculture and waste.

- **Global Flaring and Methane Reduction Partnership (GFMR)** concentrating on reducing methane leaks in the oil and gas sector.

Global Warming Potential (GWP)

- GWP is a measure of how much heat a greenhouse gas traps in the atmosphere over a specific time period, **usually 100 years**, compared to carbon dioxide (CO₂).
- It is used to evaluate the potential impact of different greenhouse gases on global warming. The GWP allows for the comparison of the warming effects of various gases based on their ability to absorb and retain heat in the atmosphere.
- **Carbon dioxide is the reference gas with a GWP of 1.** Other greenhouse gases, such as methane (CH₄) and **nitrous oxide (N₂O)**, have higher GWPs because they are more effective at trapping heat.
- **The Intergovernmental Panel on Climate Change (IPCC)** provides GWP values for different gases. It's important to note that GWP values can vary depending on the time horizon chosen for the comparison.

What are the Initiatives to Tackle Methane Emissions?

- **Indian:**
 - **'Harit Dhara' (HD):** Indian Council of Agricultural Research (ICAR) has developed an anti-methanogenic feed supplement **'Harit Dhara' (HD)**, which can cut down cattle methane emissions by 17-20% and can also result in higher milk production.
 - **India Greenhouse Gas Program:** The India GHG Program led by WRI India (non-profit organization), Confederation of Indian Industry (CII) and **The Energy and Resources Institute (TERI)** is an industry-led voluntary framework to measure and manage greenhouse gas emissions.
 - **National Action Plan on Climate Change (NAPCC):** **NAPCC** was launched in 2008 which aims at creating awareness among the representatives of the public, different agencies of the government, scientists, industry and the communities on the threat posed by climate change and the steps to counter it.
 - **Bharat Stage-VI Norms:** India shifted from **Bharat Stage-IV (BS-IV)** to **Bharat Stage-VI (BS-VI)** emission norms.

Note:

➤ **Global:**

- **Methane Alert and Response System (MARS):**
 - MARS will integrate data from a large number of existing and future satellites that have the ability to detect methane emission events anywhere in the world, and send out notifications to the relevant stakeholders to act on it.
- **Global Methane Pledge:**
 - At the [Glasgow climate conference](#) (UNFCCC COP 26) in 2021, nearly 100 countries had come together in a voluntary pledge, referred to as the Global Methane Pledge, to cut methane emissions by at least 30% by 2030 from the 2020 levels.
- **Global Methane Initiative (GMI):**
 - It is an international public-private partnership focused on reducing barriers to the recovery and use of methane as a clean energy source.

What Measures can be Taken Further to Reduce Methane Emissions?

- **In the Energy Sector:** Methane emissions occur along the entire oil and gas supply chain, but especially from **fugitive emissions from leaking equipment, system upsets, and deliberate flaring and venting.**
 - Existing cost-effective solutions can help reduce emissions, **including initiating leak detection and repair programs, implementing better technologies and operating practices,** and capturing and utilising methane that would otherwise be wasted.
- **In Agriculture:** The farmers can provide animals with more nutritious feed so that they are larger, healthier and more productive, effectively producing more with less.
 - When it comes to staple crops like paddy rice, experts recommend alternate wetting and drying approaches that could halve emissions.
 - Rather than allowing the continuous flooding of fields, **paddies could be irrigated and drained two to three times throughout the growing season,** limiting methane production without impacting yield.
 - That process would also require one-third less water, making it more economical.
- **In the Waste Sector:** The waste sector accounts for **around 20%** of global human-caused methane emissions.

- The cost-effective mitigation solutions with the greatest potential related to separating organics and recycling also have the potential of creating new jobs.
 - Upstream avoidance of food loss and waste is also key.
- Additionally, **capturing landfill gas** and generating energy will reduce methane emissions, displace other forms of fuels and create new streams of revenue.
- **Role of Government:** The Government of India should envision a food system transition policy to help its people grow and consume food differently.
 - Instead of working in silos, **the government must develop a comprehensive policy** that moves farmers to sustainable modes of plant-based food production.

Ethical, Social and Cultural Risks of Climate Engineering***Why in the News?***

The [United Nations Educational, Scientific and Cultural Organization \(UNESCO\)](#) in its report on the **Ethics of Climate Engineering** emphasized the importance of including **vulnerable, neglected, and marginalized individuals**, along with **women, youth, and indigenous people**, as crucial stakeholders in policy decisions regarding the contentious field of [climate engineering](#).

What is Climate Engineering?

- **Climate engineering** refers to the **deliberate modification of Earth's climate** to counteract or mitigate the effects of [climate change](#).
- This can involve various techniques aimed at either [reflecting sunlight](#) away from the Earth or removing [greenhouse gasses](#) from the atmosphere.
- **Climate engineering techniques** are gaining **policy attention** due to the current gap between **climate policy targets** and the **necessary reductions** in atmospheric **greenhouse gas** concentrations.
- **Climate engineering** is classified into two groups of techniques:
 - **Carbon Dioxide Removal (CDR):**
 - It removes and stores the emitted carbon dioxide from the atmosphere. [CDR](#) involves **five approaches**. This includes:
 - **Direct air capture**

Note:



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- **land-use management** through **afforestation / reforestation**
- **Sequestering carbon dioxide (CO₂)** produced by **biomass** that may also be used as an energy source increases the uptake of CO₂ by the ocean and enhances natural weathering processes that remove CO₂ from the atmosphere.
- New **CDR technologies** have performed only about 0.1% of carbon removal around 2.3 million tonnes per year according to a report in the journal Nature.
- **Solar Radiation Modification (SRM):**
 - **SRM** approaches include increasing the surface reflectivity of the planet
 - Painting structures with **reflective paints**
 - **Planting crops** with **high reflectivity**
 - Enhancing the **reflectivity of marine clouds**
 - Removing **infrared-absorbing clouds**
 - **Injecting aerosols** into the **lower stratosphere** to mimic the **cooling** induced by **volcanic eruptions** and **lowering the solar radiation** reaching the earth by placing **reflectors** or **shields** in space are some more **SRM techniques**.

What are the Issues related to Climate Engineering Highlighted in the Report ?

- **Ethical Issues:**
 - **Climate engineering methods** may pose a “**moral hazard**” by giving stakeholders a reason to avoid reducing **fossil fuel** use. A comprehensive approach involves considering these techniques as part of a broader portfolio of **climate policies**, moving away from the moral hazard framework.
 - **Climate engineering** faces the issue of “**organized irresponsibility**,” where uncertainties and combined environmental risks make it challenging to pinpoint

specific institutions responsible for assigning blame. This is because all institutions are interconnected and lack clear individual accountability.

➤ **Economical Issues:**

- **Climate engineering** could be pushed by corporations as a favored response to tackling **global warming** while fostering **business investments** and **economic growth**.
- **Deployment of climate engineering technologies** requires **international cooperation** among countries with **different economic interests**. It will be a challenge to tailor these technologies to help vulnerable countries while not endangering others.

➤ **Governance and Regulation Issues:**

- At present, action on **climate change** suffers from a **gap** between the **global approach** that it requires and the current nation state-based legal order.
- **Climate engineering governance** requires a **multi-level approach** and **coordinating with non-state actors**. The involvement of such actors can be a source of **risk**, however, **civil society** can also play an important role in pressuring institutions to **meet their obligations**, such as through **litigation**.

What are the Recommendations of UNESCO's Report?

- **UNESCO** recommended its Member States to **introduce legislation** that regulates climate action while also considering the **transboundary impact of their decisions** on all human beings and ecosystems.
- Countries should make regional agreements to avoid risks of **unequal spatial distribution of effects**.
- It called for a ban on using **climate engineering techniques** as a weapon (weaponization).
- It added that **political** or **economic** interests should not interfere with **scientific research** on **climate engineering**.



Note:

Security

Highlights

- Successful Training Launch of Short-Range Ballistic Missile 'Agni-1'
- Indian Navy Day 2023
- Pilatus PC-7 Mk II
- Extending BSF Jurisdiction
- Tejas Jets and Prachand Helicopters

Successful Training Launch of Short-Range Ballistic Missile 'Agni-1'

Why in News?

Recently, training launch of **Short-Range Ballistic Missile 'Agni-1'** was carried out successfully from APJ Abdul Kalam Island, Odisha. The launch, **carried out under the aegis of the Strategic Forces Command**, successfully validated all operational and technical parameters.

What is the Ballistic Missile 'Agni-1'?

➤ About:

- The **Agni-1** is a Short-Range Ballistic Missile (SRBM) developed by India as part of its Agni series of missiles. It is the **first missile in the Agni series and is designed to be a strategic weapon capable of carrying a nuclear payload**.
- The Agni-1 is primarily intended for use as a deterrent against potential adversaries and is known for its quick response time.
- It is the **first variant of the Agni series missiles under Integrated Guided Missile Development Program (IGMDP)**.

➤ Technical Specifications:

- The Agni-1 is a **single-stage, solid-fueled missile with a range of around 700 to around 1200 kilometers and can carry a payload of 1,000 kg**, making it a short-range ballistic missile. It has the **capability to carry both conventional and nuclear warheads**.
- The **solid-fuel propulsion** system enhances its operational flexibility and reduces launch preparation time.

➤ Development and Testing:

- The Agni-1 was developed by the **Defence Research and Development Organisation (DRDO)** in India. The missile has undergone several successful test launches to validate its performance and reliability.
- **Agni-1 was first tested at the Interim Test Range in Chandipur in 1989**. The Indian army accepted Agni-1 in service in 2007.



What are the Other Agni Class of Missiles?

The Agni series is a family of ballistic missiles developed by India, **with each variant designed for specific ranges and purposes**. Besides Agni-1, other notable missiles in the series include:

➤ Range of other Agni Missiles:

- **Agni II:** Range more than 2000 km.
- **Agni III:** Range of more than 2,500 Km
- **Agni IV:** Range is more than 3,500 km and can fire from a road-mobile launcher.
- **Agni-V:** The longest of the Agni series, an **Inter-Continental Ballistic Missile (ICBM)** with a range of over 5,000 km.
- **Agni Prime:** A two-stage canisterised missile (**under development**) has been successfully flight tested in June 2023.

Note:

- The missile is capable of delivering a number of warheads at separate locations at a **distance of 1,000-2,000 km.**

➤ **ICBMs:**

- It is a type of **long-range ballistic missile** with the capability to travel vast distances, typically intercontinental ranges.
- They play a crucial role in a country's nuclear triad, which includes **land-based missiles**, **submarine-launched missiles (SLBMs)**, and **strategic bombers**.
- ICBMs are characterized by their exceptionally long ranges, **typically exceeding 5,500 kilometers** (about 3,400 miles) and often reaching distances of over **10,000 kilometers** (more than 6,200 miles).
- ICBMs follow a **ballistic trajectory**, meaning they are launched into space before re-entering the Earth's atmosphere to strike their targets.

Indian Navy Day 2023

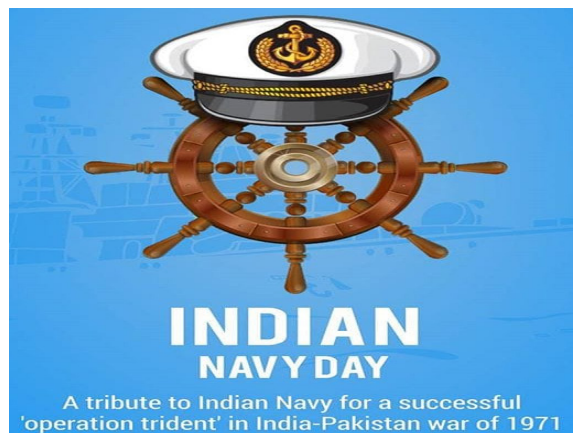
Why in News?

Recently, the **Prime Minister (PM)** of India declared on **Indian Navy Day** 2023 a government decision to eliminate the colonial military legacy by revealing that designations within the Indian Navy would be revamped to align with Indian cultural roots.

- PM also paid tributes to **Chhatrapati Shivaji Maharaj**, and unveiled a grand statue of the 17th century Maratha king at the coastal fort of Sindhugarh, Maharashtra.

What are the Announcements Made on Navy Day?

- **Symbolic Epaulettes and Indigenous Maritime Values:**
- The PM mentioned that the **epaulettes** (ornamental shoulder pieces denoting rank) **adorned by Naval officers** would now feature the **emblem** of Shivaji Maharaj's army.
 - He connected the Naval flag with the **heritage of Chhatrapati Shivaji Maharaj**, emphasizing the inspiration drawn from the historical figure.
 - The PM reiterated Shivaji Maharaj's belief in the **power of controlling the seas** and credited the Navy for embodying this principle.
 - Aligning with the Prime Minister's call to discard the colonial mindset, **the Navy adopted a new ensign in 2022 inspired by the legacy of Chhatrapati Shivaji Maharaj.**



➤ **Honoring Naval Warriors and India's Maritime History:**

- The PM paid tribute to historical naval warriors like **Kanhoji Angre, Mayaji Naik Bhatkar, and Hiroji Indulkar.**
- Indian Navy has named its training establishment in Lonavla as **INS Shivaji**, and the shore-based logistics and administrative hub of the Western Naval Command, Mumbai, as **INS Angre** — after Kanhoji Angre (1669-1729), the celebrated Maratha naval commander.

