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1 POLITY AND GOVERNANCE

1.1 COALITION GOVERNMENT

The lack of a clear mandate in the recent Lok Sabha elections has brought back the era of a coalition government at the centre.

About Coalition Government

- **Sharing of Power:** A coalition government is formed when no single party secures an outright majority in the legislature. Multiple parties come together to form an alliance, sharing power and responsibilities.
- **Common Minimum Programme:** The coalition partners agree on a common minimum programme, which outlines the shared goals and policies they will pursue during their tenure.
- **Cabinet Representation:** Cabinet positions are distributed among the coalition partners, allowing them to have a say in policy formulation and implementation.
- **Collective Decision-Making:** Decisions are taken collectively by the coalition partners, often through negotiations and compromise, to ensure the stability and continuity of the government.
- **Dynamic Alliances:** Coalitions can be pre-poll alliances formed before elections or post-poll alliances formed after the results.

History of Coalition Government in India

- **First Coalition (1977-1979):** India's first coalition government was formed in 1977 after the Janata Party alliance led by Morarji Desai defeated the Indian National Congress. This coalition was formed in the aftermath of Indira Gandhi's emergency rule.
- **United Front (1996-1998):** The United Front coalition, led by H.D. Deve Gowda and later I.K. Gujral, formed a government with the support of the Indian National Congress from outside.
- **National Democratic Alliance (1998-2004, 2014-2023):** The National Democratic Alliance (NDA), led by the Bharatiya Janata Party (BJP), under the leadership of Atal Bihari Vajpayee and Narendra Modi respectively, formed coalition governments from 1998 to 2004 and again from 2014 to 2023.
- **United Progressive Alliance (2004-2014) The United Progressive Alliance (UPA),** led by the Indian National Congress, under the leadership of Manmohan Singh, formed a coalition government from 2004 to 2014, with support from left-wing parties and regional allies.

Benefits of Coalition Government

- **Political Stability:** Coalitions can provide greater stability than minority governments, preventing frequent elections and political turmoil.
- **Accommodation of Diverse Views:** They represent a wider range of political ideologies, leading to a more representative government.
- **Checks and Balances:** Coalition partners can act as checks and balances on each other, preventing any single party from dominating or abusing power.
- **National Integration:** They encourage regional parties to participate in national governance, fostering a sense of national unity.
- **Moderation of Extremes:** The need for consensus and compromise in coalitions can help moderate extreme positions and promote more balanced and centrist policies.
- **Accommodation of Diverse Interests:** Coalitions can effectively address the needs of various social groups and tackle complex issues with a broader perspective.

Challenges associated with Coalition Government

- **Internal Conflicts:** Differences in ideology and priorities among coalition partners can lead to internal conflicts and instability.

- **Horse-Trading and Policy Compromises:** The need for political accommodation can lead to horse-trading and compromises that dilute policy effectiveness.
- **Weak Leadership:** Frequent bargaining within the coalition can weaken the government's leadership and its ability to take decisive action.
- **Shifting Alliances:** The constant negotiation and potential for shifting alliances can create uncertainty in the political environment.
- **Slower Decision Making:** The need for consensus among coalition partners can lead to slower decision-making and policy implementation.
- **Policy Inconsistency:** Shifting political priorities within the coalition can result in inconsistency and frequent changes in policy direction.

Additional Considerations

- **Electoral Systems:** The type of electoral system in place can influence the likelihood of coalition governments. Proportional representation systems often lead to coalition governments, while first-past-the-post systems can lead to single-party rule.
- **Public Perception:** Coalition governments can sometimes be perceived as unstable or ineffective by the public, which can influence voter behaviour in future elections.
- **Role of the President/Governor:** In parliamentary democracies, the President (or Governor at the state level) plays a crucial role in inviting parties to form a government in the absence of a clear majority.
- **Role of Independent Candidates:** Independents and smaller parties can hold significant power in coalition scenarios, often becoming kingmakers in the formation of the government.

Way Forward

- **Pre-Poll Alliances:** Strengthening pre-poll alliances with clear and shared agendas can ensure greater stability and policy coherence.
- **Institutional Reforms:** Streamlining legislative processes and strengthening anti-defection laws can enhance the effectiveness of coalition governments.
- **Focus on National Interest:** Prioritizing national interest above narrow political considerations is crucial for successful coalition governance.
- **Transparency and Communication:** Maintaining open communication with the public about coalition agreements and policy compromises fosters trust in the government.

1.2 RESERVATION IN INDIA

The Patna High Court on June 20 set aside the amendments passed by the Bihar legislature in 2023 to increase the reservation given to Backward Classes (BC), Extremely Backward Classes (EBC), Scheduled Caste (SC) and Scheduled Tribe (ST) from 50% to 65% in educational institutions and government jobs.

News Details

- **Undermines Meritocracy:** the Patna High Court set aside amendments passed by the Bihar legislature by highlighting arbitrariness and reverse discrimination.
- This ruling was in response to a **Public Interest Litigation (PIL)** filed by **Gaurav Kumar and others**, challenging the Bihar government's decision.
- **Violation of Cap:** The decision was based on the violation of the 50% reservation cap established by the Supreme Court in the *Indra Sawhney case*.

About Reservation

- **Affirmative action:** Reservation is a **Positive discrimination** towards marginalised sections to ensure equitable representation

- **Policy for Equality:** Reservation sets aside a specific quota of seats in government jobs, educational institutions, and legislatures for certain social groups.
- **Targeted Beneficiaries:** It primarily benefits **Scheduled Castes (SC)**, **Scheduled Tribes (ST)**, **Other Backward Classes (OBC)**, and **Economically Weaker Sections (EWS)**.

Constitutional Provisions enabling reservation:

- **Article 15(4):** Empowers the state to make special provisions for the advancement of any socially and educationally backward classes of citizens or for the SCs and STs.
- **Article 16(4):** Allows the state to make provisions for the reservation of appointments or posts in favour of any backward class of citizens which, in the opinion of the state, is not adequately represented in the services under the state.
- **Article 16(4A):** Provides for reservation in promotions for SCs and STs.
- **Article 16(4B):** Allows unfilled reserved vacancies to be carried forward to the subsequent year.
- **Articles 15(6) and 16(6):** Enable the state to make special provisions for the advancement of economically weaker sections, including reservations in educational institutions and public employment.
- **Articles 243D & 243T:** Mandate reservation for SCs, STs, and women in local governance bodies.
- **Articles 330 & 332:** Ensure political representation of SCs and STs in the Lok Sabha and State Legislative Assemblies.

Rationale Behind Reservation

- **Addressing Historical Injustice:** Aims to correct centuries of social and economic discrimination faced by certain communities.
- **Promoting Inclusion:** Seeks to integrate disadvantaged groups into the mainstream by providing them a fair share in opportunities.
- **Diversity in Governance:** Ensures representation of various sections of society in government institutions and policy making.
- **Socio-economic Upliftment:** Reservation in education and jobs empowers these communities and paves the way for better socio-economic conditions.
- **Creating Role Models:** Reservation policies help create role models within marginalised communities.

History of Reservation in India

- **Pre-Independence:**
 - **1882: Hunter Commission** recommended free education for lower castes.
 - **1932: Communal Award** made provision for **separate electorates for Muslims, Sikhs, Indian Christians, Anglo-Indians, Europeans and the Dalits**.
 - **1935: The Government of India Act of 1935** extended the communal representation by giving separate electorates to depressed classes, women and labour.
- **Post-Independence:**
 - **1950:** Constitution of India came into effect with reservation provisions.
 - **1951:** First Constitutional Amendment was passed to promote caste-based reservation in India.
 - **1979: Mandal Commission** was appointed to identify socially backward classes.
- **1990s Developments:**
 - **1990:** V.P. Singh government implemented Mandal Commission recommendations.
 - **1992:** Supreme Court capped reservation at 50% in **Indra Sawhney case**.
- **Recent Developments:**
 - **2019:** 103rd Constitutional Amendment introduced **10% EWS quota**.
 - **2023:** 106th Constitutional Amendment introduced **33% Women reservation**.

Mandal Commission

- **Objective:** Established in 1979 to identify Socially and Educationally Backward Classes (SEBCs).
- **Focus on OBCs:** Identified OBCs as 52% of India's population and recommended a 27% reservation for them in government jobs.
- **Recommendations:**
 - Identification of 3,743 castes as OBCs.
 - 27% reservation for OBCs.
 - **Social impact:** Led to protests but was implemented to create a more equitable society.

Indira Sawhney Judgement (1992)

- **Upholding Reservation:** Supreme Court upheld the validity of reservation for OBCs in government jobs and educational institutions.
- **Capping the Quota:** Established a ceiling of 50% on total reservations.
- **Creamy Layer Concept:** Introduced to exclude affluent sections within OBCs from reservation benefits.

Issues and Challenges

- **Creamy Layer:** Debate on excluding economically well-off individuals within reserved categories; ensuring benefits reach the truly disadvantaged within OBC communities.
- **Merit vs. Social Justice:** Balancing meritocracy with the need for social justice; potential conflict between providing equal opportunities and maintaining high standards in education and employment.
- **Political Interference:** Potential misuse of reservations for political gains; politicisation of reservation policies can lead to inefficiencies and corruption.
- **Implementation Issues:** Challenges in effective implementation and monitoring of reservation policies; ensuring that the intended beneficiaries receive the benefits without bureaucratic hurdles.
- **Social Backlash:** Possible resentment and social tension between different communities; perception of unfairness among non-reserved categories.
- **Economic Backwardness:** Need for considering economic backwardness as a criterion alongside caste-based reservations; addressing poverty and deprivation across all communities.
- **Judicial Scrutiny:** Ensuring that reservation policies withstand judicial scrutiny and do not violate constitutional limits; legal challenges to reservation amendments and policies.
- **Employment Opportunities:** Limited job opportunities in the public sector to absorb all reserved category candidates; need for expanding employment opportunities in both public and private sectors.
- **Administrative Challenges:** Difficulty in accurately identifying and categorizing eligible beneficiaries; ensuring transparency and accountability in the reservation process.

Way Forward

- **Effective Implementation:** Ensure reservation benefits reach intended beneficiaries through better monitoring and accountability mechanisms. This involves robust data collection, transparent processes, and strict oversight to prevent misuse and ensure compliance with legal frameworks.
- **Data-Driven Approach:** Regularly review and update reservation quotas based on up-to-date socio-economic data. Conduct comprehensive socio-economic surveys to accurately identify and assess the needs of backward classes, ensuring that policies reflect current realities and address the most pressing issues.
- **Focus on Education:** Invest in education and skill development within reserved categories to improve their employability and socio-economic status. This includes providing scholarships, establishing coaching programs, and enhancing vocational training to help reserved category students perform well and secure better job opportunities.

- **Creamy Layer Criteria:** Implement formal legislation to quantify and regularly monitor the creamy layer criteria within OBCs. Ensure that benefits reach the truly needy sections by excluding economically well-off individuals who no longer require affirmative action support.
- **Socio-Economic Measures:** Develop policies that support vulnerable populations and infrastructure to address the socio-economic impacts of reservation policies. **This includes building flood-resilient infrastructure,** enhancing community preparedness, and ensuring food security through efficient supply chain management.
- **Judicial Compliance:** Ensure that reservation policies are designed to withstand judicial scrutiny and do not violate constitutional limits. Regularly consult legal experts to align policies with Supreme Court guidelines and address any potential legal challenges proactively.
- **Political Neutrality:** Safeguard reservation policies from political interference by establishing independent bodies to oversee implementation and compliance. This reduces the risk of politicisation and ensures that policies serve their intended purpose.
- **Administrative Efficiency:** Strengthen administrative capacity to accurately identify and categorise eligible beneficiaries. Improve transparency and accountability in the reservation process through regular audits and public reporting of outcomes.
- **Sustainable Development Goals:** Align reservation policies with broader sustainable development goals to promote inclusive growth. Ensure that reservation policies contribute to reducing poverty, improving education, and fostering social harmony and economic stability.

Justice Rohini Commission

- **Formation:** Established on October 2, 2017, to examine sub-categorization of OBCs.
- **Objectives:**
 - Investigate the conditions of socially and educationally backward classes.
 - Examine inequality in reservation benefits among OBCs.
 - Develop sub-categorization criteria.
 - Recommend corrections to the central list of OBCs.
- **Need for Sub-Categorization:** Address disproportionate distribution of 27% OBC reservation benefits.
- **Preliminary Findings:**
 - 97% of reserved jobs and educational seats went to just 25% of OBC sub-castes.
 - Only 10 OBC communities accounted for 25% of reserved central jobs and institutional seats.
 - 37% of OBC communities had zero representation in jobs and educational institutes.
 - Only 2.68% of the reservation was utilised by 994 castes.