What were the Naval Legacies of the Maratha Empire under Shivaji?

- Inspired by conflicts with the **Siddis** and observing **Portuguese naval strength**, Shivaji emphasized the need for a robust navy and efficient port system. He strategically constructed coastal forts like **Vijaydurg and Sindhudurg** to safeguard against adversaries.
- Under Shivaji's leadership, the Maratha navy flourished, establishing strongholds at **Kolaba, Sindhudurg, Vijaydurg, and Ratnagiri**. Surpassing 500 ships, the Maratha navy successfully thwarted both Portuguese and British advances for over four decades. However, **after Shivaji's death in 1680, the Maratha navy weakened, marking a decline in its power and influence.**

Pilatus PC-7 Mk II

Why in News?

Two **Indian Air Force (IAF)** pilots were killed after their **Pilatus PC-7 Mk II** trainer aircraft crashed during a routine training sortie from the Air Force Academy at Dundigal, Telangana which marks the first crash involving the aircraft in nearly a decade.

Note:



What is Pilatus PC-7 Mk II Trainer Aircraft ?

➤ Trainer Aircraft:

- Trainer aircraft are **specialized planes meant for training pilots and aircrews**. Since modern military planes are complex and challenging for new pilots, trainers serve as a foundational step.
- These aircraft are simpler, slower, and more forgiving, helping rookies learn basic skills. They are also **cost-effective, allowing air forces to purchase them in large quantities for cadet training**.

➤ Types of Trainer Aircraft with IAF:

- The IAF currently operates **75 Pilatus PC-7 Mk II aircraft**, which are used for basic training in the first stage of a cadet's flight training.
- After basic training, cadets progress to the **HAL Kiran**, an intermediate jet-powered trainer, and then to the **BAE Hawk**, a British advanced trainer.

➤ Features of Pilatus Aircraft:

- The **PC-7** is a turbo-prop aircraft with tandem seating, introduced in the 1990s as an upgraded version of the original model from the 1970s.
- Powered by a **Pratt & Whitney engine**, it has a maximum speed of **412 km/h**, can reach over **10,000 m** in height, and has a range of 1,200 km without external tanks, providing slightly over 4 hours of flying time.

➤ IAF's Need of PC-7 Mk-II:

- The IAF procured 75 of these aircraft from **Pilatus Aircraft Ltd** (an aerospace manufacturer located in Stans, Switzerland) under a contract signed in 2012, to meet the critical shortage of trainer aircraft urgently needed to carry out the basic flying training for its pilots.
- The shortage emerged after the **indigenously developed HPT-32 aircraft** were grounded in 2010, after fatal crashes which killed multiple IAF pilots.

➤ Replacing PC-7 Mk II:

- Defence Ministry signed a contract with **Hindustan Aeronautics Ltd (HAL)** to procure 70 **HTT-40** for replacing PC-7.
- Designed indigenously, the **HTT-40 is a basic trainer aircraft** powered by a four-bladed turbo-prop engine (PC-7 is three-bladed).
 - The aircraft will have an **air-conditioned cockpit, modern avionics, hot refuelling, and zero-zero ejection seats**.

Extending BSF Jurisdiction

Why in News?

Recently, the **Supreme Court** clarified that the Centre's notification of 2021, which expands the **Border Security Force's (BSF's)** jurisdiction in Punjab **from 15 to 50 km**, only grants the BSF the authority to act concurrently in preventing specific offenses within these limits and it **does not diminish the investigative authority of the state police**.

- In 2021, the Punjab government moved the Supreme Court challenging the Centre's decision that expanded the BSF's jurisdiction.

What is the Centre's Notification About Extending BSF's Jurisdiction?

➤ About :

- The notification **replaced a 2014 order under the BSF Act, 1968**, which also covered the States of Manipur, Mizoram, Tripura, Nagaland and Meghalaya.
 - It also specifically mentioned the two newly created Union Territories- **J&K and Ladakh along with Assam, West Bengal and Punjab**.
- The violations for which the BSF carries out search and seizure include **smuggling of narcotics, other prohibited items, illegal entry of foreigners and offences punishable under any other Central Act** among others.
- After a suspect has been detained or a consignment seized within the specified area, the **BSF can only conduct "preliminary questioning"** and has to hand over the suspect to the local police within 24 hours.

Note:

- The BSF does not have the powers to prosecute crime suspects.

➤ Special Powers of BSF:

- In all border states, there is a power under the **BSF Act, 1968** to extend the jurisdiction of BSF so far as offences are considered. **Since 1969**, Gujarat has had 80 kms. In some states it was less. **Now it is uniform 50 kms.** And that would merely mean that with regard to some offences **under Criminal Procedure Code, 1973, Passport (Entry into India) Act, 1920 and Passport Act, 1967 etc**, BSF will also have jurisdiction.
- **Local police will continue to have jurisdiction.** BSF is also concurrently conferred with the jurisdiction.

What are the Different Issues Involved in the Extension of Jurisdiction?

➤ Larger Issues:

- **Public Order vs Security of State:** **Public order and Police** which connotes public peace, safety and tranquility, is primarily the responsibility of a **State Government (Entry 1 and Entry 2 of State list respectively)**.
- However, when there is a serious public disorder which threatens **the security or defence of the State or of the country itself (entry 1 of Union list)**, the situation becomes a matter of concern for the Union Government also.
- **Weakening Spirit of Federalism:** Without obtaining the concurrence of the state government, the notification amounts to encroachment on the powers of the states.
 - The Punjab Government has asserted that this notification is Centre's encroachment under the guise of security or development.
- **Affecting Functioning of BSF:** Policing in the hinterland is not the role of a border guarding force, **rather it would weaken the capacity of the BSF** in discharging its primary duty of guarding the international border.
- Issues Specific to Punjab:
 - For 50 km, they have the concurrent power along with the state police to exercise every power over every cognisable offence under **Indian Penal Code (IPC)**.

- When extended from 15 to 50 in a relatively small state like Punjab, all the major cities come under that.
 - So far as other states are considered — **Gujarat and Rajasthan** — Gujarat **has marsh land in a substantial portion**. There it can be reasonable to extend it because no major urban centres come within it. **Similarly in Rajasthan, there is desert.**

Constitutional Viewpoint on Deployment of Armed forces in States

- Under **Article 355**, the Centre can deploy its forces to protect a state against "external aggression and internal disturbance," **even when the state concerned does not requisition the Centre's assistance** and is reluctant to receive central forces.
- In the case of a state's opposition to the deployment of armed forces of the Union, the right course for the Centre is to first issue directives under Article 355 to the state concerned.
- In the event of the state not complying with the directive of the Central government, the Centre can take further action under **Article 356 (President's Rule)**.

What is BSF?

- The BSF was raised in **1965**, after the **India-Pakistan war**.
- It is one of the **seven Central Armed Police Forces** of the Union of India under the administrative control of the Ministry of Home Affairs (MHA).
 - Other Central Armed Police Forces are: Assam Rifles (AR), Indo-Tibetan Border Police (ITBP), Central Industrial Security Force (CISF), Central Reserve Police Force (CRPF), National Security Guards (NSG) and Sashastra Seema Bal (SSB).
- The 2.65-lakh force is deployed along the Pakistan and Bangladesh borders.
 - It is deployed on Indo-Pakistan International Border, Indo-Bangladesh International Border, **Line of Control (LoC)** along with Indian Army and in **Anti-Naxal Operations**.
- BSF has been defending **Sir Creek** in Arabian Sea and **Sundarban delta** in the **Bay of Bengal** with its state of art fleet of Water Crafts.
- It contributes dedicated services to the **UN peacekeeping Mission** by sending a large contingent of its trained manpower every year.

Note:

Tejas Jets and Prachand Helicopters

Why in News?

Recently, the **Defence Acquisition Council (DAC)** has sanctioned Rs 2.23 lakh crore for the procurement of **97 Tejas Light Combat Aircraft (Mark 1A)** and **156 Prachand Light Combat Helicopters (LCH)**, underscoring India's commitment to bolster its armed forces' combat capabilities.

- The procurement plan aims to source **98% of its total needs from domestic industries**, providing a significant boost to the Indian defense industry in its pursuit of **'Aatmanirbharta' (self-reliance)**.
- The DAC also approved a proposal of the Indian Air Force to upgrade its **Su-30 fighter fleet by state-run aerospace** major Hindustan Aeronautics Ltd (HAL).

What is Light Combat Aircraft (LCA)?

- **About:**
 - The LCA programme was started by the Government of India in 1984 when they established the Aeronautical Development Agency (ADA) to manage the LCA programme.
- **Features:**
 - Designed to carry a range of air-to-air, air-to-surface, precision-guided, weapons.
 - Air to air refueling capability.
- **Variants of Tejas:**
 - **Tejas Trainer:** 2-seater operational conversion trainer for training air force pilots.
 - **LCA Navy:** Twin- and single-seat carrier-capable for the Indian Navy.
 - **LCA Tejas Navy MK2:** This is phase 2 of the LCA Navy variant.
 - **LCA Tejas Mk-1A:** This is an improvement over the LCA Tejas Mk1 with a higher thrust engine.

What is a Light Combat Helicopter?

- **About:**
 - The LCH is the **only attack helicopter in the world** which can land and take off at an **altitude of 5,000 meters** with a considerable load of weapons and fuel.

- The helicopter uses radar-absorbing material to lower radar signature and has a **significantly crash-proof structure and landing gear**.
 - A pressurised cabin offers protection from Nuclear, Biological and Chemical (NBC) contingencies.
- The helicopter is equipped with a **countermeasure dispensing system** that protects it from enemy radars or infrared seekers of enemy missiles.
- LCH is powered by **two French-origin Shakti engines** manufactured by the HAL.

➤ Genesis:

- It was during the **1999 Kargil war that the need was first felt for a homegrown lightweight assault helicopter** that could hold precision strikes in all Indian battlefield scenarios.
 - This meant a craft that could operate in very hot deserts and also in very cold high altitudes, in counter-insurgency scenarios to full-scale battle conditions.
- India has been operating sub 3 ton category French-origin legacy helicopters, **Chetak and Cheetah**, made in India by the Hindustan Aeronautics Limited (HAL).
 - These single engine machines were, primarily, utility helicopters. Indian forces also operate the Lancer, an armed version of Cheetah.
- In addition, the Indian Air Force currently operates the **Russian origin Mi-17** and its variants Mi-17 IV and Mi-17 V5, with maximum take-off weight of 13 tonnes, which are to be phased out starting 2028.
- The government sanctioned the LCH project in October 2006 and HAL was tasked to develop it.

➤ Significance:

- The LCH has the capabilities of combat roles such as destruction of enemy air defence, counter insurgency warfare, combat search and rescue, anti-tank, and counter surface force operations.

What Different Types of Aircrafts India Has?

➤ Multi-Role Fighter Aircraft (MRFA):

- Designed to perform various missions such as **air-to-air combat, air-to-ground attack, and electronic warfare**.
- IAF pursuing the procurement of 114 MRFA to replace the aging fleet of Soviet-era MiG-21.
- Procurement will be carried out under the **Make in India initiative**.

Note:

- Selected vendor will have to set up a production line in India and transfer technology to local partners.

➤ **MiG-21:**

- Supersonic jet fighter and interceptor aircraft designed by the erstwhile USSR in the 1950s.
 - Widely used combat aircraft in history, with more than 11,000 units built and over 60 countries operating it.
- IAF acquired its first MiG-21 in 1963 and has since inducted 874 variants of the aircraft
- Involved in several wars and conflicts involving India. Involved in many accidents and crashes, earning it the nickname “flying coffin”.
- **IAF plans to phase out the MiG-21 by 2024** and replace it with more modern fighters.

➤ **Advanced Medium Combat Aircraft (AMCA):**

- An Indian program to develop a 5th generation stealth, multirole combat aircraft for the IAF and the Indian Navy.
- Designed and developed by the ADA of the **DRDO**, in collaboration with Hindustan Aeronautics Limited (HAL) and other public and private partners.
- Expected to have features such as a **stealth airframe, internal weapons bay, advanced sensors, data fusion, supercruise capability and swing-role performance.**
- Started in 2008 as a successor to the Sukhoi Su-30MKI
 - First flight planned for 2025 and production is expected to start after 2030.

➤ **Sukhoi Su-30MKI:**

- **Twin-engine, two-seat**, multirole fighter aircraft developed by Russia’s Sukhoi and built under license by India’s HAL for the IAF.

- Designed to perform air superiority, ground attack, electronic warfare, and maritime strike missions
- Entered service with the IAF in 2002 and has been deployed in several conflicts and exercises

➤ **Twin-Engine Deck-Based Fighter (TEDBF):**

- Manufactured for the Navy to replace the Navy’s MiG-29K.
- First twin-engine aircraft project in India for dedicated carrier-based operations.
- Equipped predominantly with domestic weapons.
- Maximum mach number of 1.6, service ceiling of 60,000 feet, maximum takeoff weight of 26 tons, unfolded wing.