1.3 LOK SABHA SPEAKER

The newly elected 18th Lok Sabha has elected its new Speaker recently.

About Lok Sabha Speaker

- The Speaker is the Presiding Officer or Chairman of the Lok Sabha.
- **Articles 93-97** of Indian constitution deals with the provisions of Presiding officers of Lok Sabha.
- The rules for electing the Speaker are laid down in **Article 93 of the Constitution.**
- The Speaker holds office from the **date of his or her election until the first sitting of the Lok Sabha** following the dissolution of the one to which he or she was elected.
- As per the process, before the first session of newly elected Lok Sabha begins, the President appoints a **Pro-tem Speaker** to administer the oath of office to the newly elected **Members of Parliament (MPs).**

Historical Background

- **Montagu-Chelmsford Reforms (Government of India Act 1919):** Introduced the positions of Speaker and Deputy Speaker. Up until 1947, the Speaker and Deputy Speaker were addressed as the President and Deputy President respectively.
- The Central Legislative Assembly's first Speaker and Deputy Speaker were **Frederick Whyte and Sachidanand Sinha, respectively**. In 1925, **Vithalbhai J. Patel** became the **Central Legislative Assembly's first Indian Speaker**.
- The **Government of India Act of 1935** changed the nomenclatures of the President of the Central Legislative Assembly to the Speaker. However, the old nomenclature continued till **1947 as the federal part of the 1935 Act** was not implemented.
- **Ganesh Vasudev Mavalankar:** Served as the first Speaker of independent India from 15 May 1952 until 27 February 1956.
- **Madabhushi Ananthasayanam Ayyangar (4 February 1891 – 19 March 1978)** was the first Deputy Speaker and then Speaker of the Lok Sabha in the Indian Parliament.

Role of Speaker

- **Representative of the House:** The Speaker is the head of the Lok Sabha and its representative. He/she is the guardian of the powers and privileges of the members, the House as a whole, and its committees.
- **Decision Authority:** The Speaker is the principal spokesman of the House, and his/her decision in all Parliamentary matters is final.
- **Maintaining Order:** The Speaker is responsible for maintaining order and decorum in the House. He/she can discipline members, including suspending them for unruly behaviour.
- **Conduct of Business:** The Speaker ensures the smooth conduct of business in the House. This includes deciding the order of speeches, allocating time for debates, and putting matters to vote.
- **Certification of Money Bills:** The Speaker certifies whether a Bill is a Money Bill or not. This certification is crucial as Money Bills can only be introduced in the Lok Sabha and must be passed within a stipulated time frame.
- **Chairing Joint Sessions:** In case of a deadlock between the two Houses on certain legislative matters, the Speaker presides over the joint sessions of Parliament.
- **Committee Appointments:** The Speaker appoints members to various parliamentary committees, ensuring their effective functioning and representation of all political parties.
- **Casting Vote:** In case of a tie during a vote in the House, the Speaker exercises a casting vote to break the deadlock.

Resignation and Removal of Speaker

- Usually, the Speaker remains in office during the life of the Lok Sabha. However, he has to vacate his office earlier in any of the following three cases:
 - If he ceases to be a member of the Lok Sabha
 - If he resigns by writing to the Deputy Speaker
 - If he is removed by a resolution passed by a majority of all the members of the Lok Sabha.
- Such a resolution can be **moved only after giving 14 days'** advance notice and when such a resolution for the removal of the Speaker is under consideration of the House, he cannot preside at the sitting of the House, though he may be present.
- However, he can speak and take part in the proceedings of the House at such a time and vote in the first instance, **though not in the case of an equality of votes**.
- Whenever the Lok Sabha is dissolved, the **Speaker does not vacate his office and continues till the newly-elected Lok Sabha meets**.

Independence and Impartiality of Speaker

- **Security of Tenure:** The Speaker is provided with security of tenure and can be removed only by a resolution passed by the Lok Sabha by a special majority.

- **Financial Independence:** The salaries and allowances of the Speaker are fixed by Parliament and are charged on the Consolidated Fund of India, making them independent of the annual vote of Parliament.
- **Conduct in House:** The Speaker's work and conduct cannot be discussed or criticized in the Lok Sabha except on a substantive motion.
- **Legal Immunity:** The Speaker's powers of regulating procedure, conducting business, or maintaining order in the House are **not subject to the jurisdiction of any Court**.
- **Order of Precedence:** The Speaker holds a high position in the order of precedence, placed at seventh rank, along with the Chief Justice of India.

Pro tem Speaker

- **Temporary Appointment:** As provided by the Constitution, the Speaker of the last Lok Sabha vacates office immediately before the first meeting of the newly-elected Lok Sabha. The **President** designates a Lok Sabha member as Speaker Pro Tem, typically the most senior member.
- **Oath Administration:** The Speaker Pro Tem is sworn in by the **President and possesses all the powers of the Speaker**. His primary responsibility is to **administer the oath** to new members and facilitate the election of the new Speaker.

Issues with the Working of the Speaker

- **Partisanship Allegations:** One of the significant issues is the perceived lack of impartiality, with allegations that Speakers sometimes favor the ruling party. This perception can undermine the credibility and authority of the Speaker's office.
- **Disruption Management:** The Speaker often faces challenges in managing disruptions in the House. The inability to control frequent disruptions affects legislative productivity and the efficient conduct of business.
- **Decision Making under Pressure:** Speakers are sometimes under immense pressure from their political affiliations, leading to decisions that may not always align with the principles of neutrality and fairness.
- **Transparency and Accountability:** There is often a call for greater transparency in the Speaker's decision-making processes. Critics argue that decisions, especially those related to disqualification of members and procedural rulings, should be more transparent and subject to review.
- **Regulatory Challenges:** The Speaker's role in enforcing rules and maintaining order can be challenging, especially in a highly polarized political environment. Balancing the interests of different political groups while ensuring adherence to parliamentary norms requires significant skill and impartiality.

Way Forward

- **Strengthening Impartiality:** Efforts should be made to further insulate the Speaker from political pressures to maintain and enhance the impartiality of the office.
- **Capacity Building:** Regular training and capacity-building programs for the Speaker and other parliamentary officers can ensure effective management of the House.
- **Technological Integration:** Embracing technology for better management of parliamentary proceedings, including digital voting systems, electronic document management, and virtual sessions, can enhance the efficiency of the Lok Sabha.
- **Reforms in Selection Process:** Introducing reforms in the selection process of the Speaker to ensure more bipartisan support and enhance the credibility of the position.

1.4 LEGAL SERVICES AUTHORITY

Ordeal of child marriage victims in Udaipur ends with Legal Services Authority's help.

About Legal Services Authority Act, 1987

- It was enacted to enforce the provisions of **Article 39 A**.

- **Article 39A** of the constitution pertains to promoting justice on the basis of equal opportunity by providing **free legal aid to weaker sections of society**.
- **Article 39A was inserted in the constitution by the 42nd Amendment act 1976.**
- The Act resulted in creation of The **National Legal Services Authority (NALSA)** across the country.
- Following types of services are covered in legal aid under the act,
- Legal **proceedings represented by advocates**.
- Document preparation of any pleadings, appeal memo, or paper book which includes for translation and printing of documents towards legal proceeding;
- Expenses incurred for drafting special leave petitions or other legal documents.
- Any service given and amount charged relating to any legal case conducted or proceedings before any court or other **Authority or tribunal which are of legal nature and;**

Advices of legal nature.

- In addition to above, payment of fees towards any aid or advice given to the beneficiaries for claiming benefits for the schemes and statues framed by any state government or central government, it can be included under free legal services.

National Legal Services Authority

- **The Chief Justice of India** is patron-in-chief of NALSA.
- The second senior-most Judge of the Supreme Court of India is the Executive-Chairman.
- To promote an inclusive legal system in order to ensure fair and meaningful justice to the marginalized and disadvantaged sector is the vision of NALSA.
- **The prime objective of NALSA is speedy disposal of cases** and reducing the burden of the judiciary.
- NALSA is housed at the Supreme Court of India.
- It is the apex body constituted to lay down policies and principles for making legal services available under the provisions of the Act and to frame most effective and economical schemes for legal services.
- It also **disburses funds and grants to State Legal Services Authorities** and NGOs for implementing legal aid schemes and programmes.

State Legal Services Authority

- In every State, the State Legal Services Authority has been constituted to give effect to the policies and directions of the NALSA.
- To give free legal services to the people and conduct Lok Adalats in the State.
- The State Legal Services Authority is **headed by Hon'ble the Chief Justice of the respective High Court who is the Patron-in-Chief of the State Legal Services Authority**.
- A Senior **Most Judge of the High Court is nominated as Executive Chairman, SLSA**.

District Legal Services Authority

- **It has been constituted to implement Legal Services Programmes and situated in Districts Courts Complex in every District.**
- It is chaired by the **District Judge** of the respective district.
- **A Civil Judge Cadre Judicial Officer** is appointed as Secretary on a fulltime basis.

Eligibility for free legal aid

- **Under Section 12 of the Legal Services Authorities Act, 1987**, the following individuals are eligible for free legal services:
- Scheduled Castes or Scheduled Tribes Members
- Victims of Trafficking or Begar
- Women and Children

- Mentally Ill or Disabled Persons
- **Victims of Undeserved Want:** Includes victims of mass disasters, ethnic violence, caste atrocities, floods, droughts, earthquakes, or industrial disasters.
- **Industrial Workmen**
 - **Persons in Custody:** Includes those in protective homes, juvenile homes, psychiatric hospitals, or psychiatric nursing homes.
- **Low-Income Individuals:**
 - Annual income less than ₹9,000 (or higher as prescribed by State Govt.) for cases before courts other than the Supreme Court.
 - Annual income less than ₹12,000 (or higher as prescribed by Central Govt.) for cases before the Supreme Court.

Lok Adalat

- **NALSA along with other Legal Services Institutions conducts Lok Adalats.**
- Lok Adalat is one of the alternative dispute redressal mechanisms. It is a forum where disputes/cases pending in the court of law or at pre-litigation stage are settled/ compromised amicably.
- Lok Adalats have been given **statutory status** under the Legal Services Authorities Act, 1987.
- The award (decision) made by the Lok Adalats is deemed to be a decree of a civil court and is final and binding on all parties and no appeal against such an award lies before any court of law.
- If the parties are not satisfied with the award of the Lok Adalat though there is no provision for an appeal against such an award.
- They are free to initiate litigation by approaching the court of appropriate jurisdiction by filing a case by following the required procedure, in exercise of their right to litigate

Challenges

- **Limited Beneficiary Reach:** Despite over 80% of India's 1.25 billion population being eligible for legal aid, only 15 million people have benefited since 1995 (India Justice Report 2019). This indicates a significant gap in the reach and accessibility of legal services.
- **Financial Mismanagement:** The lack of financial management and accountability, coupled with insufficient performance monitoring, has severely compromised the performance and effectiveness of legal services authorities. Efficient fund allocation and usage are critical for maintaining and expanding legal aid services.
- **Women Representation:** Only 18% of panel lawyers are women, which restricts efficiency, particularly in handling cases related to women. Increasing the representation of women in the legal aid system is crucial for ensuring gender-sensitive legal services.
- **Inconsistent Organizational Procedures:** In 2018, 2,254 sub-divisional/taluka legal services committees and 664 District Legal Services Authorities (DLSA) were established. However, inconsistent procedures and lack of uniformity across these bodies hinder their overall effectiveness.
- **Limited Reach of DLSA:** District Legal Services Authorities have not been established in all judicial districts of Tripura, West Bengal, Telangana, Chhattisgarh, Gujarat, and Uttar Pradesh, limiting the reach and impact of legal aid services in these regions.
- **Awareness and Education:** A significant portion of the eligible population is unaware of their right to free legal aid. There is a need for more extensive public awareness campaigns and education programs to inform citizens about available legal services.
- **Technological Integration:** The adoption of technology in the legal aid system is limited, affecting the efficiency and accessibility of services. Implementing digital platforms and tools can streamline processes and reach a broader audience.
- **Resource Constraints:** Legal services authorities often face resource constraints, including insufficient staffing and inadequate infrastructure, which hamper their ability to provide effective services.

- **Coordination and Collaboration:** There is often a lack of coordination between different levels of legal services authorities (national, state, and district), as well as with other related agencies and NGOs.