➤ **Rafale:**

- **French twin-engine** and multirole fighter aircraft.
- India procured 36 Rafale jets for Rs 59,000 crore in 2016.
- Equipped to perform **air supremacy, interdiction, aerial reconnaissance, ground support, in-depth strike, anti-ship strike, and nuclear deterrence missions.**
- The weapons package of Rafale jets includes **Meteor missile, Scalp cruise missile, and MICA missile system.**
 - Meteor missile is the next generation of Beyond Visual Range air-to-air missile designed to revolutionize air-to-air combat, capable of targeting **enemy aircraft from 150 km away.**
 - SCALP Cruise Missiles **can hit targets 300 km away**, while MICA missile system is a versatile air-to-air missile capable of **hitting targets up to 100 km away.**
- Flight hour capacity of 30,000 hours in operations.



Note:

Art and Culture

Highlights

• ASI's Stance on Religious Practices at Monuments

• UNESCO Recognition to Gujarat's Garba Dance 108

ASI's Stance on Religious Practices at Monuments

Why in News?

A recent report on '*Issues relating to Untraceable Monuments and Protection of Monuments in India*' presented by a **parliament committee** recommends significant changes in the **Archaeological Survey of India's (ASI)** approach towards religious activities at protected monuments.

- Earlier, in May 2022, prayers at the 8th century **Martand Sun Temple in Jammu and Kashmir** sparked concerns from the ASI, operating under the Ministry of Culture, citing a violation of regulations.

What is the Current Policy on Worship at ASI Monuments?

- As of now, the ASI allows worship and rituals only at monuments where such traditions were **ongoing at the time the ASI took custody**.
 - The best-known example of a living ASI monument is the **Taj Mahal** where namaz is held every Friday.
 - Other notable living monuments include **three mosques in Kannauj, the Roman Catholic Church in Meerut, the Nila Mosque in Delhi's Hauz Khas Village and several Buddhist monasteries in Ladakh**.
- This restriction aims to preserve the historical and cultural integrity of the monuments.
- No religious rituals can be conducted at **non-living monuments** where there has been no continuity of worship since it became an ASI-protected site.
 - The policy decision prohibits the revival of worship in cases where it was not in practice at the time of protection or has been abandoned for an extended period.

- Out of the **3,693 centrally protected monuments** and archaeological sites managed by the ASI, around a **fourth (820) include places of worship**, while the rest are considered non-living monuments where no new religious rituals can be started or conducted.
 - These sites encompass a diverse range of religious structures, such as temples, mosques, dargahs, and churches.
- The Martand Sun Temple, commissioned by **King Lalitaditya Muktapida of the Karkota dynasty**, was **once a thriving place of worship**. However, it was destroyed in the 14th century.
 - ASI took control in the 20th century for conservation, **no puja or Hindu ritual was being held there**. Recent pujas in 2022, led by devotees, were deemed a **violation of ASI norms for non-living monuments**.

What are the Committee's Recommendations on Worship at ASI Monuments?

- **Recommendations:**
 - The committee suggests exploring the possibility of **permitting prayers and worship** at ASI-protected monuments with religious significance.
 - This potential shift in policy raises questions about its implications for various religious sites.
 - Recommends that the Ministry of Culture and ASI conduct surveys to identify monuments promptly and make the results public, stressing the importance of transparency and accountability in addressing critical issues related to monument protection.
- **Concerns Against the Committee's Recommendations:**
 - Allowing religious activities at protected monuments **may pose a threat to the integrity, authenticity and historical value of the monuments**, as they may be subjected to alterations, additions, modifications or damage by the devotees or the authorities.

Note:



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- Allowing religious activities at protected monuments may also create conflicts and **disputes among different religious groups**, who may claim ownership or rights over the monuments, or object to the activities of other groups.

Archaeological Survey of India (ASI)

- ASI, under the **Ministry of Culture**, is the **premier organization for the archaeological research and protection of the cultural heritage** of the nation.
- It administers more than 3650 ancient monuments, archaeological sites and remains of national importance.
- Its activities include **carrying out surveys of antiquarian remains, exploration and excavation of archaeological sites, conservation and maintenance** of protected monuments etc.
- It was **founded in 1861 by Alexander Cunningham**- the first Director-General of ASI. Alexander Cunningham is also known as the **"Father of Indian Archaeology"**.
- It oversees all archaeological undertakings within the nation by the **Ancient Monuments and Archaeological Sites and Remains Act, of 1958.**

UNESCO Recognition to Gujarat's Garba Dance

Why in News?

Recently, the **United Nations Educational, Scientific and Cultural Organization (UNESCO)**, during its 18th session of the Intergovernmental Committee in Botswana, officially added **Gujarat's iconic Garba dance** to its esteemed **Representative List of Intangible Cultural Heritage (ICH) of Humanity.**

- The Garba dance form is the **15th cultural item from India to make it to the UNESCO list.** **Kolkata's Durga Puja** was the last one added in 2021.

What is the Garba Dance?

- Garba is a form of **Gujarati folk dance** that is performed during the **nine-day Hindu festival of Navratri**, which celebrates the victory of good over evil.

- The name Garba comes from the **Sanskrit word for womb**, implying life and creation.
- Garba dances celebrate **fertility, honor womanhood, and pay respect to any of an array of mother goddesses.**
 - The dance also customarily marks a girl's first menstrual cycle and, later, her imminent marriage.
- The dance is performed around a **centrally lit lamp or a picture or statue of the Goddess Shakti**, who represents the feminine energy of the universe.
- Garba is accompanied by rhythmic music, singing, and clapping. The dance can be performed by anyone, regardless of age, gender, or social status.
- Modern Garba is heavily influenced by **Dandiya Raas**, a dance traditionally performed by men. The merger of these two dances has formed the high-energy Garba dance that is seen today.
- Garba fosters **social equality by diluting socio-economic, gender, and rigid sect structures.**
 - It continues to be inclusive and participative by diverse and marginalized communities, strengthening community bonds.



Note:

What is UNESCO Intangible Cultural Heritage (ICH)?**➤ About:**

- UNESCO ICH is a term that refers to the practices, representations, expressions, knowledge, skills, and cultural spaces that are recognized as part of the cultural heritage of a community, group, or individual.
- UNESCO defines ICH as “the mainspring of humanity’s cultural diversity and its maintenance a guarantee for continuing creativity.”
- In 2003, UNESCO adopted the Convention for the **Safeguarding of the Intangible Cultural Heritage (ICH)**, signifying a commitment to protect, promote, and transmit the diverse expressions of human culture.
- The convention establishes two crucial lists for ICH.
 - **Representative List:** Showcasing the global diversity of ICH, this list raises awareness of its significance and importance.
 - **Urgent Safeguarding List:** Identifying threatened ICH, this list calls for immediate measures to ensure its survival.

➤ Examples of ICH:

- Languages, oral traditions, literature, and poetry.
- Performing arts, such as music, dance, and theatre.
- Social practices, rituals, and festive events.
- Knowledge and practices concerning nature and the universe.
- Traditional craftsmanship, such as pottery, weaving, and metalwork.

➤ Existing UNESCO’s ICH list of India:

Note:

History

Highlights

- Dr. Rajendra Prasad

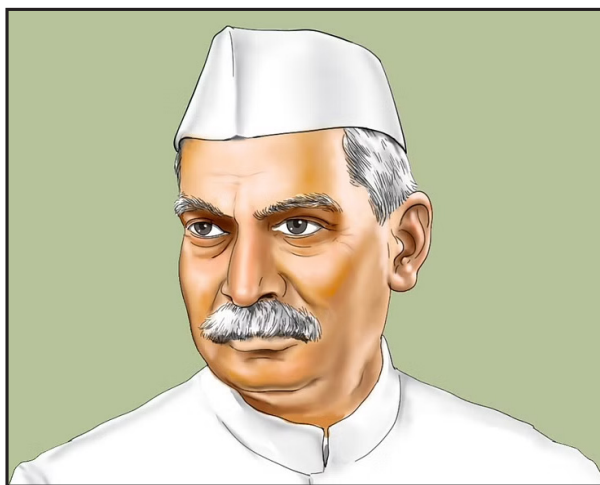
Dr. Rajendra Prasad

Why in News?

Recently, the President of India has paid tributes to [Dr. Rajendra Prasad](#), the first President of India on his birth anniversary.

Who Was Dr. Rajendra Prasad?

- Dr. Rajendra Prasad was born in Zeradei, Siwan, Bihar on 3rd December 1884.
- He was associated with [Mahatma Gandhi](#) during the [Champaran Satyagraha](#) (1917) in Bihar.
- Dr. Prasad reacted strongly to the [Rowlatt Act of 1918](#) and the [Jallianwala Bagh massacre of 1919](#).
 - He called for **non-cooperation** in Bihar as part of [Gandhi's non-cooperation movement](#).
- Played a significant role in the [Salt Satyagraha](#) in Bihar in 1930, leading to his imprisonment.
- He officially **joined the Indian National Congress in 1911**, during its annual session held in Calcutta.
 - Joined the Interim Government in 1946 as the Minister of Food and Agriculture. and gave the slogan of "Grow More Food".
- He served as the first President of India from January 26, 1950, when the country adopted its [constitution](#), until May 13, 1962, holding the record for the longest-serving President.
- On January 26, 1950, he was elected India's First President. His tenure as the President for over 12 years makes him the **longest-serving President** in the history of India.
- Dr. Prasad was awarded the [Bharat Ratna](#) in 1962. He authored several books, including "[Satyagraha at Champaran](#)," "[India Divided](#)," and his autobiography "[Atmakatha](#)."
- Passed away on February 28, 1963.



Note:

Miscellaneous

Highlights

- Anarcho-Capitalism
- Painkiller Meftal and DRESS Syndrome
- Article 99 of the UN Charter
- 91st Interpol General Assembly
- Protests Over National Medical Commission Logo
- NGT's Intervention in Haryana's Illegal Mining Issue
- India's Elevated Role in Codex Alimentarius Commission
- India Re-elected to International Maritime Organisation Council

Anarcho-Capitalism

Why in News?

The term “**anarcho-capitalism**” has recently gained attention, particularly with the recent electoral victory of **Javier Milei**, a self-proclaimed anarcho-capitalist, in the presidential race in Argentina.

- This political philosophy advocates for the **abolition of the state**, proposing that **private companies manage law and order** in a free market.

What is Anarcho-Capitalism?

➤ About:

- Anarcho-capitalism, political philosophy and political-economic theory that advocates the voluntary exchange of goods and services in a society broadly **regulated by the market rather than by the state**.
- The term anarcho-capitalism was coined by **Murray Rothbard**, a leading figure in the American libertarian movement from the 1950s.
- Anarcho-capitalists assert that **private companies** in a free market **can efficiently provide policing and legal services**.
- The philosophy contends that similar to private sectors offering superior products and services, private policing and legal systems can outperform state-monopolized counterparts.
 - In an anarcho-capitalist society, individuals pay private police and courts for protection and dispute resolution.
 - Private companies, driven by customer patronage, are argued to be more accountable, as dissatisfied customers can **switch to competing services**.

- Anarcho-capitalists advocate for competitive markets, asserting that they guarantee **top-tier and cost-effective police and legal services**. This contrasts with **state-funded systems**, providing customers the **freedom to select services aligned with their preferences and needs**.

➤ Concerns:

- Multiple private firms offering police and judiciary services in a single region **may lead to armed conflicts and chaos**.
- Skepticism arises about a **market-based system favouring the wealthy**, allowing them to escape justice by paying more to private firms.
 - Apprehensions exist that a **profit-driven system could marginalize the poor**, limiting their access to justice.
- Critics worry that **without a centralized authority**, private firms may not be **accountable to the broader public**, influencing justice based on financial interests, and potentially compromising the **integrity of justice**.
- The absence of a centralized authority may **increase the risk of vigilantism**, where individuals or groups take the law into their own hands.
 - Anarcho-capitalism could **worsen societal inequalities**, providing better legal protection for those who can **afford premium services**.
- The absence of a standardized legal framework may result in varying standards of justice, creating uncertainty and inconsistency in legal outcomes.

➤ Anarcho-Capitalist Responses to Concerns:

- Private firms would **aim to satisfy the larger market**, not just the wealthy, ensuring fair and accessible justice for all.
- In a competitive market, private firms **depend on customer patronage**, making them accountable to the public and responsive to their needs.

Note:



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- Private firms may strive to meet the demand at the **bottom of the pyramid**, potentially offering better chances of justice for the poor.
- Competitive pressures among private firms would lead to agreements on common rules, preventing conflicts and potential vigilantism.

Painkiller Meftal and DRESS Syndrome

Why in News?

Recently, the **Indian Pharmacopoeia Commission (IPC)** has issued a drug safety alert about **Meftal**, the common painkiller, saying its constituent, **mefenamic acid**, triggers severe allergic reactions like the **DRESS syndrome**, which affects internal organs.

What is DRESS Syndrome?

- **DRESS syndrome** (Drug Rash with Eosinophilia and Systemic Symptoms) is a severe allergic reaction affecting around 10% of individuals, **potentially deadly** and caused by certain medications.
- It is also known as **Drug-Induced Hypersensitivity Syndrome (DIHS)**.
- It is characterized by **skin rash, high fever, swollen lymph nodes** and complications in internal organs.

What is the Use and Associated Side Effects of Meftal?

- **Uses:**
 - Meftal is commonly used as **non-steroidal anti-inflammatory drug (NSAID)**.
 - It is widely used in India for multiple purposes, including relieving **menstrual pains**, **headaches**, **muscle** and **joint pain**, and is even prevalent among **children for high fever**.
- **Associated Side Effects:**
 - Prolonged use of drugs like **Meftal** may increase the risk of **stomach ulcers**, **bleeding** and related complications.
 - Meftal has been associated with potential adverse effects on the **cardiovascular system**.
 - Some experts have flagged **renal complications** as a potential side effect of **Meftal**.

What is Indian Pharmacopoeia Commission (IPC)?

- IPC is an Autonomous Institution of the **Ministry of Health and Family Welfare**.
- IPC was created to set standards for drugs in India. Its basic function is to regularly update the **standards of drugs** commonly required for the **treatment of diseases** prevailing in this region.
- It publishes official documents for improving the **Quality of Medicines** by way of adding new and updating existing monographs in the form of **Indian Pharmacopoeia (IP)**.
 - It further promotes the **rational use of generic medicines** by publishing the National Formulary of India.
- IPC also provides **IP Reference Substances (IPRS)** which act as a fingerprint for identification of an article under test and its purity as prescribed in IP.

Article 99 of the UN Charter

Why in News?

Recently, the **United Nations(UN) Secretary-General Antonio Guterres** invoked **Article 99 of the UN Charter**.

- This move was intended to warn the **UN Security Council** about the danger caused by **Israel's actions in Gaza**. This step is meant to draw attention to the pressing need to prevent a **major humanitarian disaster** in the area.

What is Article 99 of the UN Charter?

- Article 99 is a provision within the United Nations Charter, serving as the U.N.'s constitution.
 - It empowers the secretary-general to **bring attention to the Security Council** about matters that, in their opinion, could **threaten international peace and security**.
- Article 99 is considered **discretionary**, allowing the Secretary-General to highlight **critical issues**, and it requires the Security Council's attention when invoked.
 - This article has been sparingly used, with previous invocations including addressing the **upheaval in the Republic of the Congo** in 1960, Tunisia's complaint against France's military actions in 1961, and the **creation of Bangladesh in 1971**.

Note:

Charter of the United Nations

- The Charter of the UN is the founding document of the UN. It was signed on 26th June 1945, in San Francisco and came into force on 24th October 1945.
- The UN can take action on a wide variety of issues due to its unique international character and the powers vested in its Charter, which is considered an **international treaty**.
 - As such, the UN Charter is an **instrument of international law**, and UN **Member States** are bound by it.
- The **International Court of Justice (ICJ)**, the primary judicial body of the United Nations, operates by its Statute, annexed to the UN Charter as an integral part.

UN Security Council (UNSC)

The UN Charter vests the primary responsibility for maintaining international peace and security to the UNSC

About

One of the **6 principal organs** of UN; established in **1945** by UN Charter

Headquarters

New York City

First Session

17 January 1946 at Church House, Westminster, London

Membership

- 15 members - 5 Permanent Members (P5), 10 Non-Permanent Members elected for two-year terms (5 elected each year)
- P5 - the US, the UK, Russia, France and China

Presidency

- Rotates every month among the 15 members
- India's Presidency for year 2022 - December

Voting Powers

- 1 member = 1 vote
- P5 have **veto power**
- Members of UN sans membership of UNSC participate without vote

UNSC Committees/Resolutions

Terrorism

- Resolution 1373 (Counter Terrorism Committee)
- Resolution 1267 (Da'esh and Al Qaeda Committee)

Non-Proliferation Committee

- Resolution 1540 (against nuclear, chemical and biological weapons)

India and UNSC

- Served **7 times** as non-permanent member; elected for the **8th time** for 2021-22; **advocates for a permanent seat**
- Arguments for a permanent seat:
 - **43 peacekeeping missions**
 - Active participation in **formulating Human Rights Declaration (UDHR)**
 - India's **population, territorial size, GDP, economic potential, cultural diversity, political system** etc.



G4

Group of 4 countries (Brazil, Germany, India and Japan) which advocate each other's bids for permanent seats in the UNSC

Uniting for Consensus (UfC) Movement

- Informally known as the **Coffee Club**
- Countries **oppose the expansion Permanent Seats** of UNSC
- **Prime movers of the club** - Italy, Spain, Australia, Canada, South Korea, Argentina and Pakistan
- Italy and Spain are opposed to Germany's bid; Pakistan - India's bid; Argentina - Brazil's bid and Australia - Japan's bid

Major Challenges in UNSC

- Usual UN rules don't apply to UNSC deliberations; **no records of meetings kept**
- Powerplay in UNSC; **anachronistic veto powers** of P5
- **Deep polarisation** among P5; frequent divisions end up blocking key decisions
- **Inadequate representation** of many regions among of the world

91st Interpol General Assembly

Why in News?

Recently, the Indian delegation, led by the **Central Bureau of Investigation (CBI)** and **National Investigation Agency (NIA)**, urged member countries to deny safe havens to **crime, criminals**, and the **proceeds of crime** at the **91st Interpol General Assembly** held in Vienna, Austria.

- **Criminals** and **fugitives** wanted by Indian agencies have been successfully returned through increased leveraging of Interpol channels and enhanced relationships with international law enforcement agencies.

What are the Key Highlights of the 91st Interpol General Assembly?

- During the **91st Interpol General Assembly**, resolutions were passed to strengthen the collaborative response to **disrupt financial crime** and **corruption**, **combat online child sexual exploitation**, and promote diversity within Interpol itself.
- The delegation engaged in discussions with law enforcement agencies from various countries on coordinated strategies to combat **organized crime**, **terrorism**, **drug trafficking**, **money laundering**, **online radicalization**, and **cyber-enabled financial crimes**.
- They also advocated for **real-time prevention** of these crimes.
- The delegation supported the adoption of **Interpol's Vision 2030** and the establishment of the **Interpol Future Council**.



Note:

What is CBI?

- **Central Bureau of Investigation (CBI)** is the premier investigating police agency in India.
 - It provides assistance to the **Central Vigilance Commission** and **Lokpal**.
- It functions under the superintendence of the **Department of Personnel, Ministry of Personnel, Pension & Public Grievances, Government of India**.
- It is also the **nodal police agency** in India which coordinates investigations on behalf of **Interpol Member countries**.

Protests Over National Medical Commission Logo

Why in News?

The **National Medical Commission (NMC)** has recently changed its logo, which has sparked a controversy among the **medical fraternity**.

- The new logo features a colourful image of **Dhanvantri**, an avatar of Lord Vishnu who is considered the **god of Ayurveda** in Hindu mythology.
- The new logo also replaces the word 'India' with 'Bharat', and does not include the **national emblem**.



Why are the Doctors Protesting Against the NMC logo?

- NMC officials justify Dhanvantri's presence in the logo as a representation of **India's rich cultural and mythological heritage in the field of medicine**.
- The **Indian Medical Association (IMA)** contends that the revised logo may promote a **specific religion and ideology**, prompting the IMA to express reservations about religious symbolism in the visual identity of a vital medical institution.

- IMA argues that the logo of any national institution ought to capture the **aspirations of all our citizens in an equal manner** and by remaining neutral in all respects thereby eliminating any possibility of any part or section of the society feeling aggrieved in any manner.

- The logo change is also seen as disrespect to the **constitution**, as it undermines the **secular and democratic values of the country**.
- The logo change is also seen as a contradiction to the scientific and evidence-based nature of the modern medical system, as it promotes a **mythical and unproven system of Ayurveda**.

Dhanvantri

- Dhanvantri is revered as the **deity associated with Ayurveda**, the traditional system of medicine in Hinduism.
 - Dhanvantri symbolizes healing, well-being, and the restoration of health.
- Typically depicted with four hands, carrying medicinal herbs and the sacred pot, Dhanvantri is an iconic figure in the realm of health and medicine in Hindu culture.

What is the National Medical Commission (NMC)?

- NMC is the **apex regulatory body for medical education and practice in India**.
- NMC was established in 2020 by the **National Medical Commission Act, 2019**, replacing the **Medical Council of India (MCI)**.
- NMC consists of four autonomous boards: the Under-Graduate Medical Education Board, the Post-Graduate Medical Education Board, the Medical Assessment and Rating Board, and the Ethics and Medical Registration Board.
- NMC also has a **Medical Advisory Council**, which advises the commission on matters related to medical education and practice.
- NMC is responsible for conducting and overseeing major screening tests, such as NEET-UG, NEET-PG, and FMGE.
- NMC also regulates the **standards and quality of medical education and training**, the registration and ethics of medical practitioners, and the assessment and rating of medical institutions.

Note:



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- NMC has also achieved the prestigious **World Federation for Medical Education (WFME)** recognition, which means that the medical degrees awarded by the NMC are recognized globally.
 - The WFME was founded in 1972 by the World Medical Association, the World Health Organization, and other organizations.

NGT's Intervention in Haryana's Illegal Mining Issue

Why in News?

The **National Green Tribunal (NGT)** has recently taken stringent action against the state of Haryana for its **failure to address illegal mining concerns in Gurgaon's Rithoj village**.

What is Illegal Mining?

- **About:** Illegal mining is the **extraction of minerals, ores, or other valuable resources from land or water bodies** without the necessary permits, licenses, or regulatory approvals from government authorities.
 - It can also involve the violation of environmental, labor, and safety standards.
- **Laws Related to Mining in India:**
 - The entry at serial No. 23 of **List II (State List)** to the Constitution of India mandates the state government to own the **minerals located within their boundaries**.
 - The entry at serial No. 54 of **List I (Central List)** mandates the central government to own the minerals within the **exclusive economic zone of India (EEZ)**.
 - In pursuance to this **Mines & Minerals (Development and Regulation) (MMDR) Act of 1957** was framed.
 - The power to frame **policy and legislation relating to minor minerals is entirely delegated to the State Governments** while policy and legislation relating to the **major minerals are dealt by the Ministry of Mines under the Union Government**.

What is the National Green Tribunal?

- **Foundation:** The NGT was established in **October, 2010**, under the **National Green Tribunal Act 2010**.
 - Its primary focus is to facilitate the swift and efficient resolution of cases related to **environmental protection, conservation of forests, and preservation of natural resources**.
 - Currently, **New Delhi** serves as the principal place of sitting of NGT, with **Bhopal, Pune, Kolkata, and Chennai** designated as the other four places of sitting for the Tribunal.
- **Structure:**
 - The Tribunal is headed by the **Chairperson who sits in the Principal Bench** and has at least 10 but not more than 20 judicial members and expert members.
 - The Chairperson is appointed by the Central Government in consultation with the **Chief Justice of India (CJI)**.
 - A Selection Committee shall be formed by the central government to appoint the Judicial Members and Expert Members.
- **Legal Mandate:** The Tribunal's jurisdiction **extends to enforcing environmental rights, granting relief and compensation for damages to individuals and property**, and addressing matters associated with environmental protection and conservation.
 - It operates independently of the **procedural rules laid down in the Code of Civil Procedure, 1908**, guided instead by principles of natural justice.
 - Any person seeking relief and compensation for environmental damage involving subjects in the legislations mentioned in **Schedule I of the National Green Tribunal Act, 2010** may approach the Tribunal. **The statutes in Schedule I are:**
 - The Water (Prevention and Control of Pollution) Act, 1974
 - The Water (Prevention and Control of Pollution) Cess Act, 1977
 - The Forest (Conservation) Act, 1980
 - The Air (Prevention and Control of Pollution) Act, 1981
 - The Environment (Protection) Act, 1986
 - The Public Liability Insurance Act, 1991
 - The Biological Diversity Act, 2002

Note:

India's Elevated Role in Codex Alimentarius Commission

Why in News?

Recently, India has been unanimously elected as a **member** representing the Asian region in the **Executive Committee of Codex Alimentarius Commission (CAC)** during its **46th meeting at Food and Agriculture organization (FAO) headquarters at Rome.**

- India proposed the establishment of global standards for **millets** like **Finger millet, Barnyard millet, Kodo millet, Proso millet, and Little millet**, similar to group standards set for pulses. This proposal gained unanimous endorsement during the session.
- Codex currently has standards for **Sorghum and Pearl Millet.**

What is Codex Alimentarius Commission (CAC)?

- **About:**
 - CAC is an international food standards body established jointly by the **FAO and the World Health Organization (WHO)** in May 1963 with the objective of **protecting consumer's health and ensuring fair practices in food trade.**
- **Recognition:**
 - The **Agreement on Application of Sanitary and Phytosanitary Measures (SPS) of the World Trade Organization (WTO)** recognizes **Codex standards, guidelines and recommendations** as reference standards for international trade and trade dispute settlement.
- **Members:**
 - Currently the **Codex Alimentarius Commission has 189 Codex Members** made up of **188 Member Countries and 1 Member Organization (The European Union).**
 - India became the member of Codex Alimentarius in 1964.
- **Codex Standards:**
 - **General Standards, Guidelines and Codes of Practice:** These core Codex texts typically deal with **hygienic practice, labeling, contaminants, additives, inspection & certification, nutrition**

and residues of veterinary drugs and pesticides and apply horizontally to products and product categories.

- **Commodity Standards:** Codex commodity standards refer to a **specific product** although increasingly Codex now develops standards for food groups.
- **Regional Standards:** Standards developed by the **respective Regional Coordinating Committees**, applicable to the respective regions.