Way forward

- **Enhance Women Representation:** Increase recruitment and training of women panel lawyers.
- **Expand Beneficiary Reach:** Launch awareness campaigns and outreach programs in rural and remote areas.
- **Improve Financial Management:** Establish robust financial management, accountability mechanisms, and regular performance monitoring.
- **Standardize Procedures:** Develop and enforce uniform guidelines across all legal services bodies.
- **Increase DLSA Presence:** Ensure District Legal Services Authorities are established in all judicial districts.
- **Boost Awareness and Education:** Conduct extensive public education programs about legal aid rights.
- **Integrate Technology:** Implement digital platforms and tools for efficient legal aid delivery.
- **Address Resource Constraints:** Improve staffing and infrastructure for legal services authorities.
- **Strengthen Coordination:** Enhance collaboration between national, state, and district legal services authorities and related agencies

1.5 DRAFT DIGITAL COMPETITION BILL

Recently, the government proposed the Digital Competition Bill 2024, which aims to regulate the digital sector and prevent anti-competitive practices.

About Digital Competition Bill

- It proposes new **legislative framework which aims to address the unique challenges** posed by digital marketplaces and ensure fair competition within the rapidly evolving tech sector in India.
- The bill is **inspired by the European Union's Digital Markets Act (DMA)**.
- **Current Framework Limitations:** India's current ex-post framework under the Competition Act, 2002, has faced criticism for delays and disadvantaging smaller competitors.

Current Status of the Digital Market in India

- **Rapid Growth:** The digital market in India is expanding quickly, with a projected growth from USD 5.15 billion in 2023 to **USD 55.37 billion by 2032**.
- **E-commerce Boom:** Driven by over **900 million internet users**, the e-commerce sector is thriving, fuelled by increased smartphone usage and affordable data.
- **Technological Advancements:** **Adoption of AI, data analytics, AR, VR, and blockchain** is transforming the digital landscape, enhancing consumer engagement and marketing efficiency.
- **Government Initiatives:** The Digital India campaign and supportive policies are fostering a digitally empowered society and a robust digital economy.
- **Regional Leaders:** States like **Karnataka, Maharashtra, Telangana, Gujarat, and Haryana** are leading in digital transformation, significantly contributing to market growth.

Key Proposals of The Draft Digital Competition Bill

Predictive Regulation

- **Proactive Approach:** The bill introduces provisions to set **presumptive norms to curb anti-competitive practices** before they occur, addressing the complexity of digital markets.
- **Heavy Penalties:** Violations of these norms can result in substantial fines, potentially amounting to billions of dollars.

Significant Entities

- **Systematically Significant Digital Enterprises (SSDE):** Companies will be designated as SSDEs based on specific criteria:
 - Turnover in India of at least Rs 4,000 crore over the last three financial years, or

- Global turnover of at least \$30 billion, or
- Gross merchandise value in India of at least Rs 16,000 crore, or
- Global market capitalization of at least \$75 billion, or
- Core digital service with at least 1 crore end users or 10,000 business users.
- **Discretionary Designation:** Entities not meeting these parameters can still be designated as SSDEs if the CCI believes they have a significant presence in any core digital service.
- **Prohibited Practices:** SSDEs are prohibited from engaging in:
 - **Self-Preferencing:** Favoring their own products or services over competitors'.
 - **Anti-Steering:** Restricting users from being directed to third-party services or products.
 - **Restricting Third-Party Applications:** Limiting the functionality of third-party apps on their platforms.
- **Penalties:** Violations can result in fines up to 10% of the company's global turnover.

Associate Digital Enterprises (ADEs)

- **Designation Criteria:** ADEs are identified based on the interplay of data across major technology groups:
 - **Group Association:** An entity within a technology group that benefits from data collected by another group company can be designated as an ADE.
- **Example:**
 - **Google Maps:** If Google Search directs significant traffic data to Google Maps, it can be designated as an ADE.
 - **YouTube:** If YouTube's recommendations are heavily influenced by data from Google Search, it can also be designated as an ADE.
- **Regulatory Obligations:** ADEs will have the same regulatory obligations as SSDEs, ensuring they comply with rules on self-preferencing, anti-steering, and third-party application restrictions.

Empowering the Competition Commission of India (CCI)

- **The bill empowers the CCI to proactively intervene and enforce regulations,** addressing conflicts and anti-competitive practices in the digital market.

Data Regulation

- **Fair Data Use:** Regulates how data can be shared and used within tech conglomerates to ensure fair competition and prevent misuse.

Significance

- **Ensuring Fair Competition:** The bill aims to create a level playing field in the digital market by regulating dominant players, preventing them from engaging in anti-competitive practices that could stifle competition.
- **Supporting Startups:** By **preventing market monopolization** and ensuring fair competition, the bill supports start-ups and small businesses, enabling them to compete more effectively against larger, established players.
- **Protecting Consumers:** By **curbing practices like self-preferencing and anti-steering**, the bill ensures consumers have more choices and access to diverse services, leading to better quality and fair pricing.
- **Regulating Data Interplay:** Recognizing the significant role of data sharing within tech conglomerates, the bill ensures that data collected by one company is not misused to unfairly benefit other group companies.
- **Encouraging Innovation:** The bill seeks to **lower market entry barriers for new players**, promoting a competitive environment where innovation can thrive, benefiting consumers with more innovative products and services.
- **Aligning with Global Standards:** Inspired by the European Union's Digital Markets Act (DMA), the bill aligns India's digital market regulations with global standards, enhancing the country's reputation competitive market.

Criticism

- **Compliance Burden on Big Tech:** Major technology companies argue that the stringent regulations and compliance requirements could impose significant administrative and financial burdens. This could shift their focus from innovation and research to regulatory compliance, potentially stifling technological advancements.

- **Discretionary Powers of the CCI:** The extensive **discretionary powers granted to the CCI** to designate SSDEs and ADEs based on quantitative assessments are a point of contention. Critics argue that this could lead to subjective decision-making and potentially arbitrary enforcement actions.
- **Potential for Increased Litigation:** The preventive and presumptive nature of the bill may lead to an increase in litigation, as companies challenge CCI's designations and the imposed restrictions. This could result in prolonged legal battles, adding to the operational complexities for businesses.
- **Global Competitiveness:** Critics argue that stringent regulations might affect the global competitiveness of Indian tech companies. As they comply with rigorous local regulations, they might struggle to compete on an international scale against companies operating in less regulated environments.
- **Security Concerns:** Companies like Google and Apple have raised concerns about security implications. For instance, **regulations requiring platforms to allow third-party applications** could expose users to security risks, as these apps might not adhere to the same security standards.
- **Economic Impact:** Some critics suggest that the bill could have unintended economic consequences, such as **reducing foreign direct investment in India's digital sector**. Companies might be deterred by the prospect of heavy regulations and potential fines, impacting the overall growth of the digital economy.

Way forward

- **Stakeholder Consultation:** Engage in continuous dialogue with stakeholders, including tech companies, consumer groups to refine the bill and address concerns about compliance burdens and regulatory impacts.
- **Clear Guidelines:** Establish clear and transparent criteria for the designation of Systematically Significant Digital Enterprises (SSDEs) and Associate Digital Enterprises (ADEs) to prevent subjective decision-making and ensure fair implementation.
- **Balancing Regulation and Innovation:** Ensure that the regulatory framework supports innovation by minimizing unnecessary compliance burdens and focusing on creating a level playing field.
- **Enhanced CCI Capacity:** Strengthen the technical and operational capacity of the Competition Commission of India (CCI) to handle the complexities of the digital market effectively, including early detection and timely resolution of anti-competitive practices.
- **Security Measures:** Implement robust security measures to mitigate the risks associated with third-party applications and ensure user data protection, addressing concerns raised by companies like Google and Apple.
- **Global Competitiveness:** Align the regulatory framework with global standards to maintain the international competitiveness of Indian tech companies, ensuring they can compete effectively on a global scale.
- **Periodic Reviews:** Conduct regular reviews of the regulatory impact to adapt to the rapidly evolving digital market, ensuring the legislation remains relevant and effective in addressing new challenges.

1.6 EMERGENCY PROVISIONS IN INDIAN CONSTITUTION

25th June 2024 marks 49 years since the Proclamation of Emergency in 1975.

Emergency Provisions in India

- **Purpose:** Emergency provisions in the Indian Constitution are designed to **grant extraordinary powers to the central government** to safeguard national security and stability during crisis situations
- **Constitutional Framework:** Enshrined in **Part XVIII** of the Indian Constitution, Articles **352 to 360** cover different types of emergencies.
- **Historical Context:** Influenced by **Germany's Weimar Constitution and Government of India Act, 1935**, emergency provisions were extensively debated in the Constituent Assembly. They were **intended as measures of last resort**, reflecting the federal nature of Indian polity while providing a mechanism to handle severe threats to the nation.

- **Checks and Balances:** To prevent misuse, emergency provisions **require parliamentary approval and are subject to judicial review**. They are implemented with **time-bound restrictions and include safeguards for fundamental rights**, with amendments made over time to address potential abuse of power.
- **Types of Emergencies:** The Constitution provides for three types of emergencies: **National Emergency (Article 352), State Emergency or President's Rule (Article 356), and Financial Emergency (Article 360)**.

National Emergency: Article 352

- **Grounds for Proclamation:** A National Emergency can be declared under Article 352 when the security of India is threatened by **war, external aggression, or armed rebellion**.
- **Process of Implementation:**
 - The President, on the advice of the Union Cabinet, issues a proclamation of emergency.
- **Ratification and Duration:**
 - Both houses of Parliament (Lok Sabha and Rajya Sabha) must **approve the proclamation within one month**.
 - The proclamation lasts for **six months** initially.
 - Parliament can **extend it by a further six months** at a time through a resolution.
 - There is **no maximum limit** on the duration of a National Emergency.
- **Withdrawal:**
 - The **President can revoke** the proclamation at any time.
 - The emergency can also be revoked if the **Lok Sabha passes a resolution by a simple majority** disapproving its continuation.
- **Impacts:**
 - **Centralization of power:** The federal structure shifts towards unitary, with the Union government gaining more **control over state affairs**.
 - **Restrictions on Fundamental rights:** Most fundamental rights including Art 19 can be suspended, significantly impacting civil liberties. However, Art 21 cannot be suspended even under emergency(44th CAA)
 - **Extended tenure of Parliament:** The Lok Sabha's term can be extended by one year at a time (up to a maximum of 6 months after the emergency ceases).

State Emergency: Article 356

- **Grounds for Proclamation:**
 - If the President is satisfied that a situation has arisen in which **the government of a state cannot be carried out in conformity with the provisions of the constitution**, he/she is authorized by **Article 356** to issue a proclamation.
 - According to **Article 365**, whenever a **state fails to comply with or to give effect to any direction given by the centre**, President's rule can be declared.
- **Ratification and Duration:**
 - Parliament must approve the proclamation within **two months**.
 - The President's Rule is imposed in the state, with the central government assuming control.
 - The proclamation lasts for **six months** initially and can be extended for further periods of **three years**.
- **Withdrawal:** The President's rule can be **revoked by the President** at any time by a subsequent proclamation. Such a proclamation **does not require parliamentary approval**.
- **Impacts:**
 - **The State government dissolution:** The elected state government is dismissed, and governance is taken over by the Union government.
 - **Legislative powers shift:** The state legislature is suspended, and Parliament assumes the power to make laws for the state.

- **Bureaucratic realignment:** State administrative machinery comes under direct control of the Union government, potentially affecting policy implementation and governance.

Financial Emergency: Article 360

- **Grounds for Proclamation:** A Financial Emergency can be declared under **Article 360** if a situation arises that threatens the **financial stability or credit of India**.
- **Ratification and Duration:**
 - The proclamation must be laid before both Houses of Parliament and ceases to operate at the expiration of **two months** unless approved by resolutions of both Houses with a **simple majority**.
 - The proclamation allows the central government to take steps to control the economic situation.
 - There is **no time limit** on a Financial Emergency.
- **Withdrawal:** The Financial emergency can be **revoked by the President** at any time by a subsequent proclamation. Such a proclamation **does not require parliamentary approval**.
- **Impacts:**
 - **Fiscal autonomy reduction:** States' financial powers are curtailed, with the Union government able to direct states on financial matters.
 - **Salary cuts:** The salaries and allowances of all government officials, including judges of the Supreme Court and High Courts, can be reduced.
 - **Budget scrutiny:** All **money bills and financial bills of states require the President's approval** before being introduced in the state legislature, impacting state-level financial decision-making.

Instances of Emergency Use in the Past

- **National Emergency:** India has declared emergencies on three occasions:
 - **1962 Sino-Indian War**
 - **1971 Indo-Pak War**
 - **1975-77 Internal Disturbance**
- **State Emergency:** President's Rule has been imposed **over 100 times** since independence, with **Kerala in 1959** being the first instance. Its frequent use, especially during the 1970s and 1980s, often for political reasons, has been a subject of much debate and criticism.
- **Financial Emergency:** A Financial Emergency has never been proclaimed in India till date.

Emergency of 1975: A Case Study

Background

- **June 24, 1975:** The Supreme Court found Prime Minister Indira Gandhi guilty of electoral fraud, ruling her ineligible to serve as an MP.

Declaration of Emergency

- **June 25, 1975:** President Fakhruddin Ali Ahmed, on Gandhi's advice, declared a national emergency, citing a "deep and widespread conspiracy" against her government.

Emergency Period (1975-1977)

- **Civil Liberties Suspended:**
 - Strict censorship on the press.
 - Mass arrests of opposition leaders, including Jayaprakash Narayan, L.K. Advani, Atal Bihari Vajpayee, and Morarji Desai.
- **Centralisation of Power:**
 - Federal structure shifted towards a unitary system.
 - Government extended Parliament's and state assemblies' terms.

Constitutional Amendments During Emergency

- **39th Amendment (1975):** Placed electoral disputes involving key political figures beyond judicial review.

- **42nd Amendment (1976):**
 - Allowed the central government to override state laws during emergencies.
 - Restricted judicial review of laws and amendments.
 - Extended the terms of Parliament and state assemblies.
 - Permitted laws to supersede fundamental rights in cases of anti-national activities.

Aftermath

- **End of Emergency:** Officially ended on March 21, 1977.
- **Elections:** The Janata Party won a significant majority, and Morarji Desai became Prime Minister.
- **44th Amendment (1978):**
 - Ensured the right to life and liberty under Article 21 could not be suspended during an emergency.
 - Reinforced the Supreme Court's power to review presidential proclamations of emergency.
 - Required the President to act on the written recommendation of the cabinet before declaring a national emergency.

Issues

Potential for Misuse

- **Centralization of Power:** Emergency provisions can lead to excessive centralization, undermining the federal structure of governance.
- **Infringement on Fundamental Rights:** There's a significant risk of fundamental rights being compromised, with political motivations potentially overshadowing genuine crises.
- **Necessity for Checks and Balances:** Strong oversight mechanisms are required to prevent abuse and ensure that emergency powers are used appropriately.

Lack of Clear Definitions

- **Ambiguity:** Terms like "failure of constitutional machinery" are vague, leading to diverse interpretations and potential misuse.
- **Financial Emergency Criteria:** The absence of specific criteria for declaring a financial emergency adds to the complexity and potential for arbitrary application.

Impact on Democratic Functioning

- **Suspension of Democratic Processes:** Emergencies often result in the suspension of democratic norms and processes, eroding state autonomy and disrupting the institutional balance.
- **Public Trust:** Frequent or unjustified use of emergency powers can diminish public trust in democratic institutions and the rule of law.

Judicial Limitations

- **Scope of Review:** The judiciary's limited ability to review emergency proclamations restricts its role in checking executive overreach.
- **Subjective Satisfaction:** Assessing the President's satisfaction in declaring an emergency is challenging, making judicial oversight difficult.
- **Intervention Delays:** Judicial interventions during ongoing emergencies often face significant delays, complicating the balance between national security and constitutional principles.

Additional Dimensions

- **Economic Impact:** Emergencies can disrupt economic activities, leading to financial instability and loss of investor confidence.
- **International Perception:** Frequent use of emergency provisions may harm a country's international reputation, affecting diplomatic relations and foreign investments.
- **Administrative Efficiency:** The centralization of power during emergencies can lead to bureaucratic inefficiencies and a lack of accountability in governance.

Way Forward

- **Strengthen judicial oversight:** Implementing the guidelines set by the **Supreme Court in S.R. Bommai vs Union of India (1994) and Rameshwar Prasad vs Union of India (2006) cases:**
 - To ensure that the **President's satisfaction is based on relevant material** and can withstand judicial scrutiny.
- **Localize emergency provisions:** Adopting the Punchhi Commission's recommendation to **apply Articles 355 and 356** to specific areas rather than entire states and limiting the duration of such localized emergency provisions to a maximum of 3 months.
- **Preserve legislative assemblies:** Following the S.R. Bommai judgment by suspending, rather than dissolving, state assemblies until parliamentary approval of the proclamation.
- **Enhance transparency:** Implementing the Sarkaria Commission's recommendation for governors to provide a 'speaking document' with wide publicity when recommending President's Rule.
- **Clarify grounds for invocation:** Adopting the **Sarkaria Commission's guidelines** on **specific circumstances warranting the use of Article 356**, such as political crisis, internal subversion, physical breakdown, and non-compliance with constitutional directives.
- **Implementing the Recommendations of 2nd Administrative Reforms Commission:**
 - **Invoking Article 356:** The Commission recommended that **Article 356 should be used sparingly** and only as a measure of last resort.
 - **Use Case:** It should be imposed only in cases of **genuine breakdown of constitutional machinery** in a state.
 - **Governor's role:** The Governor's report recommending President's Rule should be detailed. The report should be made public to ensure transparency and accountability.
 - **Safeguarding fundamental rights:** The commission emphasized the need to protect fundamental rights, especially the right to life and personal liberty, during emergencies.
- **Review mechanism:** It recommended establishing a mechanism for periodic review of emergency situations to ensure they are not prolonged unnecessarily.

1.7 SPECIAL CATEGORY STATUS

Demands for special category status for Bihar and Andhra Pradesh are back in focus after the general Lok Sabha election.

- **A special category status (SCS) is allotted** in situations to a state to enhance its growth prospects in case they are backward.
- **Purpose:** Special Category Status used to be granted to some regions that have historically been at a disadvantage compared with the rest of the country.
- **Criteria to Select:** In the past, the National Development Council (NDC) considered factors such as
 - Difficult and hilly terrain,
 - Low population density and/or a sizeable share of tribal population,
 - Strategic location along borders, economic and infrastructural backwardness, and
 - The non-viable nature of state finances.
- **Benefits:** For special category status category states, the **Centre pays 90 percent of the funds required in a centrally sponsored scheme as against 60 per cent** in case of normal category states, while the remaining funds are provided by the state governments.
- The **NDC first accorded SCS in 1969 to Jammu and Kashmir, Assam and Nagaland.**
 - Over the years, eight more states were added to the list — Arunachal Pradesh, Himachal Pradesh, Manipur, Meghalaya, Mizoram, Sikkim, Tripura and, finally, in 2010, Uttarakhand.
- **Constitutional Provision:** The Constitution does not have any provision for categorization of any state as a (SCS).
- A provision was made later for awarding Special Category Status on the recommendations of the **Fifth Finance Commission in 1969.**
- **Role of NITI Aayog:** The NITI Aayog, which has replaced the Planning Commission, has no power to allocate funds.

- **Current Status: Fourteenth Finance Commission effectively removed** the concept of Special Category States after its recommendations **were accepted in 2015.**
- It suggested that the resource gap of each state be filled through 'tax devolution', urging the Centre to increase its share of **tax revenues to the states from 32% to 42%.**

Centrally Sponsored Scheme

- Centrally Sponsored Schemes (CSS) are those schemes which are implemented by the state government but **expenses are shared between the central and state government.**
- At present, there are **30 centrally sponsored schemes**, but these are umbrella programmes and they have **many sub-schemes under them.**
- **The funding is borne by the states in the ratio of 50:50 or 90:10 or 75:25 or 70:30.**
- **Centrally sponsored schemes can be further divided into two sections** — core of core schemes and core schemes.
- **Core Scheme:** Green Revolution, White Revolution, Blue Revolution, Pradhan Mantri Gram Sadak Yojana, Pradhan Mantri Krishi Sinchai Yojana, Pradhan Mantri Awas Yojana, Swachh Bharat Mission, Mid-day meals in schools and National Livelihood Mission are some core schemes.
- **Core of the core schemes:** include the umbrella scheme for development of scheduled castes, umbrella scheme for development of minorities, and the Mahatma Gandhi National Rural Employment Generation Scheme.
- **Core of core schemes are implemented for social inclusion and social protection**, and they are fully funded by the central government.

Central sector schemes

- **Central sector schemes are implemented by the central government** and the budget or financing needed for the scheme is entirely sourced by the central government.

1.8 AGNIPATH SCHEME

Recently, it has been stated that the government should review the "Agnipath" scheme for short term recruitments to the armed forces.

About Agnipath Scheme

- **It is a short-service manpower model under which around 45,000 to 50,000** soldiers are recruited annually. Of these, 75% will leave the service in four years. 25% will be allowed to continue for another 15 years under permanent commission.
- **Eligibility Criteria:** It is only for personnel below officer ranks (those who do not join the forces as commissioned officers).
 - Aspirants between the ages of 17.5 years and 21 years are eligible to apply.
- **Post Selection Scenario:** Once selected, the aspirants go through training for six months and then will be deployed for three and a half years.
 - **Remuneration:** During this period, they get a starting salary of **INR 30,000**, along with additional benefits which will go up to **INR 40,000** by the end of the four-year service.
- **Seva Nidhi Package:** 30% of salary is set aside under a Seva Nidhi programme, and the Government will contribute an equal amount every month, and it will also accrue interest. At the end of the four-year period, each soldier will get INR 11.71 lakh as a lump sum amount, which will be tax-free.
- They will also get a INR 48 lakh life insurance cover for the four years. In case of death, **the payout will be over INR 1 crore, including pay for the unserved tenure.**
- **There shall be no entitlement to gratuity and pensionary benefits.**

Agniveer

- Agniveers will be the name given to the young people selected for the Agneepath initiative. After four years, agniveers will be given the chance to apply for permanent enlistment in the armed forces.

1.9 FOREIGNERS TRIBUNAL

Supreme Court halts deportation of Cooch Behar woman declared foreigner by tribunal

- **About tribunal:** The Foreigners Tribunal is a quasi-judicial authority.
- **Established under the Foreigners (Tribunal) Order, 1964**, and governed by the Foreigners Act, 1946, these tribunals play a crucial role in adjudicating cases related to the identification of illegal immigrants.

Legal Framework

- **Foreigners Act, 1946:** Provides the legal foundation for identifying and managing foreigners in India.
- **Foreigners (Tribunal) Order, 1964:** Establishes the creation and operation of the Foreigners Tribunal.

Functioning

- **Referral Process:** In 1964, the Centre passed the Foreigners' (Tribunals) Order under provisions of Section 3 of the Act. The FTs get two kinds of cases: those against whom a "reference" has been made by border police, and those whose names in the electoral rolls have a D (Doubtful) against them.
- **Section 9 of the Foreigners Act says that:** the accused has to prove he or she is an Indian.
- Since the onus is on the person, if he or she is absconding and doesn't appear before the tribunal, the member can pass an ex parte order.
- **Hearing:** The tribunal conducts hearings where the individual in question can present evidence to support their claim of Indian citizenship.
- **Decision:** Based on the **evidence presented, the tribunal issues a ruling**. If the tribunal declares someone a foreigner, they **may face deportation or detention**.
- If police can track the person after the order, he or she will be arrested and put into a detention camp. If not, the person will be an 'untraced foreigner'.

1.10 SECTION 436A OF THE CODE OF CRIMINAL PROCEDURE (CRPC)

PMLA accused who have spent half of maximum sentence as undertrial can be given bail using the provisions of Section 436A of the Code of Criminal Procedure (CrPC).

Overview

- **Provision:** Section 436A CrPC allows undertrials who have spent half of the maximum period of the prescribed sentence to be released on bail.
- **Extension:** The Supreme Court has applied this to Prevention of Money Laundering Act, 2002 (PMLA) cases, broadening its impact.

About Section 436A CrPC

- **Legal Text:** Stipulates that a person who has served half of their maximum sentence as an undertrial should be granted bail.
- **Judicial Extension:** The Supreme Court, in Vijay Madanlal Choudhary vs. Union of India (2022), allowed the use of Section 436A for PMLA cases.
- **Exceptions:** Courts can deny bail if the delay in trial is due to the accused's actions or other significant reasons.

PMLA (Prevention of Money Laundering Act, 2002)

- **Objective:** To prevent money laundering and to provide for the confiscation of property derived from such activities.
- **Stringent Bail Conditions:** Similar to UAPA, PMLA imposes tough conditions for granting bail.

- **Section 45:** Contains a "negative" provision, making it difficult for the accused to secure bail. The accused must prove no prima facie case against them and assure they will not commit any offense in the future.

Case Study: Vijay Madanlal Choudhary vs. Union of India (2022)

- **Significance:** This case provided a crucial precedent for applying Section 436A to PMLA cases, highlighting the judiciary's recognition of prolonged detention issues.
- **Outcome:** Established a legal framework for undertrials in PMLA cases to seek bail after spending half of their maximum sentence period in custody.