Note: The Agreement on Application of Sanitary and Phytosanitary Measures (SPS) entered into force with the **establishment of the World Trade Organization on 1 January 1995.** The SPS Agreement concerns the application of food safety and animal and plant health regulations. It aligns with international standards set by **Codex Alimentarius, the World Organization for Animal Health, and the International Plant Protection Convention.**

India Re-elected to International Maritime Organisation Council

Why in News?

Recently, India has been re-elected to the **International Maritime Organisation (IMO) Council**, marking its continuous service at IMO.

- This re-election, part of the 2024–25 biennium, places India among the Category of **10 states with "the largest interest in international seaborne trade,"** reaffirming its pivotal role in **global maritime affairs.**

What is the International Maritime Organisation?

- **About:**
 - The IMO is a **specialized agency of the United Nations (UN)** that is responsible for **regulating shipping and preventing marine pollution** from ships.
 - IMO was established in 1948 following a UN conference in Geneva and came into existence in 1958.
- **Members:**
 - IMO has 175 Member States and three Associate Members, and its headquarters are in **London, United Kingdom.**
 - India joined the IMO in 1959.

Note:

➤ **Role:**

- Its main role is to create a **regulatory framework** for the shipping industry that is **fair and effective, universally adopted** and universally implemented.
- It is also involved in **legal matters**, including **liability** and **compensation issues** and the **facilitation of international maritime traffic**.
- IMO celebrates **World Maritime Day** every last Thursday of September, to highlight the importance of shipping and maritime activities.

➤ **Structure of IMO:**

- IMO is governed by an **assembly of members**, which meets every two years, and a **council of 40 members**, which is elected by the assembly for a two-year period.
 - The Assembly is the highest Governing Body of the IMO.
- The **IMO Council, being the executive organ**, is responsible for supervising the organization's work, especially in maritime safety and pollution prevention.

- IMO's work is conducted through five committees and several subcommittees, which develop and adopt international conventions, codes, resolutions, and guidelines.

➤ **India and IMO:**

- India maintains to be in **Category B of IMO Council**, highlighting its **consistent commitment to maritime affairs**.
- **India's Vision 2030** aims to enhance **representation at IMO** by appointing permanent representatives at IMO London.
- The **Amrit Kaal Vision 2047** outlines goals to strengthen India's global maritime presence.
 - Initiatives include establishing a dedicated IMO cell, appointing a permanent representative at IMO headquarters, and implementing the **Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC)** Master Plan.

Note:

Rapid Fire Current Affairs

Highlights

- Bills for Women's Quota in J&K and Puducherry
- INS Tarmugli
- Decoding Jamun's Medicinal Might
- Celebrating Energy Efficiency: National Energy Conservation Day 2023
- Tihar Store
- Goldfish
- Turbulence
- Demaorchestia alanensis
- Cough Syrup Samples Fail Export Quality Test
- NTPC Wins Brandon Hall Group's Excellence in Technology Awards 2023
- Chip-In-Ball Technology to Make Handball Decisions Easier
- Mummified Baboons
- Male Mosquitoes with Bloodsucking Behavior
- Military Exercise "VINBAX-2023"
- Project ARTHA Ganga
- Pinna Nobilis
- Wed in India
- SC Deploys SUVAS for Regional Language Accessibility
- Mera Gaon Meri Dharohar Project
- Suvidha Sanitary Napkins under PMBJP
- IMO Green Voyage 2050 Project
- Advancements in TB Care
- Hanukkah
- Central Tribal University in Telangana
- Ban on Sugarcane Juice for Ethanol
- Armed Forces Flag Day
- Adopt A Heritage program 2.0.
- Kiwi Bird
- Dr. B R Ambedkar Death Anniversary
- Google Unveils Project Gemini
- International Civil Aviation Day 2023
- Implementing "Nari Adalat" Under Mission Shakti 128
- South Eastern Coalfields Ltd to Use "Miyawaki" Plantation Method
- One District One Product in PMFME Scheme
- Fake MGNREGS Job Cards Deleted
- Rising Cases of Mpox in the Democratic Republic of the Congo
- Marapi Volcano
- India's Manufacturing PMI Rises
- Tele-MANAS Cell for Armed Forces Mental Health Support
- Indian Navy Day 2023
- New International Air Routes Open for Northeast India
- MAHASAGAR Initiative
- NCMC Reviews Cyclone 'Michaung' Preparedness
- 40th Coast Guard Commanders' Conference
- Accelerated Growth of the Core Sector
- Three Anti-Submarine Warfare Ships for Indian Navy
- Delhi High Court Scrutinizes 'Walk with Wildlife' Event in Asola Sanctuary
- 9th National Level Pollution Response Exercise (NATPOLREX-IX)
- DGCA Cautions Airlines Against Fake Navigational Signals
- Pulses, Oil seeds, Fruit Output to Lag Demand Till 2030-31

Bills for Women's Quota in J&K and Puducherry

Recently, the **Lok Sabha** passed two Bills to extend the provisions of the **Constitution (106th Amendment) Act, 2023** that grants **33%** reservation for women in Parliament and State legislatures to the Union Territories of **Puducherry** and **Jammu and Kashmir**.

- The Ministry of Home Affairs introduced the **Jammu and Kashmir Reorganisation (Second Amendment) Bill, 2023** and the **Government of Union Territories (Amendment) Bill, 2023** in the **Lok Sabha**.
- The two Bills seek to enable greater representation and participation of women as **public representatives** in **law-making processes** in the legislative assemblies of **Puducherry** and **Jammu and Kashmir**.

Note:



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- Parliament needs to amend the **Government of Union Territories Act, 1963**, to establish reservations for women in the Puducherry Legislative Assembly.

WOMEN Reservation Act, 2023

(106th Constitutional Amendment Act)

OBJECTIVE

- Reserve 1/3rd of total seats in LS and state Legislative Assemblies (LAs) for women

BACKGROUND

- Bill previously introduced in: 1996, 1998, 2009, 2010, 2014
- Related Committees:
 - » Committee on the Status of Women in India (1971)
 - » Committee under Margaret Alva (1987)
 - » Geeta Mukherjee Committee (1996)
 - » Committee on the Status of Women (2013)

Key Features

Articles Inserted:

- Article 330A – Reservation for Women in LS
- Article 332A – Reservation for Women in State LAs
- Article 239AA – Reservation for Women in NCT of Delhi
- Article 334A – Reservations to become effective after delimitation is undertaken and Census is conducted

Time Period:

- Reservation to be provided for **15 years** (can be extended)

Rotation of Seats Reserved:

- After each delimitation

NEED

- Political Underrepresentation:
 - » Only **82 Women MPs in LS (15.2%)** and 31 in RS (13%)
 - » On avg, women constitute only 9% of the total members in State LAs



ARGUMENTS

In Favour:

- » Vital step towards gender equality
- » Broader range of perspectives to the decision-making process
- » Helps eliminate discrimination against women in political/public life

Against:

- » Delimitation based on 2021 census (yet to be conducted) is mandatory
- » No women's reservation in RS and State Legislative Councils

STEPS AHEAD

- Reservation for women within political parties
- Independent political decision-making by women; overcoming Sarpanch-patrim



Read More: **Women Reservation Act, 2023 - Women in Politics**

INS Tarmugli

The **Indian Navy** recently commissioned **INS Tarmugli**, a **fast attack craft (FAC)**, showcasing maritime diplomacy and strength.

- The ship was commissioned in the Indian Navy as **INS Tillanchang**, a **Trinkat Class ship**, was in active

service till 2006, and thereafter gifted to the **Maldives National Defence Force (MNDF)** government of India in 2006 as part of diplomatic outreach in the **Indian Ocean Region (IOR)**.

- The ship was returned to the Indian Navy in May 2023, the warship is fitted with **MTU engines**, the **latest communication equipment**, and an advanced **Radar system** and will be extensively used for coastal surveillance and protection along the **east coast of India**.

Note:

- The ship is named after **Tarmugli Island**, a small island in the **Andaman group**.

India, Asian Development Bank Ink Deal for Uttarakhand Power Project

The signing of the **USD 200 million loan agreement between the Government of India and the Asian Development Bank (ADB)** marks a significant step towards **fortifying Uttarakhand's power infrastructure**.

- Aimed at enhancing **quality, efficiency, and reliability**, the project will introduce a modernized underground cable system spanning 537 km, along with substations and power lines to **meet escalating electricity demands and ensure smoother integration of renewable energy**.
- ADB is a regional development bank established in 1966 with the objective of promoting social and economic development in Asia and the Pacific.
 - It has 68 members; 49 are from within Asia and the Pacific and 19 outside. **India is a founding member**. ADB is **headquartered in Manila, Philippines**.

Read more: [Asian Development Bank](#)

Decoding Jamun's Medicinal Might

The first-ever genome sequencing of the **jamun tree (*Syzygium cumini*)** by researchers at **IISER Bhopal** has revealed the **pharmacological properties embedded within this species**. Jamun tree is an **evergreen tree** popular in India for its medicinal properties, fruits, and ornamental value.

- Jamun's genetic code uncovers a rich array of **bioactive compounds responsible for its antioxidant, anti-inflammatory, and anti-diabetic attributes**.
 - The study also highlights the **presence of genes linked to terpenoids and glucosides**, key contributors to its defense mechanisms and anti-diabetic capabilities respectively.
- **Genome sequencing** is the process of determining the exact order of **DNA** building blocks in an organism, unveiling its complete genetic blueprint.

Read more: [Genome Sequencing in India](#)

Celebrating Energy Efficiency: National Energy Conservation Day 2023

The **National Energy Conservation Day**, observed on 14th December annually, serves as a platform to highlight India's achievements in energy efficiency.

- Hosted by the **Bureau of Energy Efficiency** under the Ministry of Power, Government of India, the event is integral to the **Energy Conservation Act 2001's** mandate to **promote and regulate energy efficiency**.
- The **Bureau of Energy Efficiency, established in 2002**, operates with a mission to reduce the energy intensity of India's economy through self-regulation, market principles, and collaboration with designated consumers and agencies, aligning with the Energy Conservation Act's regulatory and promotional functions.

Tihar Store

- The **Tihar Jail Store** resumed its operations with a new outlet offering products crafted by the prisoners which was previously halted by the **COVID-19 pandemic**.
 - This initiative aims to provide **rehabilitation opportunities** for the inmates, giving them a chance at a better life.
- The shop offers a variety of products, including **clothes, artificial jewelry, bread, buns, candles, soaps, toilet cleaners, furniture, and confectionery items**.
- Past records of jail inmates like their conduct, health and the duration of time spent in the jail will be taken into consideration before letting them run the shop.
- The sale proceeds will go to the **treasury** and each convict will be paid according to approved **wages**.

Goldfish

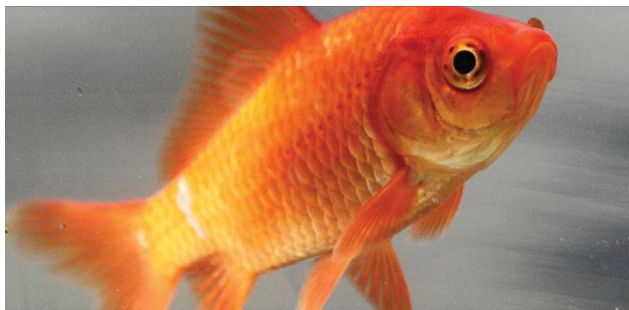
- **Goldfish** was one of the earliest fish to be domesticated and a relatively small member of the **Carp family**.
- Releasing it into the **wild can lead to giant sizes, making them invasive** and harmful to native marine life, damaging fragile ecosystems.
 - It can eat almost anything and everything, including **algae, aquatic plants, eggs, and invertebrates**.

Note:



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- They can tolerate a **wide range of water temperatures**, reach **sexual maturity quickly**, and **reproduce several times** in one season.
- **Feral goldfish** are also destructive, as they help spawn harmful algal blooms by consuming the algae and expelling nutrients that promote its growth.



Turbulence

Turbulence, often encountered in everyday phenomena like **flowing fluids**, holds a profound level of organization that scientists are still striving to understand.

- Turbulence is a **complex fluid motion characterized by chaotic fluctuations, unpredictable variations**, and the formation of **swirling patterns called vortices**.
- The balance between fluid **inertia (fluid's tendency to keep moving)** and **viscosity (motion-slowing force)** determines whether a flow is **laminar (well-ordered) or turbulent (highly unstable)**.
 - When inertia dominates, turbulence emerges.
- **Applications of Turbulence:**
 - Meteorological models leverage turbulence studies for **more accurate short-term weather predictions**, essential for disaster preparedness.
 - Studying turbulence helps assess the **dispersion of pollutants** in the atmosphere, influencing **environmental policies**.

Demaorchestia alanensis

Researchers at Berhampur University, Odisha, have unveiled a new species of marine amphipod, named **Demaorchestia alanensis**, in Chilika Lake, contributing to **global marine biodiversity**.

- The discovery increases the global species count in the **Demaorchestia (Senticaudata, Talitridae) genus to six**, showcasing the region's marine diversity.