Practical Implications

- **Relief for Undertrials:** The provision is crucial for undertrials facing long judicial processes in PMLA cases.
- **Judicial Balance:** Aims to balance stringent anti-money laundering measures with protecting the rights of undertrials.

1.11 INTER STATE COUNCIL

Recently, certain States are agitating against the Centre's alleged discriminatory treatment against them.

Brief overview

- **Purpose:** Established to support Centre-State and Inter-State coordination and cooperation in India.
- **Recommendation:** Suggested by the **Sarkaria Commission in 1988**.
- **Formation:** Came into existence through a Presidential Order in 1990.
- **Constitutional Provision**
- **Article 263:** The Constitution of India provides for the establishment of an Inter-State Council.

Composition

- **Chairman:** The Prime Minister of India.
- **Members:**
 - Chief Ministers of all states and UTs with legislative assemblies.
 - Administrators of other UTs.
 - Six Ministers of Cabinet rank nominated by the Prime Minister.
- **Meetings:** The Council is required to meet at least three times a year.

Functions

- **Dispute Resolution:** Inquiring into and advising on disputes between states.
- **Policy Coordination:** Investigating and discussing subjects of common interest between states or between states and the Union.
- **Recommendations:** Making recommendations for better coordination of policy and action.

1.12 MINOR FOREST PRODUCE

Villagers in Odisha's Koraput who started the initiative of selling Kendu leaf (a minor forest produce) are now struggling for approvals from the forest department.

About Minor Forest Produce (MFP)

- **Definition by FRA:** The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 (FRA) recognizes a broad category of resources as MFP. It defines MFP as **all non-timber forest produce of plant origin**. This encompasses a wide range of products that play a vital role in the lives of forest dwelling communities.
- **Examples:**
 - **Bamboo and Canes:** Used for construction, furniture making, and handicraft production.
 - **Tendu/Kendu Leaves:** Primarily used for wrapping beedi (Indian cigarettes).

- **Medicinal Plants & Herbs:** Produces like Amla, Haritaki, Goloy are treasure trove of natural remedies with immense potential for healthcare and income generation.
- **Nuts, Fruits & Flowers:** Mahua flowers are used for making beverages and food products, while Sal seeds yield valuable cooking oil.
- **Lac, Honey & Waxes:** Lac finds application in making varnishes and shellac, while honey is a natural sweetener and has medicinal properties.

Laws Governing Minor Forest Produce

- **Indian Forest Act, 1927:** This act establishes a framework for regulating the harvest, transportation, and trade of MFP. It aims to ensure the sustainable management of forest resources and prevent their exploitation.
- **Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act (FRA Act), 2006:** This landmark legislation recognizes the rights of forest dwellers, particularly Scheduled Tribes, over MFP. It empowers them to manage and benefit from these resources in a sustainable manner.
- **The Forest Rights Rules, 2007:** These rules provide the operational framework for implementing the provisions of the FRA Act on the ground. They outline the procedures for claiming forest rights, including rights related to MFP.
- **The Panchayats (Extension to Scheduled Areas) Act, 1996 (PESA):** This Act empowers **Gram Sabhas** in Scheduled Areas to manage and protect MFP resources.
- **Minimum Support Price (MSP) Scheme:** This government initiative sets fair and predetermined prices for some MFP items. This aims to protect forest dwellers from exploitation by middlemen and ensure they receive a minimum income for their produce.

Rights to MFP under FRA Act

- **Right to Ownership:** The FRA grants **ownership rights over MFP to Scheduled Tribes and Other Traditional Forest Dwellers**, allowing them to collect, use, and dispose of MFP for their sustenance and livelihood.
- **Access to MFP:** The ownership rights granted by FRA empowers forest dwellers to manage these resources for their livelihood needs and cultural practices.
 - **First priority in harvesting and marketing MFP:** The Act grants forest dwellers first priority in harvesting and marketing MFP within their habitat. This ensures they have a secure source of income and are not displaced by external actors.
- **Management of MFP:** The FRA Act promotes the participation of forest dwellers in decision-making processes related to MFP. This includes:
 - The formation of **Village Forest Committees (VFCs)** where forest dwellers can have a say in the management of MFP resources in their area.
 - VFCs can develop plans for sustainable harvesting, marketing, and value addition of MFP, ensuring these resources are utilized for the collective benefit of the community.
- **Protection & Development:** The FRA Act empowers forest dwellers to protect MFP from illegal harvesting and depletion. Additionally, it encourages:
 - **Right to protect MFP from illegal harvesting and depletion:** This right allows forest dwellers to take steps to prevent unsustainable practices that could harm MFP resources and their long-term livelihood security.
 - **Support for sustainable harvesting practices:** The Act encourages the adoption of sustainable harvesting practices that ensure the long-term viability of MFP resources and the health of the forests.

Significance of MFP Rights

- **Reduced Poverty:** Empowering forest dwellers through MFP rights can significantly contribute to poverty reduction in these communities, providing a reliable source of income and economic opportunities.
- **Livelihood Security:** MFP provides a critical source of income for millions of forest dwellers, particularly tribal communities, contributing significantly to their household income and helping meet basic needs.

- **Nutritional Security:** Many MFP items are essential sources of food and nutrition, contributing to the food security of forest dwelling communities.
- **Gender Equality:** MFP collection and processing often involve significant participation from women in forest dwelling communities. Recognizing MFP rights can empower women by giving them greater control over income generated from these resources.
- **Traditional Knowledge Preservation:** The recognition of rights over MFP helps preserve traditional knowledge and practices associated with the sustainable use and management of forest resources.
- **Cultural Significance:** MFP holds deep cultural significance for many forest dwelling communities. Plants and herbs are used in traditional medicine, rituals, and ceremonies, and various MFP products form part of their traditional diet and way of life.
- **Conservation:** Sustainable harvesting of MFP can promote forest conservation. When forest dwellers have a stake in the long-term health of the forest ecosystem, they are more likely to adopt practices that ensure its preservation.

Issues and Challenges

- **Lack of Awareness and Implementation:** Despite the legal provisions, there is a lack of awareness and effective implementation of the rights granted under the FRA, hindering the full realization of these rights.
- **Commercialization and Overexploitation:** Increased commercialization and overexploitation of MFP can lead to unsustainable harvesting practices and depletion of resources.
- **Unclear Ownership and Tenure Rights:** In some cases, unclear ownership and tenure rights over MFP resources can lead to conflicts and exploitation by external actors.
- **Inadequate Value Addition and Marketing:** Limited value addition and marketing opportunities for MFP products can limit the economic benefits derived by these communities.

Way Forward

- **Awareness and Capacity Building:** Increasing awareness among forest-dwelling communities about their rights under the FRA, and providing capacity-building initiatives to support sustainable management and value addition of MFP. Also, Streamlining the administrative process to grant approval will assure timely remuneration.
- **Strengthening Traditional Institutions:** Empowering traditional institutions like Gram Sabhas and Van Panchayats to effectively manage and govern MFP resources in their respective areas.
- **Developing Value Chains and Market Linkages:** Facilitating the development of value chains and establishing market linkages for MFP products to ensure fair and remunerative prices for these communities.
- **Research and Documentation:** Encouraging research and documentation of traditional knowledge and practices related to MFP to inform conservation and sustainable management efforts.
- **Enabling Policy and Regulatory Environment:** Developing and implementing policies and regulations that support the rights of forest-dwelling communities over MFP, while ensuring sustainable harvesting and conservation of forest resources.

1.13 PRESIDENTIAL CLEMENCY IN INDIA

President Droupadi Murmu has turned down the mercy petition of Mohammed Arif alias Ashfaq, a Pakistani national and a member of the Lashkar-e-Taiba who was sentenced to death in the December 2000 Red Fort attack.

About Presidential Clemency in India

- **Grant of Mercy:** Presidential clemency allows the President to show mercy towards a convicted person.
- **Constitutional Provision:** **Article 72** empowers the President to grant pardons, reprieves, respites, or remissions of punishment, or suspend, remit, or commute sentences.
- **Offenses Covered:** The President can consider clemency petitions for offenses against **central laws, court-martial sentences, and death sentences**.

- **Role of Cabinet:** Although the **President is bound by the Cabinet's advice**, Article 74 (1) empowers him to return it for reconsideration once. If the Council of Ministers decides against any change, the President has no option but to accept it.
- **Judicial Review:** The President's pardoning decisions are subject to judicial review by the courts to ensure they are not arbitrary, discriminatory, or based on extraneous considerations.

Types of Presidential Pardons in India

- **Pardon:** It removes both the sentence and the conviction and **completely absolves the convict from all sentences**, punishments and disqualifications.
- **Commutation:** It denotes the **substitution of one form of punishment for a lighter form**. For example, a death sentence may be commuted to rigorous imprisonment, which in turn may be commuted to a simple imprisonment.
- **Remission:** It implies **reducing the period of sentence** without changing its character. For example, a sentence of rigorous imprisonment for two years may be remitted to rigorous imprisonment for one year.
- **Respite:** It denotes **awarding a lesser sentence in place of one originally awarded** due to some special fact, such as the physical disability of a convict or the pregnancy of a woman offender.
- **Reprieve:** It implies a **stay of the execution of a sentence** (especially that of death) for a temporary period. Its purpose is to enable the convict to have time to seek pardon or commutation from the President.

Mechanism of Mercy Petition

- **Petition Process:** Individuals or family members can submit mercy petitions to the President.
- **Home Ministry Scrutiny:** The Ministry of Home Affairs examines the petition and makes recommendations to the President.
- **Cabinet Consideration:** The President consults the Council of Ministers before making a final decision.

Rationale Behind the Power

- **Humanitarian Consideration:** Provides a means to correct judicial errors and show mercy in exceptional circumstances.
- **Check on Judicial Power:** Serves as a check on the judiciary by allowing for a reconsideration of severe punishments.
- **Societal Harmony:** Can be used to foster social harmony and reconciliation in specific contexts.
- **Difference between Presidential Clemency of India and US**
- **Scope of Pardoning Power:**
 - In India, the President's pardoning power extends to all cases involving punishment or sentence for criminal offenses under central law, including those related to the armed forces.
 - In the US, the President's pardoning power is generally limited to federal offenses, except in cases of impeachment.
- **Discretion:**
 - In India, the President typically seeks advice from the concerned government before granting clemency.
 - In the US, the President has more discretion and is not bound by the recommendations of any advisory body.
- **Judicial Review:**
 - In India, the President's pardoning decisions are subject to judicial review by the courts to ensure they are not arbitrary or discriminatory.
 - In the US, the President's pardoning power is considered absolute and not subject to judicial review.

Difference between Pardoning Powers of President and Governor in India

	President	Governor
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Related Article	Article 72	Article 161
Scope	The President can grant pardons in offenses against central laws.	The Governor can grant pardons in offenses against state laws.
Court Martial	The President has pardoning powers in case of Court martial sentences	The Governor does not have such powers.
Death Penalty	The President can grant pardon, commutation, reprieve, remission, or respite in all death penalty cases.	The Governor cannot grant clemency in death penalty cases.

1.14 EVM BURNT MEMORY

11 candidates in the recently-concluded 2024 Lok Sabha and State Assembly elections have applied for verification of the burnt memory of the Ballot Units and Control Units of electronic voting machines (EVMs), and of Voter Verified Paper Audit Trail (VVPAT) units.

Supreme Court Order

- SC directed the Election Commission of India (ECI) to allow second- and third-placed candidates to seek verification of burnt memories of EVMs and VVPATs of up to 5% of machines in an Assembly constituency or Assembly segment of a Lok Sabha constituency.

Process

- Eligibility:** Second and third-placed candidates can seek verification of up to 5% of EVMs per Assembly constituency or segment of a Lok Sabha constituency.
- Process Details:**
 - Verification requests** must be made within seven days of the result declaration.
 - Candidates or their representatives** can identify the EVMs for verification and remain present during the process.
 - The cost of verification, set by the ECI, is to be borne by the candidates but will be refunded if tampering is found.
 - Responsibility:** The **District Election Officer (DEO)** oversees the verification process.
- Application and Costs:**
 - Candidates must apply in writing to the DEOs** and deposit Rs 40,000 (plus 18% GST) per EVM set with the manufacturer.
 - Verification requests cover up to **5% of EVMs/VVPATs, split between the second and third-placed candidates.**
- Verification Procedure:**
 - Applications are sent to the state Chief Electoral Officer, who notifies the EVM manufacturers (BEL and ECIL).
 - Verification occurs after a **45-day period post-result declaration or upon court order if an Election Petition is filed.**
 - Checks are conducted in secure, monitored facilities without electronic devices allowed.

1.15 PARLIAMENTARY OATH

Recently, members of 18th Lok Sabha have taken Oath.

Members of Parliament (MPs) Oath Process

- **Section 73 of the Representation of the People Act, 1951** talks about the declaration of the result of winning MP.
- **To debate and vote in Lok Sabha**, an MP has to take her seat in the House by making and subscribing to an oath or affirmation prescribed in the Constitution (Article 99). The text is present in the third schedule of the constitution.
 - The Constitution also specifies a **financial penalty (the only one in the document) of Rs 500** if a person participates or votes in House proceedings without taking an oath (Article 104).
- **Exception:** An individual can become a minister without being elected to Parliament. They **have six months to secure a seat in either Lok Sabha or Rajya Sabha**. During this time, they can participate but not vote in House proceedings.
- **Purpose of Oath:** To show allegiance to the Constitution, commitment to duties, Accountability and Integrity

Oath Process

- **Submission of Election Certificate:** MPs must submit their election certificate to Lok Sabha staff for verification.
- **Language of Oath:** After verification, MPs can take the oath or affirmation in English or any of the 22 languages specified in the Constitution as per 8th schedule.
- **Adherence to Text:** MPs must use the name mentioned in their election certificate and adhere strictly to the text of the oath.
- **Personal Choice:** MPs can choose to swear in the name of God or affirm their allegiance to the Constitution. Both options are provided in the oath text in the Constitution's third schedule.

1.16 E SAKSHYA APP

The Union Ministry of Home Affairs (MHA) is testing eSakshya (e-evidence) app before implementation of the three criminal laws.

About

- **The eSakshya app is a mobile-phone** application to help police record crime scenes, conduct searches, and seizures in criminal cases.
- It enables police to upload recorded evidence to a cloud-based platform.
- **Aim:** The app aims to create uniformity in investigations, potentially increasing the conviction rate.
- **Developed by:** National Informatics Centre (NIC)
- **Availability:** Will be available to all police stations.
- **Connectivity Solutions:** Offers two options for police:
 - Record on personal devices, generate a hash value, and upload from the police station.
 - Direct upload via eSakshya if internet connectivity is sufficient.

Key Features of eSakshya

- **Crime Scene Recording:** Police can record the crime scene, search, and seizure activities using the app, with recordings capped at four minutes each.
- **Selfie Upload:** Police officers must upload a selfie after completing the recording procedure.
- **Cloud Upload:** Files are uploaded to a cloud-based platform for secure storage and access.

National Crime Statistics

- **NCRB Report 2022:** 58.24 lakh crimes under Indian Penal Code and Special Local Laws were reported.
- **MHA Study:** Estimates 20% of these crimes involve punishments of seven years or more, with 35% involving seizures.

Challenges

- Procuring hardware and cloud space is expensive, and many States lack resources.

- Maintaining the sanctity of the chain of evidence submission is crucial to prevent benefiting the accused.
- Forensic evidence integrity is essential, and any issues in procuring digital evidence could lead to criminals escaping justice.

1.17 ANTI-DEFECTION LAW

Brief Overview

- **Tenth Schedule:** The Anti-Defection Law is outlined in the Tenth Schedule of the Indian Constitution, added by the **52nd Amendment Act of 1985**.
- **Objective:** To prevent political defections by **Members of Parliament (MPs)** and Members of Legislative Assemblies (MLAs), ensuring political stability and curbing the practice of legislators switching parties for personal gains, colloquially known as 'Aya Ram - Gya Ram' politics.

Key Provisions

- **Disqualification on Grounds of Defection:**
 - **Voluntary Resignation:** MPs or MLAs who voluntarily resign from their party are subject to disqualification.
 - **Voting Against Party Directives:** Legislators who vote or abstain from voting contrary to party directives, without prior permission, can be disqualified.
 - **Independent Members:** Independent MPs or MLAs will lose their seat if they join a political party after the election.
 - **Nominated Members:** Nominated MPs or MLAs can join a political party within six months of their nomination; joining a party after this period results in disqualification.
- **Exceptions:**
 - **Merger:** The law allows for a merger if at least two-thirds of the members of a party agree to the merger. This recognizes genuine splits without disqualification.

Decision-Making Authority

- **Presiding Officer:** The Presiding Officer of the Legislature (Speaker of the Lok Sabha or Chairman of the Rajya Sabha for Parliament; Speaker or Chairman in State Legislatures) decides on disqualification matters. These decisions are subject to judicial review.
- **Judicial Review:**
 - ***Kihoto Hollohan v. Zachillhu (1992)*:** The Supreme Court upheld the powers of the Speaker to decide disqualification petitions, with judicial review permissible only after the Speaker renders a final order.
- **Whip's Responsibility:** The whip communicates the party's position to its members and ensures they vote in line with that position. Defiance of the whip's directives can result in disciplinary action under the anti-defection law.

91st Amendment Act, 2003

- **Objective:** Strengthened the Anti-Defection Law by making further provisions to reduce the scope of defections.
- **Key Provisions:**
 - **Council of Ministers:** Limited the size of the Council of Ministers at both the Union and State levels to 15% of the total number of members in the Lok Sabha or the State Legislative Assembly, respectively.
 - **Disqualification:** Disqualified defectors from holding ministerial positions until they are re-elected to the legislature.
 - **Article 75 and 164:** Inserted clauses in Articles 75 and 164, stating that the total number of ministers, including the Prime Minister or Chief Minister, should not exceed 15% of the total number of members in the Lok Sabha or the State Legislative Assembly.
 - **Article 361B:** Added to disqualify defectors from holding any remunerative political post.

Issues

- **Ambiguity:** The law lacks clarity on key terms, leading to varied interpretations.

- **Bias:** Decisions by the Presiding Officer can be influenced by political bias.
- **Judicial Delays:** Challenges to disqualification decisions can cause significant delays.

Way Forward

- **Clarification:** Amend the law to define key terms clearly.
- **Independent Body:** Establish an independent tribunal to decide on disqualification cases.
- **Time-bound Decisions:** Implement strict timelines for judicial review to ensure swift resolution of disputes.

1.18 PROTEM SPEAKER

- **Definition:** 'Protem' is a Latin phrase translating to 'for the time being' in English.
- **Role:** A temporary speaker appointed to preside over the first meeting of the newly elected Lok Sabha.
- **Duties:**
 - Administers the oath of office to newly elected members of the Lok Sabha.
 - Conducts the election of the new Speaker of the Lok Sabha.
 - Administers the floor test if required.
- **Selection:** Appointed by the President of India, typically the most senior member of the Lok Sabha is chosen.
- **Duration:** The office ceases to exist once the new Speaker is elected.

1.19 CABINET COMMITTEE ON SECURITY

Overview

- **Apex Body:** Responsible for national security and foreign policy matters in India.
- **Crucial Role:** Entrusted with critical decisions affecting national security, including defence policy, internal security, and strategic diplomacy.
- **High-Level Decisions:** Involves top government officials in key decision-making processes related to the security of the nation.
- **Composition of CCS**
 - Prime Minister of India
 - Minister of Defence
 - Minister of Home Affairs
 - Minister of Finance
 - Minister of External Affairs

Mandate and Role of CCS

- **National Security:**
 - Shapes and oversees India's national security policies and defence strategies.
 - Coordinates efforts to protect the country from internal and external threats.
- **Crisis Management:**
 - Manages government responses to national crises, such as terrorist attacks or natural disasters.
 - Ensures timely and effective action during emergencies.
- **Strategic Planning:**
 - Engages in long-term planning to prepare for future defence and security challenges.
 - Develops and implements strategies for military and security readiness.
- **Resource Allocation:**
 - Decides on the allocation of resources for defence and security.
 - Oversees budgeting for military operations, procurement of technology, and modernization of the armed forces.
- **Appointments and Decisions:**

- Makes major decisions regarding significant appointments within national security bodies.
- Handles defence expenditure and other critical security-related issues.
- **Policy Matters:**
 - Discusses and formulates policies related to law and order, internal security, and foreign affairs on security-related matters.
- **Atomic Energy:**
 - Considers and decides on matters related to atomic energy, ensuring the safe and strategic use of nuclear resources.

Cabinet Committees

- **High-Level Bodies:** Facilitate efficient and focused governance within the Indian government.
- **Specific Domains:** Handle specific areas, allowing the Cabinet to focus on broader issues.
- **Characteristics of Cabinet Committees**
- **Type:** Extra-constitutional decision-making bodies.
- **Formation:** Set up by the Prime Minister with selected Cabinet members; Specific functions assigned by the Prime Minister.
- **Number:** The Prime Minister can decide the number and functions of the committees; Varies from three to eight members upon the discretion of the Prime Minister.
- **Chairman:** Nominated by the Prime Minister. PM acts as the head if he is a member.
- **Mandate:** Resolve issues, formulate proposals for Cabinet consideration, and make decisions on assigned matters.
- There are **eight Cabinet committees** at present which are:
 - Appointments Committee of the Cabinet.
 - Cabinet committee on Security.
 - Cabinet Committee on Accommodation.
 - Cabinet Committee on Parliamentary Affairs.
 - Cabinet Committee on Economic Affairs.
 - Cabinet Committee on Political Affairs.
 - Cabinet Committee on Investment and Growth.
 - Cabinet Committee on Employment and Skill Development

1.20 SNAP POLLS

About

- A snap election is an election that is called earlier than expected or scheduled.
- It is initiated by the government or ruling party for various strategic reasons, such as seeking a new mandate.

Reasons for Calling Snap Elections

- **Political Advantage:** Called when the ruling party is performing well in polls to increase its majority.
- **Crisis Situations:** Used to resolve political deadlock or during national emergencies.
- **Loss of Confidence:** Called if the ruling party loses a vote of confidence to reestablish its authority.

Differences from Other Elections

- **Recall Election:** A snap election is initiated by politicians (usually the head of government or ruling party) rather than voters.
- **By-Election:** Winners in a snap election will serve an entire term as opposed to the remainder of an already established term.

1.21 DUAL MEMBERSHIP IN PARLIAMENT

- **No individual can be a member of two houses** at the same time in the political system of India.
- **Article 101(2):** No person shall be a member both of Parliament and of a House of the Legislature of a State, and if a person is chosen a member both of Parliament and of a House of the Legislature of a State, then, at the expiration of such period as may be specified in rules made by the President.
 - **Rule 2, Prohibition of Simultaneous Membership Rules, 1950:** Members of state legislatures who have been elected to Lok Sabha must resign their seats within 14 days “**from the date of publication in the Gazette of India or in the Official Gazette of the State**, whichever is later, of the declaration that he has been so chosen”, failing which their seats in Lok Sabha shall automatically fall vacant.
- **Sec 33(7) of The Representation of the People Act (RPA), 1951:** An individual can contest from two parliamentary constituencies but (**Rule 91 of the Conduct of Elections Rules, 1961**), if elected from both, he has to resign one seat within 14 days of the declaration of the result, failing which both his seats shall fall vacant.
- **Sec 68, RPA 1951:** If a person is elected simultaneously to both Rajya Sabha and Lok Sabha within the 10-day window **must resign from one failing which his seat in Rajya Sabha will fall vacant at the end of this period.**
- **Sec 69, RPA 1951:** If a sitting Rajya Sabha member contests and wins a Lok Sabha election, his seat in the Upper House becomes automatically vacant on the date he is declared elected to Lok Sabha. The same applies to a Lok Sabha member who contests an election to Rajya Sabha.

1.22 EXIT POLLS

- An election exit poll is a poll of voters taken immediately after they have exited the polling stations.
- **Aim:** It is conducted to gain an early indication of the results of the election.
- **Governed by:** It is governed by the **Election Commission of India (ECI)**.
- **First exit poll:** The first exit poll in India was conducted by the Indian Institute of Public Opinion during the second Lok Sabha elections in 1957.

Release and guidelines

- **Timing of release:** Exit polls are released after the final phase of voting ends.
 - This is to avoid influencing voters who are yet to vote
- **Section 126A of the Representation of the People Act, 1951:** Restriction on publication and dissemination of result of exit polls, etc.
 - (1) No person shall conduct any exit poll and publish or publicize by means of the print or electronic media or disseminate in any other manner, whatsoever, the result of any exit poll during such period, as may be notified by the Election Commission in this regard.
- **Article 324:** It empowers the ECI to issue guidelines in this regard.
 - It **prevented newspapers and news channels** from publishing results of pre-election surveys and exit polls until the end of the last phase by a notification.

2 INTERNATIONAL RELATIONS

2.1 INDIA-KENYA RELATIONS

India is keen on partnering with Kenya to develop and expand Africa's space capabilities, particularly for predicting and monitoring extreme weather events.