- The new species is characterized by its white colour, measuring less than 15 millimetres in length, with 13 pairs of legs serving various functions.
- It can be recognized from other similar species by having **two to three hair-like structures** on the front edge of the gnathopod's propodus (Limb).
- It belongs to the subfamily **Platorchestiinae** found along the Indian coast.
- Amphipods act as indicators for climate change impact and coastal ecosystem health.
- The family Talitridae was considered one of the **oldest groups of amphipods**, and it was believed to have been on the planet since the Jurassic age.



Cough Syrup Samples Fail Export Quality Test

Recently, data from the **Central Drugs Standard Control Organisation (CDSCO)**, shows that at least 6% of **cough syrup samples** from 54 Indian manufacturers failed a mandatory quality test for export.

- **Gambia, Uzbekistan, Cameroon**, and the **World Health Organization (WHO)** expressed concerns following the deaths of children who had taken these medications.
 - **Indian manufactured syrups** were reported to be contaminated with **glycol** and **ethylene glycol** toxic substances that can sometimes be fatal, especially for children.
 - India's pharmaceutical sector contributes around **1.72% of GDP** and the industry is worth approximately **USD 50 billion** with more than half coming from exports.
 - The CDSCO under the **Ministry of Health & Family Welfare** is a national regulatory authority of India.
- Read More:** [India-made Syrups and Deaths in Gambia](#)

Note:

NTPC Wins Brandon Hall Group's Excellence in Technology Awards 2023

The [National Thermal Power Corporation \(NTPC\)](#), a [maharatna](#), central Public Sector Undertaking (PSU) under the **Ministry of Power**, has achieved a remarkable feat by becoming the sole PSU in India to win two silver awards at the prestigious **Brandon Hall Group's Excellence in Technology Awards 2023**.

- NTPC secured dual silver awards in the categories of **"Best Advance in Corporate Wellbeing Technology"** and **"Best Advance in Augmented and Virtual Reality."**
 - NTPC's award-winning efforts include the creation of an **Individual-Centric Health Care Ecosystem**, and overcoming diversity and remoteness challenges at NTPC sites, and **NTPC's 'iGuru' initiative** demonstrates its leadership in adapting innovative technologies for workforce capacity building.
- Brandon Hall Group, a US-based professional development company, recognizes NTPC's achievements through its HCM Excellence Awards program, known as the "Academy Awards of Human Capital Management."
 - The awards recognize the best organizations that have successfully developed and deployed programs, strategies, modalities, processes, systems, and tools that have achieved measurable results.

Read more: [National Thermal Power Corporation \(NTPC\)](#)

Chip-In-Ball Technology to Make Handball Decisions Easier

Recently, **Adidas** has introduced a [microchip](#) in the **official ball** for **Euro 2024** to aid referees in making handball decisions during the tournament.

- The microchip, which is **rechargeable**, can send **precise ball data** to video match officials in **real-time**, and will be used in conjunction with **limb-tracking technology** to help determine whether there has been a **handball** in the lead-up to a goal.

- The microchip installed in the 'Fussballliebe', the official match ball of the Euros, will work in tandem with **limb-tracking technology** to create **real-time 3D visual** representations of **players' skeletons**.
- According to the law set by the International Football Association Board (IFAB), it's a handball if a player "touches the ball with their hand/arm when it has made their body unnaturally bigger."
- The technology will also be used to produce faster **offside decisions**, and will contribute to the Union of European Football Associations (UEFA)'s **Video Assistant Refereeing (VAR)** decision-making process.
 - The VAR will use the data from the device to create an image that accurately establishes the **point of contact** of the ball with the body.
- The chip also allows the technology to determine the exact time the ball was kicked, which will provide an accurate result when it comes to offside decisions.

Read More: [Semi-Automated Offside Technology](#)

Mummified Baboons

The origin of **mummified baboons** in Egypt has puzzled scientists for over a century. Recently scientists uncovered the secrets behind these ancient relics using mitochondrial DNA.

- DNA analysis traced the baboons' origin to the ancient **city of Adulis, in present-day coastal Eritrea**.
- The study shed light on the potential location of the **lost city of Punt**, a significant trading partner with ancient Egypt, and Adulis.
- The findings emphasized the historical trade relationships between Egypt and Adulis, highlighting the [Red Sea](#) as a crucial node in **trade history between India, Egypt, and Europe**.
- **Papio anubis** and **Papio hamadryas** are both species of baboons. Baboons are Old World monkeys that are part of the genus Papio.
 - **Papio anubis** is the most broadly distributed baboon species, ranging through most of **central sub-Saharan Africa**.
 - **Papio hamadryas** is found on the African continent in the area of the southern Red Sea, in Ethiopia, Somalia, and Eritrea.
 - The [IUCN Red List](#) rates them "Lower Risk, Least Concern."

Note:



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Male Mosquitoes with Bloodsucking Behavior

Recently, Scientists unearthed the **oldest-known mosquito fossils**, dating back 130 million years, has revealed the **bloodsucking behavior in ancient males**. These fossils provide insights into the evolutionary history of mosquitoes and their role as **disease vectors**.

- The fossils represent **two male mosquitoes from the Cretaceous Period**, possessing **elongated piercing-sucking mouthparts** typically seen only in females.
 - This discovery suggests that originally all mosquitoes were **hematophagous (blood-eaters)**, regardless of their gender.
 - The male mosquitoes' mouthparts were shorter than those of modern female mosquitoes.
- Mosquitoes are blood-feeders and **transmit parasites and diseases to their hosts**, including **malaria, yellow fever, Zika fever, and dengue**.
- The researchers hypothesize that mosquitoes evolved from insects that did not consume blood, with their mouthparts initially adapted for **piercing plants to access nutritious fluids**.
 - The appearance of flowering plants during the Cretaceous Period may have played a role in the divergence of **feeding behaviour between male and female mosquitoes**.
- Mosquitoes likely originated millions of years earlier than the discovered fossils, with molecular evidence suggesting their existence during the **Jurassic Period**.

Military Exercise "VINBAX-2023"

- The **Indian Armed Forces** contingent reached Hanoi, Vietnam to take part in the **fourth edition of Joint Military Exercise VINBAX-2023**.
 - Exercise **VINBAX** was instituted in **2018** and the **first edition** was conducted at **Jabalpur, Madhya Pradesh**.
 - It is an **annual training event** conducted alternatively in **India and Vietnam**.
 - **Aim:**
 - The exercise is to foster **collaborative partnership, promote inter-operability** and share **best practices** between the two sides under **Chapter VII of United Nations Charter on Peacekeeping Operations**.
 - The exercise will be conducted as a **Command Post Exercise cum Field Training Exercise** with focus on deployment and employment of an Engineer Company and a Medical Team.
 - Ideas will be exchanged on modern methods to construct **roads, culverts, helipads, ammunition shelter** and observation posts in operational areas.
- Read More: [EX VINBAX 2022](#)

Project ARTHA Ganga

- **Arth Ganga** is an initiative added to the **Namami Ganga Program** launched by the **Government in 2014**.
 - It is a **sustainable and viable economic development model** to strengthen the **river-people connection** through an **economic bridge**.
 - It was decided that the **Namami Gange mission** should lead the concept of Arth Ganga with the involvement of all stakeholders. It was added as a vertical of the Namami Ganga Program, in addition to 4 verticals:
 - **Nirmal Ganga, Aviral Ganga, Jan Ganga and Gyan Ganga**.
- **Six pillars of Arth-Ganga** identified are
 - Promotion of **Natural Framing** on the **5 km band** on either side of **River Ganga**.
 - **Monetisation and reuse of Treated water** and sludge from the **STPs**;
 - Improvement of **Livelihood opportunities**, particularly for **women**;

Note:

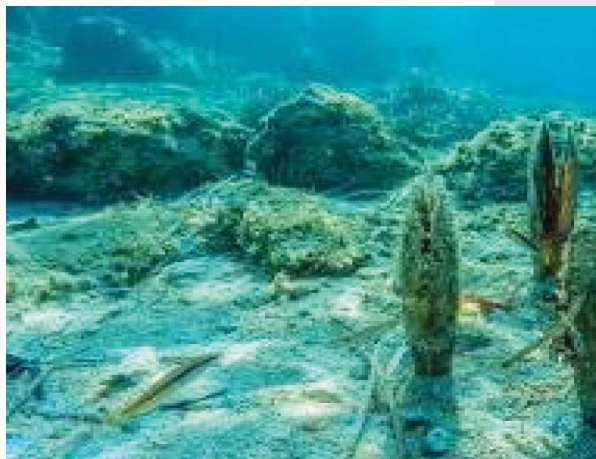
- **Promotion of Tourism** and **Cultural heritage**
- **People's Participation** and Capacity Building
- Empowering **local administration** for improved **water governance**.

Read More: [Arth Ganga Project](#)

Pinna Nobilis

A huge clam that was on the verge of extinction has made a comeback, with a surge in numbers in waters off Croatia.

- The **clam, known as the noble pen shell or pinna nobilis**, started dying out as a deadly pathogen spread in parts of the Mediterranean around 2016.
- The clams, **whose shells can grow as much as 1.2 m across**, play an important **ecological role by filtering seawater** and allowing other organisms to flourish.
- They have been spotted across the **Adriatic and Istria peninsula**.



Read More: [Critically Endangered](#)

Wed in India

Recently, the Indian Prime Minister, addressing the **Uttarakhand Global Investors Summit**, emphasised Uttarakhand's untapped potential, recognizing the '**House of Himalaya**' brand and **advocating for the 'Wed in India' movement**, like the **Make in India** movement.

- Affluent individuals were urged to **reconsider foreign destination weddings**, encouraging weddings in India.
- **House of Himalaya brand** is an attempt to **establish the local products of the state in foreign markets** which will strengthen the 'vocal for local' campaign.

SC Deploys SUVAS for Regional Language Accessibility

Recently, the Indian Law Minister stated that the **Supreme Court (SC)** has introduced SUVAS, an AI-driven **translation tool**, to facilitate regional language usage in legal proceedings.

- This specialized tool, developed with support from the **Ministry of Electronics and Information Technology**, currently translates English judicial documents into eleven Indian languages.
- Additionally, the **Chief Justice of India** noted that the landmark **Kesavananda Bharati verdict is accessible in 10 Indian languages** on the SC website, marking 50 years since the ruling.
 - The Constitutional Bench in the Kesavananda Bharati case ruled by a 7-6 verdict that **Parliament could amend any part of the Constitution so long as it did not alter or amend the basic structure or essential features of the Constitution**.

Read more: [Strengthening Indian Judiciary](#)

Mera Gaon Meri Dharohar Project

The Ministry for Culture has decided to map and document all villages under **the Mera Gaon, Meri Dharohar (MGMD)** Programme.

- This **National Mission on Cultural Mapping** is conducted in coordination with **Indira Gandhi National Centre for the Arts (IGNCA)** under the Ministry of Culture.
- A web portal on **MGMD** has also been launched. The MGMD **seeks to compile comprehensive information detailing the life, history, and ethos of Indian villages** and to make the same available to virtual and real-time visitors.
- Under the MGMD, **information is collected under seven broad categories such as Arts and Crafts Village, Ecologically Oriented Village etc.**

Read More: [Pradhan Mantri Adi Adarsh Gram Yojana](#)

Note:

Suvidha Sanitary Napkins under PMBJP

The Ministry of Chemicals and Fertilizers has recently brought attention to the [Jan Aushadhi Suvidha Sanitary Napkins](#), an initiative under the [Pradhan Mantri Bhartiya Janaushadhi Pariyojana \(PMBJP\)](#). In a bid to enhance women's health and accessibility to [menstrual hygiene products](#).

- Jan Aushadhi Suvidha Sanitary Napkins are available at [Jan Aushadhi Kendras throughout India](#) at a subsidized price of Rs. 1/- per pad.
 - Since its inception until November 30th November 2023, over 47.87 crore Jan Aushadhi Suvidha Sanitary Pads have been sold through Jan Aushadhi Kendras.
 - The sanitary [pads are oxy-biodegradable](#) and maintain good quality standards.
- **PMBJP** is a campaign launched by the Department of Pharmaceuticals to provide **quality medicines at affordable prices to the masses**.
 - PMBJP stores have been set up to provide generic drugs, which are available at lesser prices but are equivalent in quality and efficacy as expensive branded drugs.

Read more: [Janaushadhi Diwas, Review of PMBJP](#)

IMO Green Voyage2050 Project

India has been recognized as the pioneer lead country for the [International Maritime Organization \(IMO\) Green Voyage2050 Project](#), a significant stride toward mitigating [Green House Gas \(GHG\) emissions](#) from ships.

- The GreenVoyage2050 Project is a partnership project between the Government of Norway and IMO launched in 2019 aiming to transform the **shipping industry towards a lower carbon future**.
- The Initial IMO Strategy sets out a clear vision to cut **total annual GHG emissions by a minimum of 50% by 2050**, relative to 2008 levels.
- The GreenVoyage2050 Project is **working with 12 countries**: Azerbaijan, Belize, China, Cook Islands, Ecuador, Georgia, India, Kenya, Malaysia, Solomon Islands, South Africa, and Sri Lanka.
 - The participating countries can be broadly categorised into **"New Pilot Countries"** and **"Pioneer Pilot Countries"**.