News Details

- **Space Collaboration:** India has expressed keen interest in partnering with Kenya to develop and expand Africa's space capabilities, leveraging India's expertise for mutual benefit and regional development.
- **Weather Monitoring:** The collaboration aims to predict and monitor extreme weather events, enhancing Kenya's disaster preparedness and climate change adaptation strategies.
- **Technology Transfer:** India's proposal includes sharing advanced space technology and expertise with Kenya, boosting Kenya's technological capabilities and fostering innovation in the space sector.
- **Capacity Building:** The partnership envisions training and skill development programs for Kenyan space scientists, creating a pool of skilled professionals and contributing to Kenya's long-term space ambitions and technological self-reliance.

About Kenya

- **Strategic Location:** Kenya's position on Africa's east coast, straddling the equator, provides access to key maritime routes along the Indian Ocean, making it a crucial gateway for trade and geopolitical influence.
- **Regional Influence:** As an economic powerhouse in East Africa, Kenya plays a significant role in regional affairs, reinforced by its membership in the **East African Community (EAC) and African Union (AU)**.
- **Economic Hub:** Kenya has the largest and most advanced economy in East and Central Africa, with key sectors like agriculture, manufacturing, services, and an emerging technology industry attracting significant foreign investment.
- **Political Stability:** Despite occasional challenges, Kenya maintains a relatively stable democratic system with regular multiparty elections since the 1990s, fostering political participation and governance.

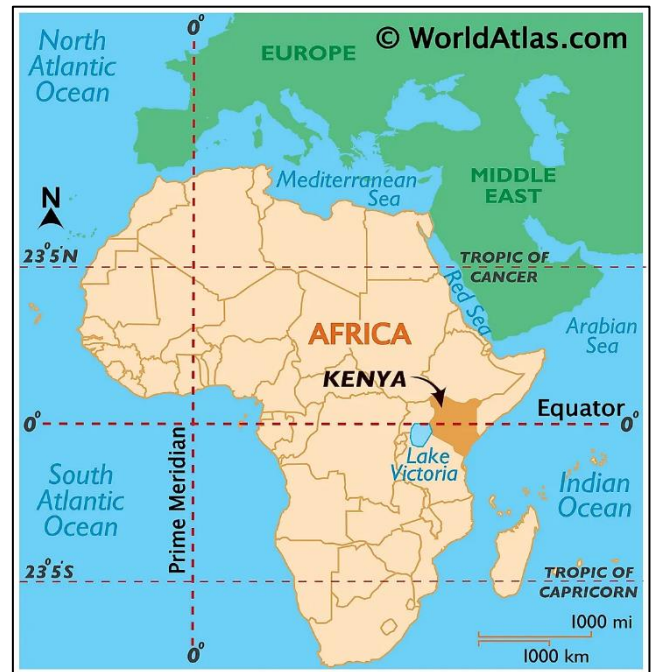
History of India-Kenya Relations

- **Colonial Connections:** India and Kenya share a historical bond rooted in their **British colonial past**. The presence of the **Indian diaspora** in Kenya, dating back to the 19th century, has created deep cultural and economic ties between the two nations.
- **Post-Independence Ties:** Diplomatic relations were **established in 1963** following Kenya's independence. Both nations collaborate on international platforms like the UN, Non-Aligned Movement, and the Indian Ocean Rim Association.
- **Economic Cooperation:** Bilateral trade agreements have been pivotal since the 1980s, with Indian investments growing in Kenyan sectors such as manufacturing, pharmaceuticals, and information technology.
- **Cultural Exchange:** The popularity of **Bollywood** in Kenya and numerous **educational collaborations** have fostered strong cultural ties. This soft power exchange has helped maintain warm relations between the two countries over the decades.

Benefits & Significance of India-Kenya Relations

- **Trade Expansion:** Kenya serves as a gateway for Indian products to enter the East African market, while India gains access to Kenya's agricultural products and minerals, creating a mutually beneficial trade relationship.
- **Diaspora Linkages:** The Indian-origin community in Kenya acts as a cultural and economic bridge, facilitating business connections and strengthening bilateral relations.
- **Developmental Partnership:** India's expertise in IT, healthcare, and education has significantly benefited Kenya's development, creating a symbiotic diplomatic relationship.

- **Strategic Cooperation:** India and Kenya collaborate on maritime security in the Indian Ocean region, addressing shared concerns like terrorism and piracy.
- **Diplomatic Leverage:** This collaboration strengthens India's position as a key partner in African development, showcasing its commitment to South-South cooperation.
- **Economic Opportunities:** The partnership opens new avenues for the Indian space industry in the African market, potentially increasing exports of space-related technologies and services.
- **Climate Change Mitigation:** By enhancing weather prediction capabilities, the collaboration contributes to global efforts in tackling climate-related disasters.
- **Soft Power Projection:** The initiative highlights India's technological capabilities and willingness to share knowledge with developing nations, enhancing its image as a reliable partner.



Challenges

- **Competition from China:** China's significant investments and influence in Kenya and Africa pose a challenge to India's engagement, requiring careful diplomatic maneuvering.
- **Economic Disparities:** The economic differences between India and Kenya necessitate a careful approach to trade relations, addressing trade imbalances for mutual benefit.
- **Political Instability:** Occasional political tensions in Kenya can affect the long-term planning and implementation of joint projects.
- **Technological Gap:** Bridging the technological divide in the space sector collaboration is crucial, requiring efforts to overcome infrastructure and skill gaps.
- **Bureaucratic Hurdles:** Both India and Kenya face bureaucratic challenges that can delay project implementation and reduce efficiency. Streamlining processes is essential for smooth collaboration.
- **Infrastructure Deficiencies:** Inadequate infrastructure in certain regions of Kenya can hinder the effective implementation of joint initiatives, particularly in remote areas.
- **Cultural Differences:** Understanding and respecting cultural differences is vital for successful partnerships. Misunderstandings or lack of cultural awareness can pose challenges in collaboration.
- **Resource Constraints:** Limited financial and human resources in both countries can restrict the scope and scale of collaborative projects, necessitating careful resource management.

Way Forward

- **Enhance Economic Ties:** Both countries should diversify their trade basket and increase bilateral investments, exploring new sectors for cooperation.
- **Strengthen Institutional Mechanisms:** Establishing regular high-level dialogues and joint working groups can enhance coordination and address challenges promptly.
- **Expand Cooperation Areas:** India and Kenya should explore collaboration in emerging sectors like renewable energy and the digital economy, creating new synergies.
- **People-to-People Connect:** Promoting cultural exchanges, tourism, and educational partnerships can deepen mutual understanding and provide a solid foundation for long-term ties.
- **Streamline Bureaucratic Processes:** Simplifying administrative procedures in both countries can facilitate smoother implementation of joint projects and reduce delays.

- **Invest in Infrastructure:** Both countries should prioritize infrastructure development, particularly in remote areas, to support effective collaboration and project execution.
- **Promote Cultural Sensitivity:** Encouraging cultural awareness and sensitivity training for personnel involved in bilateral projects can enhance cooperation and prevent misunderstandings.
- **Secure Funding and Resources:** Identifying and securing adequate funding and resources, potentially through international grants or public-private partnerships, can support the ambitious scope of collaborative initiatives.
- **Foster Innovation and Technology Transfer:** Encouraging innovation and facilitating technology transfer can bridge the technological gap and enhance the capabilities of both nations.
- **Develop Contingency Plans:** Establishing contingency plans to address political instability and other potential disruptions can ensure the continuity and success of joint projects.

The African Union (AU)

- **Formation:** Established in **2002** as a successor to the Organisation of African Unity (OAU) founded in 1963.
- **Members:** A continental union with **all 55 countries of mainland Africa**.
- **Objectives:**
 - Promote **peace and security** through peacekeeping missions and conflict resolution efforts.
 - Drive **economic development** through initiatives like the African Continental Free Trade Area (AfCFTA) and foster sustainable growth.
 - Advocate for **good governance and uphold democratic principles and human rights**.
 - Provide a **unified voice for Africa** on the international stage.
- **Relation with India:** India has strong ties with the AU, collaborating in areas like trade, infrastructure development, and capacity building.
- **G20 Membership:** India championed the inclusion of the AU in the G20, recognizing the importance of Africa's voice in global economic decisions. **In 2023, during India's G20 presidency, the AU was granted full membership.**

2.2 HIGH SEAS TREATY

As nations gear up for a preparatory meeting to discuss the implementation of the High Seas Treaty in June, a new research paper has proposed three steps essential to protect marine species from climate change.

About the High Seas Treaty

- **Formal Name:** The High Seas Treaty, formally known as the "**Agreement on the Conservation and Sustainable Use of Marine Biological Diversity of Areas Beyond National Jurisdiction**", marks a historic breakthrough in international efforts to protect the high seas.
- **High Seas:** High seas are waters that are beyond national control. Simply put, it is the area beyond a country's Exclusive Economic Zone which extends up to 200 nautical miles (370 km) from the coastline. It comprises around two-thirds of the surface area of the planet's oceans. **No country is responsible for the management and protection of resources on the high seas.**
- **Years of Negotiations:** After nearly two decades of arduous negotiations, the treaty was finally adopted on March 4, 2023, by the United Nations Intergovernmental Conference on **Marine Biodiversity of Areas Beyond National Jurisdiction (BBNJ)**.
- **Objective:** The primary objective of the **High Seas Treaty is to establish a legal framework** for the conservation and sustainable use of marine biodiversity in areas beyond national jurisdictions, commonly referred to as the high seas.
- **Need of the Treaty:** Currently, there is no international **policy mechanism to conserve biodiversity in the high seas.**

- **Global Response:** The treaty has garnered widespread support from nations worldwide, including India, recognizing the urgent need to address the escalating threats to ocean ecosystems and marine life.
- **Current Situation:** So far, seven nations have either ratified, accessed, accepted, or approved the treaty. **The treaty is expected to enter into force in 2025 after 60 nations ratify it.**

Features of the Treaty

- **Environmental Impact Assessments:** The treaty mandates the conduct of environmental impact assessments for activities that may have a significant adverse impact on marine biodiversity in the high seas.
- **Marine Protected Areas:** It establishes a mechanism for the creation and management of marine protected areas in the high seas, safeguarding vulnerable ecosystems and species.
- **Area-Based Management Tools (ABMTs):** The HST emphasizes the use of ABMTs, similar to marine protected areas (MPAs), to regulate human activities and protect vulnerable ecosystems.
- **Access and Benefit-Sharing:** The treaty ensures the fair and equitable sharing of benefits derived from the utilization of marine genetic resources in the high seas, promoting sustainable use and research.
- **Capacity Building and Technology Transfer:** It facilitates capacity building and the transfer of marine technology to developing countries, empowering them to participate effectively in the conservation and sustainable use of marine biodiversity.

Comparison with UNCLOS

- The **United Nations Convention on the Law of the Sea (UNCLOS)** is the foundational legal framework for maritime law.
- **Complementary Legal Frameworks:** The High Seas Treaty complements and builds upon the United Nations Convention on the Law of the Sea (UNCLOS), which provides the overarching legal framework for the governance of the world's oceans.
- **Addressing Gaps in UNCLOS:** While UNCLOS establishes principles for the conservation and management of marine resources, it does not provide a comprehensive framework for the protection of marine biodiversity in **areas beyond national jurisdiction**. The High Seas Treaty fills this gap.
- **Specific Focus on Biodiversity:** The High Seas Treaty has a **specific focus on the conservation and sustainable use of marine biodiversity**, whereas UNCLOS addresses a broader range of issues related to the law of the sea.
- **Institutional Mechanisms:** The High Seas Treaty establishes **institutional mechanisms and decision-making processes** specific to the management of marine biodiversity in the high seas, which were not addressed in detail by UNCLOS.

Significance of the High Seas Treaty

- **Protecting Marine Ecosystems:** The treaty provides a robust legal framework for protecting marine ecosystems in the high seas, which are increasingly threatened by human activities and climate change.
- **Sustainable Resource Utilization:** It promotes the sustainable utilization of marine resources, ensuring their long-term availability and contributing to global food security and economic development.
- **Blue Economy Growth:** The treaty fosters the development of a sustainable blue economy, creating new opportunities in sectors like marine biotechnology and renewable energy.
- **Strengthening International Cooperation:** The High Seas Treaty strengthens international cooperation and collaboration in addressing global challenges related to the conservation and sustainable use of marine biodiversity.

Challenges

- **Implementation and Enforcement:** Ensuring the effective implementation and enforcement of the treaty's provisions across vast areas of the high seas will be a significant challenge, requiring cooperation and commitment from all parties.