MAIN COMPONENTS OF THE PROJECT

COMPONENT 1

Developing global tools to support implementation of the Initial IMO GHG Strategy

COMPONENT 3

Strategic partnership development

COMPONENT 2

Capacity building, policy and NAP development

COMPONENT 4

Technology cooperation, innovation and pilot demonstrations



Read more: [India Re-elected to International Maritime Organisation Council, IMO Guidelines on Shipping Fuel](#)

Note:

Advancements in TB Care

The **Union World Conference on Lung Health in 2023** heralded an optimistic turn in the fight against **tuberculosis (TB)** with the unveiling of **four new improved drug regimens**, promising to reduce treatment time for drug-resistant TB by up to two-thirds.

- The long duration of treatment, and subsequent drug toxicity, leads to patients being unable to **tolerate drugs**, and also causes non compliance with **treatment schedules**. This ultimately leads to **drug resistant TB**.
- With a mission to offer more effective treatment, these regimens exhibit similar efficacy and safety to conventional treatments but significantly reduce treatment time.
- TB is an infectious disease that most often affects the lungs and is caused by the bacteria- **Mycobacterium tuberculosis**. It spreads through the air when infected people cough, sneeze or spit.
 - According to WHO, **Multidrug-resistant TB (MDR-TB)** remains a public health crisis and a health security threat. Only about 2 in 5 people with drug resistant TB accessed treatment in 2022.

Read more: [Successful Trails in Treating Drug-Resistant TB](#)

Hanukkah

Hanukkah, also known as the **Festival of Lights** or **Chanukah**, commences at sundown on 7th December, 2023.

- It is an **eight-day Jewish holiday** that commemorates the rededication of the **Second Temple in Jerusalem** during the second century BCE.
 - The festival begins on the **25th day of the Jewish month of Kislev** and usually falls in late November to late December in the Gregorian calendar.
- Hanukkah celebrates the **miracle of a small quantity of oil, which lasted for eight days, lighting the Temple's menorah (candelabrum)** at the time of the **Maccabean revolt**, despite there being only enough oil for one day.
 - The **Hanukkah menorah** is a nine-branched candelabrum that is lit during the eight-day holiday of Hanukkah.



Central Tribal University in Telangana

- Recently, a bill seeking to establish a **Central Tribal University in Telangana** was passed by the Lok Sabha. This legislation, meeting the obligations of the **Andhra Pradesh Reorganisation Act, 2014**, earmarks ₹889.7 crore for the university.
- The bill amends **Central Universities Act, 2009** and the new university will be called **Sammakka Sarakka Central Tribal University**. It will be set up in **Mulugu** district in Telangana.
- The university's focus on **tribal art, culture, technology, and traditional knowledge** aims to advance education, research, and development while functioning akin to other Central Universities.

Ban on Sugarcane Juice for Ethanol

The Centre's recent ban on using **sugarcane** juice and sugar syrup for ethanol production in the 2023-24 supply year aims to maintain adequate sugar availability for domestic consumption and stabilize prices. However, the government has permitted the use of **B-molasses** for ethanol production.

- The **Indian Sugar Mills Association (ISMA)** forecasts a **9% reduction in gross sugar production for the 2023-24 marketing year**, further complicating the situation.
- India has emerged as the world's largest producer and consumer of sugar as well as the **world's 2nd largest exporter** of sugar after Brazil, in **Sugar Season (Oct-Sep) 2021-22**.

Read more: [Sugar Industry](#)

Note:



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Armed Forces Flag Day

The Prime Minister of India has paid tribute to the nation's brave soldiers on the occasion of **Armed Forces Flag Day** (7th December 2023).



- Armed Forces Flag Day India is a day dedicated to **honouring the soldiers and veterans of India's armed forces.**
 - It has been observed annually in India on **7th December since 1949.**
- On this day, the nation pays tribute to martyrs in the **Indian Army, Navy, Air Force,** and other defence forces who lost their precious lives while serving the country.
- On this day, people buy flags and items, supporting the **Armed Forces Flag Day Fund (AFFDF).**
 - The funds aid families of armed forces personnel, honouring those who sacrificed for the nation, and the ex-servicemen.

Read more: [Indian Army](#), [Navy](#), [Air Force](#)

Adopt A Heritage program 2.0.

Recently, the Ministry of Culture has shed light on the **Adopt A Heritage program 2.0.**

- The programme is a revamped version of the earlier scheme (**Adopt a Heritage Scheme**) launched in 2017 by the **Archaeological Survey of India (ASI)** and clearly defines the amenities sought for different monuments as per the **Ancient Monuments and Archaeological Sites and Remains Act (AMASR), 1958.**
- The program aims to involve **various private-public stakeholders** in the maintenance, development, and operation of heritage sites, thus ensuring their sustainable upkeep while also enhancing the visitor experience.
- Under the program, corporate entities will assume responsibility for selected monuments as part of their **Corporate Social Responsibility (CSR) initiatives.**

Read more: [Adopt a Heritage 2.0](#)

Kiwi Bird

Recently, two **Kiwi hatchlings** were found three miles west of **Wellington** in **Makara (New Zealand)** a suburb where kiwis had disappeared for over a century due to urban dangers.

- New Zealand's **Capital Kiwi Project** is a community-led initiative that aims to restore a **large-scale wild kiwi population.**
- **About:**
 - The **Kiwi** is a **flightless** bird endemic to New Zealand.
 - This is known for its **eccentric traits** such as being **nocturnal, flightless**, and having mouse-like whiskers and dinosaur-like legs.
- **Features:**
 - **Kiwi eggs** are one of the **largest** in proportion to body size (up to 20% of the female's weight) of any order of bird in the world.
 - Unique adaptations of kiwi, such as **short** and **stout legs** and using their **nostrils** at the end of their **long beak** to detect prey before they see it.
- **International Union for Conservation of Nature (IUCN) Status:** Vulnerable
- **Distribution:** Kiwi is especially found in the Australian Continent.



Dr. B R Ambedkar Death Anniversary

The death anniversary of **Dr. B R Ambedkar** is commemorated every year on **6th December** through the observance of **Mahaparinirvan Diwas** to recall his exemplary service to our nation.

- **Parinirvana**, regarded as one of the major principles as well as goals of **Buddhism**, is a **Sanskrit** term which means release or **freedom after death.**

Note:



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- As per the Buddhist text **Mahaparinibbana Sutta**, the death of Lord Buddha at the age of 80 is considered as the original Mahaparinirvan.



Drishti IAS

Dr. Bhimrao Ramji Ambedkar



Babasaheb Ambedkar-
The Father of Indian Constitution
14 April 1891- 06 December 1956

1. Brief Profile

- A social reformer, jurist, economist, author and thinker of comparative religions
- Labour member in the **Executive Council of Viceroy (1942)**
- **Chairman** of the **Drafting Committee** for the new Constitution
- **First Law Minister** of India
- Posthumously awarded **Bharat Ratna (1990)**

2. Contributions

- Led the **Mahad Satyagraha in 1927** against Hindus
- Participated in **all three Round Table Conferences**
- Signed the **1932 Poona pact** with **Mahatma Gandhi** to abandon the idea of separate electorates for the depressed classes

The reserved seats for depressed classes were increased from 71 to 147 in provincial legislatures and to 18% in the Central Legislature.

- **Opposed the special status of J&K (Article 370)**
- Supported **Uniform Civil Code**
- Referred **Article 32** as "**soul of the Constitution and very heart of it**"

3. Resignation and Buddhism

- Differences over **Hindu Code Bill** led to his resignation from Cabinet in **1951**
- Converted to Buddhism; his death is observed as **Mahaparinirvan Diwas**

4. Important Journals

• Mooknayak (1920)	• Bahishkrit Bharat (1927)
• Samatha (1929)	• Janata (1930)

5. Books

- Annihilation of Caste
- Buddha or Karl Marx
- **The Untouchable: Who are They and Why They Have Become Untouchables**
- The Rise and Fall of Hindu Women

6. Organisations

- Estd. '**Bahishkrit Hitkarini Sabha**' (1923)
- Founded **Independent Labour Party (1936)**
- Founded **Scheduled Castes Federation (1942)**



Read More: [65th Mahaparinirvan Diwa](#)

Note:

Google Unveils Project Gemini

Google has introduced **project Gemini**, an **artificial intelligence (AI) model** designed to **exhibit human-like behavior**.

- This development is expected to fuel the ongoing AI race and raise debates about the **potential benefits and risks of the technology**.
- Gemini aims to enhance **Google's AI-powered chatbot Bard's** intuitiveness and efficiency in tasks, particularly those involving planning.
- Google DeepMind, the AI division behind Gemini, emphasizes the model's **problem-solving skills in math and physics**, offering potential scientific breakthroughs.
- Concerns exist regarding the potential impact of AI on **job displacement, misinformation amplification, and even triggering destructive behavior**.

Read more: [Artificial Intelligence](#)

International Civil Aviation Day 2023

International Civil Aviation Day (ICAD) is celebrated annually on **7th December**. The day was established in 1994 as part of the 50th anniversary of the **International Civil Aviation Organization (ICAO)**.

- The **United Nations General Assembly** officially recognized the day in 1996.
- The purpose of ICAD is to promote global recognition of international civil aviation's **vital role in the social and economic development of nations**.
 - It underscores ICAO's unique position in **fostering cooperation among states** to establish an inclusive and efficient global transit network for the benefit of humanity.
- **Theme for 2023: "Advancing Innovation for Global Aviation Development"**.
- The ICAO is a United Nations agency that coordinates **international air navigation**. It was established in **1944** to manage the Convention on **International Civil Aviation (Chicago Convention)**.
 - **India is a member of ICAO**, it is headquartered in Montreal, Canada.

Read more: [International Civil Aviation Organisation](#)

Implementing "Nari Adalat" Under Mission Shakti

The Minister of Women and Child Development, in a written reply in Rajya Sabha, has given the information about **'Mission Shakti'**— an integrated women empowerment programme as umbrella scheme for the safety, security and empowerment of women for implementation during the **15th Finance Commission**.

- 'Mission Shakti' comprises of **two sub-schemes 'Sambal' and 'Samarthya'** for safety and security of women and empowerment of women respectively.
- The schemes of **One Stop Centres (OSC), Women Helplines (181-WHL), Beti Bachao Beti Padhao (BBBP) and Nari Adalat** are part of 'Sambal' sub- scheme.
- The components of **Pradhan Mantri Matru Vandana Yojana (PMMVY), Palna, Shakti Sadan, Sakhi Niwas and Hub for Empowerment of Women** are part of 'Samarthya' sub scheme.
- The Government has decided to implement the component of **"Nari Adalat"** in a phased manner under Mission Shakti. **In the first phase**, the State of Assam and the **Union Territory (UT) of Jammu & Kashmir** have been selected by the Ministry to implement the component of Nari Adalat.

Read More: [Sexual Harassment at Workplace, Ujjwala](#)

South Eastern Coalfields Ltd to Use "Miyawaki" Plantation Method

In a bid to boost forest cover in **Chhattisgarh**, in and around the **Gevra mine**, the largest coal mine of the country, **South Eastern Coalfields Ltd (SECL)** will undertake plantation using the **Miyawaki method** for the first time in its operational areas.

- The Miyawaki method of plantation was pioneered in the 1970s in Japan. This technique of plantation involves planting **native trees, shrubs and groundcover plants** within every square metre. This method is ideal for small parcels of land and creates dense canopy layer of tall trees.
- The species chosen for Miyawaki plantation is **typically of plants which do not require a lot of maintenance and can survive harsh weather and water-scarce conditions** and grow rapidly in existing conditions yielding thick pockets of green cover.

Read More: [Urban Forests, Climate Change](#)

Note:

One District One Product in PMFME Scheme

The **Union Minister of State for Ministry of Food** in a written reply to **Lok Sabha** has given information about **One District One Product (ODOP)**.

- The **Ministry of Food Processing Industries (MoFPI)** has approved ODOP for 713 districts of 35 States and UTs under **Pradhan Mantri Formalisation of Micro food processing Enterprises (PMFME) Scheme** on the recommendations of respective States / UTs.
- ODOP is an initiative to boost economic growth at the district level by promoting and branding one product from each district of the country.
- ODOP has been approved for all the 36 districts of State of Maharashtra including 20 unique products.
- **No ODOP product** has been recommended by the **State of West Bengal** under **PMFME Scheme**.

Read More: [One District One Product' Scheme](#)

Fake MGNREGS Job Cards Deleted

Over **10 lakh job cards** have been deleted with the reason 'fake job card' under the **Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS)** in the last two financial years **2021-22** and **2022-23**.

- As per **Section 25** of the **Mahatma Gandhi National Rural Employment Guarantee Act, 2005**, whoever contravenes the provisions of this Act shall on conviction be liable to a fine which may extend to **one thousand rupees**.
- The highest number of **fake job cards** have been deleted in **Uttar Pradesh** and followed by **Madhya Pradesh** in **2021-22**, and **2022-23**.
- MGNREGS was launched by the **Ministry of Rural Development** to guarantee **100 days** of employment in every financial year to adult members of any rural household willing to do public work-related unskilled manual work.

Read More: [Mahatma Gandhi National Rural Employment Guarantee Act \(MGNREGA\)](#)

Rising Cases of Mpox in the Democratic Republic of the Congo

The **Democratic Republic of the Congo (DRC)** has witnessed a significant increase in Monkeypox(**mpox**) **cases**, with 12,569 suspected cases and 581 deaths reported from January to November 2023.