- **Balancing Interests:** Balancing the interests of various stakeholders, including coastal and landlocked nations, as well as different economic sectors, will be crucial for the successful implementation of the treaty.
- **Financing and Resources:** Securing adequate financing and resources for the implementation of the treaty, including for capacity building and technology transfer, may pose challenges, particularly for developing countries.
- **Monitoring and Compliance:** Establishing robust monitoring and compliance mechanisms to ensure adherence to the treaty's provisions and address potential violations will be essential for its effectiveness.

New Research Paper

- **As governments gather to decide on implementing the High Seas Treaty,** a new research paper proposes three enhancements:
- **Data Sharing:** Fisheries management bodies and high-seas organizations should share existing data and trends to feed into comprehensive regional plans.
- **Systematic Conservation Plans:** Develop systematic plans for managing conservation across the high seas and national waters. The treaty's science and technical body should advise on species movements and changing oceanographic dynamics due to climate change.
- **Governance Mechanisms:** Establish governance mechanisms and build capacity. The science and technical body should address climate change and foster regional climate conservation plans.

Way Forward for India

- **Ratification and Implementation:** India should actively pursue the ratification and implementation of the High Seas Treaty, aligning its national policies and legislation with the treaty's provisions.
- **Regional Cooperation:** India should engage in regional cooperation efforts, particularly within the Indian Ocean region, to promote the effective implementation of the treaty and address common challenges.
- **Capacity Building and Technology Transfer:** India should actively participate in capacity building and technology transfer initiatives facilitated by the treaty, enabling its scientists and policymakers to contribute to and benefit from the conservation and sustainable use of marine biodiversity.
- **Scientific Research and Data Sharing:** India should prioritize scientific research and data sharing related to marine biodiversity in the high seas, contributing to a better understanding of these ecosystems and informing decision-making processes.

UNCLOS (United Nations Convention on the Law of the Sea)

- **Formation:** The United Nations Convention on the Law of the Sea (UNCLOS) was adopted in **1982** after nearly nine years of negotiations at the **Third United Nations Conference on the Law of the Sea**.
- **Objective:** The primary objective of UNCLOS is to establish a comprehensive legal regime for the world's oceans and seas, facilitating international communication, and promoting the peaceful use of the seas and oceans, the equitable and efficient utilization of their resources, and the conservation of their living resources.
- **Members:** As of 2023, UNCLOS has been ratified by **168 countries and the European Union**, making it one of the most widely ratified international treaties.

Functions

- **Legal Framework Provision:** Provides a legal framework for all marine and maritime activities.
- **Maritime Zone Regulation:** Regulates maritime zones such as territorial seas, **exclusive economic zones (EEZs)**, and continental shelves.
- **Dispute Resolution Mechanism:** Offers a mechanism for the resolution of disputes related to maritime boundaries and ocean resources.
- **Environmental Guidelines Establishment:** Establishes guidelines for environmental protection and conservation of marine life.

2.3 SIX-DAY WAR OF 1967

Fifty-seven years have passed since the Six-Day War, fought between Israel and its Arab neighbours between June 5 and June 10, 1967. The war was a watershed moment in the history of West Asia.

About the Six-Day War

- **Brief Overview:** The Six-Day War, also known as the **June War or the Third Arab-Israeli War**, was a brief but decisive conflict between Israel and its Arab neighbors (**Egypt, Jordan, and Syria**) in June 1967, which resulted in a decisive victory for Israel.
- **Participants:** The primary participants were **Israel** on one side, and **Egypt, Jordan, and Syria** on the other, with support from other Arab countries.
- **Duration:** The war lasted only **six days, from June 5 to June 10, 1967**.

Causes of the War

- **Historical Tensions:** Originating from the establishment of Israel in 1948 and the First Arab-Israeli War.
- **Palestinian Refugee Crisis:** Displacement from the 1948 war and denial of return rights.
- **Pan-Arabism:** A movement aiming to unite Arab nations, exacerbating conflict with Israel.
- **Border Disputes:** Issues over borders, water resources, and Jerusalem.

Outbreak of the War

- **Immediate Cause:** In May 1967, Egypt mobilised forces, expelled UN peacekeepers from Sinai, and blocked the Straits of Tiran.
- **Israel's Response:** On June 5, Israel launched a preemptive strike, neutralising Egyptian air forces.

Aftermath of the War

- **Territorial Gains:** Israel gained control over the Sinai Peninsula, the Gaza Strip, the West Bank, the Golan Heights, and East Jerusalem, significantly altering the geopolitical map of the region.
- **New Refugee Crisis:** The conflict resulted in a new wave of Palestinian refugees, further compounding the existing refugee crisis.
- **UN Resolution 242:** The United Nations Security Council adopted Resolution 242, calling for the withdrawal of Israeli forces from occupied territories and a just solution to the Palestinian refugee problem.
- **Increased Tensions:** The aftermath of the war further strained relations between Israel and its Arab neighbors, setting the stage for future conflicts and prolonged tensions in the region.

Impacts

- **Ongoing Conflict:** Unresolved disputes and the refugee crisis contribute to instability.
- **Regional Power Dynamics:** Israel's victory solidified its military power.
- **Rise of Extremism:** Conflict exploited by extremist groups, increasing terrorism.
- **Global Implications:** Affects international relations, energy security, and the global economy.

Way Forward

- **Peaceful Negotiations:** Essential for sustainable peace, involving compromise on both sides to address core issues like territorial disputes and the Palestinian refugee crisis.
- **Two-State Solution:** Advocated by experts and international organizations, this would establish an independent Palestinian state alongside Israel.
- **Regional Cooperation:** Fostering economic integration and cooperation among Middle Eastern nations can reduce tensions and promote stability.
- **International Engagement:** Continued global support and mediation efforts are crucial for facilitating a peaceful resolution.

- **Cultural Exchange:** Promoting cultural and educational exchanges between Israelis and Palestinians can help build mutual understanding and reduce prejudices.
- **Security Guarantees:** International guarantees for the security of both Israeli and Palestinian states can build trust and reduce fears of aggression.
- **Legal Framework:** Establishing a robust legal framework to protect the rights of all communities involved and ensure accountability for any breaches of peace agreements

2.4 RUSSIA - NORTH KOREA PACT

Russian President Vladimir Putin's visit to Pyongyang culminated in a landmark defense cooperation pact between Russia and North Korea for immediate military assistance if either faces armed aggression.

Key elements of the pact

- **Mutual Defense Agreement:** The pact includes provisions for immediate military assistance in case of armed aggression.
- **Technological Cooperation:** The agreement also includes unspecified technological assistance.
- **Historical Echo:** The pact mirrors the 1961 Russo-North Korea Treaty of Friendship, Cooperation, and Mutual Assistance.
- **Broader Collaboration:** It covers a wide range of issues, indicating a deepening of bilateral ties.

History of Russia-North Korea Relations

- **Post-World War II Support:** The Soviet Union provided significant military assistance to North Korea during and after the Korean War.
- **1961 Alliance:** A formal treaty of friendship and mutual assistance was signed, solidifying the alliance.
- **Post-Soviet Deterioration:** The dissolution of the Soviet Union in 1991 led to a temporary decline in relations.
- **21st Century Rapprochement:** Under Putin's leadership, Russia has been rekindling ties with North Korea since the early 2000s.

Need and Significance of this Pact for the Two Nations

- **Russia's Strategic Gains:** Helps Russia counter its international isolation following the Ukraine invasion, and potentially diverts Western focus from Ukraine to Northeast Asia.
- **North Korea's Military Enhancement:** Provides North Korea with potential access to advanced missile and nuclear technology, bolstering its military capabilities.
- **Economic Cooperation:** Facilitates economic cooperation, helping both nations circumvent Western sanctions.
- **Geopolitical Alignment:** Strengthens the anti-Western bloc, aligning with both countries' strategic interests and contributing to a shift in global power dynamics.
- **Space and Energy Cooperation:** The pact includes cooperation on space exploration, nuclear energy, artificial intelligence, and information technology, enhancing both nations' technological capabilities.

Global Implications of the Pact

- **Regional Tensions:** Escalates concerns in South Korea and Japan, potentially leading to increased militarization.
- **Strengthened US Alliances:** May result in stronger ties between the US and its East Asian allies as a counterbalance.
- **Nuclear Proliferation Risks:** Raises concerns about the spread of nuclear capabilities due to increased technological cooperation.
- **Global Strategic Repercussions:** Sets a precedent for authoritarian regimes aligning against Western liberal orders, influencing geopolitical strategies and alliances beyond Asia

Way Forward for India

- **Diplomatic Balancing Act:** Maintain strategic autonomy while navigating relations with both Western allies and the Russia-led bloc.
- **Enhanced Regional Engagement:** Strengthen ties with South Korea and Japan to maintain influence in East Asia.
- **Non-Proliferation Advocacy:** Advocate for nuclear non-proliferation and disarmament on global platforms.
- **Economic Strategy Recalibration:** Reassess economic ties with Russia and explore alternative markets to mitigate potential impacts of escalating global tensions.
- **Strategic Infrastructure Development:** Invest in strategic infrastructure projects in the Indo-Pacific to enhance regional influence and counterbalance the growing Russia-North Korea-China axis.

2.5 BIOPHARMACEUTICAL ALLIANCE

South Korea, India, the United States, Japan, and the European Union (EU) have come together to launch a Biopharmaceutical Alliance to put joint efforts into building a resilient supply chain in the biopharmaceutical sector.

News Details: Biopharmaceutical Alliance

- **Joint Initiative:** India, along with South Korea, the United States, Japan, and the European Union, recently launched the **Biopharmaceutical Alliance at the Bio International Convention 2024**.
- **Focus on Resilience:** This alliance aims to build a robust supply chain for biopharmaceutical products, addressing vulnerabilities exposed during the COVID-19 pandemic.
- **Collaboration is Key:** The member countries will work together to streamline bio-policies, regulations, and research & development efforts.
- **Building a Map:** A key objective is to create a comprehensive map of the global pharmaceutical supply chain to identify potential bottlenecks.

About Biopharmaceuticals

- **Biologics:** A biopharmaceutical, also known as a **biologic or biological medical product**, is a type of pharmaceutical drug that is produced using **biotechnology**.
- **Derived from biological sources:** These drugs are made from or contain components of living organisms such as **proteins, nucleic acids, or cells**.
- **Complex in structure:** Unlike traditional small-molecule drugs, biopharmaceuticals are typically large, complex molecules.
- **Produced using biotechnology:** They are often manufactured using recombinant DNA technology, controlled gene expression, or antibody production methods.
- **Used for various treatments:** Biopharmaceuticals are used to treat a wide range of conditions, including **cancer, autoimmune disorders, and genetic diseases**.

BIO International Convention

- The BIO International Convention is the largest and most comprehensive event for **biotechnology**, bringing together over **20,000 industry leaders** from across the globe.
- This dynamic gathering covers the entire biotech ecosystem, including **pharmaceutical companies, biotech startups, academia, non-profits, government, researchers, business development professionals, and investors**.
- The convention features innovative programming focused on the **current and future state of biotechnology**.

Significance for India

- **Leveraging Strengths:** India is already a leading manufacturer of generic drugs. This alliance can help India become a global leader in biopharmaceutical production.
- **Skilled Workforce:** India boasts a large pool of qualified scientists and researchers, well-positioned to contribute to advancements in this field.

- **Cost-Effectiveness:** India's advantage in cost-effective manufacturing can make biopharmaceutical products more accessible globally.
- **Addressing Domestic Needs:** A stronger biopharmaceutical sector can ensure India's self-sufficiency in critical medications and enhance public healthcare.

India's Role as Pharmaceutical Hub

- **Production Powerhouse:** India is the world's largest producer of generic drugs by volume, accounting for over **20% of global production**.
- **Generic Powerhouse:** India has established itself as the pharmacy of the world, supplying over **40% of generic demand in the United States and 25% of all medicine in the UK**, showcasing its manufacturing prowess and cost-effectiveness.
- **Vaccine Champion:** India accounts for **60% of global vaccine production**, contributing up to **70% of the WHO demand for Diphtheria, Tetanus and Pertussis (DPT) and Bacillus Calmette–Guérin (BCG) vaccines**, and **90% of the WHO demand for the measles vaccine**.
- **Growth Trajectory:** The Indian biopharmaceutical industry is projected to reach **\$150 billion by 2025**, signifying significant growth potential.

2.6 INDIA-MIDDLE EAST-EUROPE ECONOMIC CORRIDOR (IMEEC)

India, UAE Commence Talks on India-Middle East-Europe Economic Corridor.

About IMEEC