- This surge in cases marks the highest number of annual infections ever recorded, according to the **World Health Organization (WHO)**.
- The WHO has also highlighted a growing outbreak of mpox cases linked to **sexual transmission in the country**.
 - Previously, no documented cases of sexual transmission were reported globally. However, the **first-ever confirmed case of sexual transmission** was recorded in the DRC.
- Monkeypox, caused by the **Monkeypox virus (MPXV)**, is a **viral zoonotic disease** endemic in densely forested regions of west, central, and east Africa.
- Symptoms include a severe rash, resembling chickenpox, accompanied by fever, malaise, and headache. Unlike smallpox, Monkeypox exhibits early lymph gland enlargement.
- There is **no specific treatment or vaccine** available for Monkeypox infection. In the past, the **anti-smallpox vaccine, once 85% effective**, is no longer widely accessible.



Read more: [Monkeypox](#)

Note:

Marapi Volcano

Recently, the **Marapi volcano** in West Sumatra, Indonesia, erupted, ejecting **ash** up to 3,000 meters (9,840 feet) into the air and causing casualties.

- **Mount Marapi**, which means “**Mountain of Fire**”, is the most active volcano on Sumatra island and its most deadly eruption was in April 1979, when 60 people were killed.

- Indonesia sits on the **Pacific’s “Ring of Fire”** and has 127 active volcanoes.
- Despite being one of the most dangerous volcanoes in the world, **Mount Merapi is a famous tourist destination**.
- Mount Merapi, along with other volcanoes like Mount Semeru and Mount Bromo, continues to be a popular adventure destination in Indonesia.



Read more: [Ring of Fire, Mt. Merapi of Indonesia](#)

India's Manufacturing PMI Rises

The manufacturing sector in India showed signs of recovery in November from October's eight-month low pace, with the S&P Global India Manufacturing **Purchasing Managers' Index (PMI)** rising to 56 from 55.5. However, the growth of export orders was the slowest since June.

- PMI data are compiled by **S&P Global** for more than 40 economies worldwide.
- The PMI dataset features a headline number, which indicates the **overall health of an economy**, and sub-indices, which provide insights into other key economic drivers such as **Gross Domestic Product (GDP)**, **inflation**, exports, capacity utilization, employment and inventories.
- The headline **PMI is a number from 0 to 100**.
 - A PMI above 50 represents an expansion when compared with the previous month.
 - A PMI reading under 50 represents a contraction while a reading at 50 indicates no change.

Read more: [Purchasing Managers Index, Unleashing the Potential of India's Manufacturing Sector](#)

Note:

Tele-MANAS Cell for Armed Forces Mental Health Support

Recently, a dedicated **Tele-MANAS Cell** was inaugurated at the Armed Forces Medical College in Pune.

- The cell serves as an extension of the **Tele-Mental Health Assistance and Networking Across States (Tele MANAS) initiative** of the Ministry of Health and Family Welfare.
 - It functions as a **central psychological helpline** for all Armed Forces beneficiaries across the country.
- The need for tele-mental health services in the Armed Forces is recognized due to unique **stressors faced by military personnel**.
- Tele-MANAS is a **free, comprehensive mental health care service** in India. The service is part of the government's initiative to make **mental health** services accessible to everyone.
 - Tele MANAS has received over 4,60,000 calls nationwide since its launch and operates in 20 languages across 51 active cells.

Read more: [Indian Army's Proactive Measures for Mental Health](#)

Indian Navy Day 2023

India observes **Navy Day** annually on **4th December, 2023** to honor **Operation Trident**, a crucial offensive maneuver during the **1971 India-Pakistan War**.

- **Operation Trident**, a defining moment during the 1971 conflict, showcased the Indian Navy's strategic prowess by utilizing **Soviet Osa missile boats armed with 4 SS-N-2 Styx** missiles to neutralize three vessels near the Pakistani port city of Karachi.
- In a recent development, **Commander Purna Deosthalee** will be the first woman officer of the Indian Navy to command an Indian Navy Warship (**Waterjet FAC INS Trinkat**).

Read more: [Indian Navy Day](#)

New International Air Routes Open for Northeast India

Recently, the **Centre's Ude Desh Ka Aam Naagrik (UDAN) initiative** has approved **four novel air routes** linking northeastern states with international destinations.

- These routes are set to **connect Assam to Thailand and Bangladesh, Manipur to Myanmar, and Tripura to Bangladesh**.
- Under the UDAN scheme, these routes will offer **subsidized airfares**, marking a significant step in enhancing regional air connectivity.
- The UDAN scheme involves **state subsidies for airfares**, with the **Airport Authority of India** managing the bid process, airline selection, and subsequent subsidy allocation, wherein states provide viability gap funding to the lowest bidder.
 - The **'International UDAN,'** introduced in **2022**, aims to augment socio-economic progress by augmenting **air connectivity from specific states to international destinations**.

Read more: [UDAN initiative](#)

MAHASAGAR Initiative

Recently, the first session of **MAHASAGAR**, the **Indian Navy's initiative**, brought together maritime leaders from diverse nations within the **Indian Ocean Region (IOR)**. **Theme: 'Collective Maritime Approach towards Countering Common Challenges'**

- MAHASAGAR stands for **Maritime Heads for Active Security And Growth for All in the Region**. It aims to create a platform for high-level interactions **fostering cooperation among IOR nations**.
 - Heads of Navies and Maritime Agencies from **Bangladesh, Comoros, Kenya, Madagascar, Maldives, Mauritius, Mozambique, Seychelles, Sri Lanka, and Tanzania**.
- MAHASAGAR resonates with the Indian Government's SAGAR vision (**Security and Growth for All in the Region**).
 - In 2015, India unveiled its strategic vision for the Indian Ocean i.e. **Security and Growth for All in the Region (SAGAR)** to improve relations with its maritime neighbours on the economic and security fronts.

Read more: [A Secure Indian Ocean](#)

NCMC Reviews Cyclone 'Michaung' Preparedness

The **National Crisis Management Committee (NCMC)** recently convened to assess the readiness of State governments and Central Ministries for the approaching cyclone **'Michaung' in the Bay of Bengal**.

Note:



drishti

- The **India Meteorological Department (IMD)** reported the storm's current location and projected path, indicating potential landfall on coastal Andhra Pradesh.
- The NCMC is a committee set up to coordinate and implement relief measures and operations in the wake of a natural calamity.
 - The NCMC coordinates and oversees the response to major crises, emergencies, and disasters that may affect India.
 - **NCMC is headed by the Cabinet Secretary.**
- Cyclone Michaung is a **tropical cyclone** that is tracking northwest in the western Bay of Bengal.
 - 'Michaung' is named after a suggestion provided by Myanmar. It means strength and resilience

40th Coast Guard Commanders' Conference

- Recently, the **Union Defence Minister** inaugurated the **40th Coast Guard Commanders' Conference**.
 - The conference agenda covers vital topics such as **improving maritime safety and security**, including search and rescue, **pollution response, combating contraband and drug trafficking, ensuring the safety of fishermen and seafarers at sea, optimizing coastal security, promoting inter-agency coordination, and enhancing Maritime Domain Awareness.**
- **ICG** was established in **1978** by the **Coast Guard Act, 1978** as an independent Armed force of India.
 - As the **fourth largest Coast Guard** in the world, it has played a significant role in securing the Indian coasts and enforcing regulations in the maritime zones of India.

Read more: [Indian Coast Guard](#)

Accelerated Growth of the Core Sector

- India's **core sectors** grew 12.1% in October from a revised uptick of 9.2% in September.
- All **eight sectors clocking positive growth** for only the **third time in 18 months**, and five of them recording a **double-digit surge**.
- The **core sectors** constitute little over **40%** of the **Index of Industrial Production (IIP)**.
 - The **Index of Industrial Production (IIP)** is an index that shows the **growth rates in different industry groups** of the economy in a **fixed period of time**.

- A rise in **power generation** signals strong **economic activity** supported by the **coal sector**. The **Industrial Production (IIP)** growth for **October** is anticipated to be between **6% and 8%**, depending on **consumer goods performance**.
- **Fertilizer production** has risen in anticipation of **Rabi crop sowing this month**, while the **cement industry** has experienced growth due to both a **negative base effect** and an upturn in the **housing sector**.
 - **Base effect** is the effect that choosing a different reference point for a comparison between two data points can have on the result of the comparison.

Read More: [Index of Industrial Production \(IIP\)](#)

Three Anti-Submarine Warfare Ships for Indian Navy

The **Cochin Shipyard** unveiled the **first three of eight Anti-Submarine Warfare (ASW)** shallow water crafts commissioned for the **Indian Navy** - **INS Mahe**, **INS Malvan**, and **INS Mangrol**.

- These ships are poised to replace the **Abhay class ASW corvettes** and excel in anti-submarine operations, coastal defense, mine laying, and sub-surface surveillance.
- They demonstrate a **high-speed capability of 25 knots, an endurance of 1,800 nautical miles**, and are designed to undertake coordinated ASW operations with aircraft while being adept at search and rescue missions.

Read more: [Indian Navy](#)

Delhi High Court Scrutinizes 'Walk with Wildlife' Event in Asola Sanctuary

The **Delhi High Court** has raised concerns regarding the proposed **"Walk with Wildlife"** event by the Delhi government's forest department **scheduled to take place in Asola Bhatti Wildlife Sanctuary**.

- The questions arose concerning the **lack of a precise count of sanctuary animals**, including **leopards**, prompting the court's skepticism about acquainting people with wildlife without knowing the wildlife numbers.

Note:

- Also, there is a **requirement of demarcation of such places into core and buffer areas**. However, there is no such demarcation in the sanctuary.
- Asola-Bhatti Wildlife Sanctuary covering 32.71 sq km area on the Southern Delhi Ridge of Aravalli hill range on Delhi-Haryana border lies in Southern Delhi as well as northern parts of Faridabad and Gurugram districts of Haryana state.

Read more: [Asola Wildlife Sanctuary](#)

9th National Level Pollution Response Exercise (NATPOLREX-IX)

Recently, the 9th National Level Pollution Response Exercise (NATPOLREX-IX) was conducted by the [Indian Coast Guard \(ICG\)](#) off Vadinar, Gujarat.

- The NATPOLREX-IX accomplished its objective of testing the level of preparedness and coordination between various resource agencies to respond to a marine oil spill invoking provisions of the National Oil Spill Disaster Contingency Plan (NOSDCP).
- The ICG deployed surface as well as air platforms including Pollution Response Vessels (PRVs), Offshore Patrol Vessels (OPVs), indigenous Advanced Light Helicopter Mk-III, and [Dornier Aircraft](#) configured for marine pollution response.
- The event also showcased India's industrial prowess in terms of the '[Make in India](#)' and vision of '[Aatmanirbhar Bharat](#)'.
- Apart from drawing up the NOSDCP, the Coast Guard has **established four Pollution Response Centers at Mumbai, Chennai, Port Blair and Vadinar**.

Read More: [Exclusive Economic Zone \(EEZ\), SAGAR' - Security and Growth for all in the Region](#)

DGCA Cautions Airlines Against Fake Navigational Signals

The [Directorate General of Civil Aviation \(DGCA\)](#) issued an advisory to Indian airlines detailing mitigating measures to be taken in the **event of spoofing of (fake) navigational signals**, following incidents near the Iranian airspace and a U.S. advisory.

- [Global Positioning System \(GPS\) spoofing](#) is "the surreptitious replacement of a true satellite signal that can cause a GPS receiver to output an erroneous position and time".
- In its circular, the DGCA has provided comprehensive mitigation measures which includes developing "**contingency procedures in coordination with equipment manufacturers, and assessing operational risk by conducting a safety risk assessment**".
- The DGCA has also provided a mechanism for air navigation service providers to **establish a "threat monitoring and analysis network"** for preventive and reactive threat monitoring and analysis of reports of GNSS interference.

Read More: [GPS AIDED GEO AUGMENTED NAVIGATION \(GAGAN\), ISRO](#)

Pulses, Oil seeds, Fruit Output to Lag Demand Till 2030-31

As per the report published by the [National Bank for Agriculture and Rural Development \(NABARD\)](#) and the Indian Council for Research on International Economic Relations ([ICRIER](#)), commodities like oilseed, pulses and fruits are expected to experience a supply and demand gap in the coming years.

- Therefore, **there is a need to increase the level of production and productivity** of oilseeds, pulses, and fruits since their demand in the future shows an increasing trend.
- **As per capita incomes rise**, the consumption basket of people tends to diversify towards nutritious and high-valued commodities, including fruits and vegetables and dairy products and away from staples such as rice and cereals.
- Oil seeds production is **expected to rise to around 35 to 40 million tonnes (MT)** by 2030-31, with the gap between demand and supply likely to expand to 3 MT by 2025-26.
- The report reiterated the recommendation of a 2012 report from the [Commission for Agricultural Costs and Prices \(CACP\)](#) to raise the import duty whenever the import **price of crude palm oil falls below USD 800 per tonne** to protect Indian producers.

Read More: [Minimum Support Price, Primary Agricultural Credit Society \(PACS\)](#)



Note: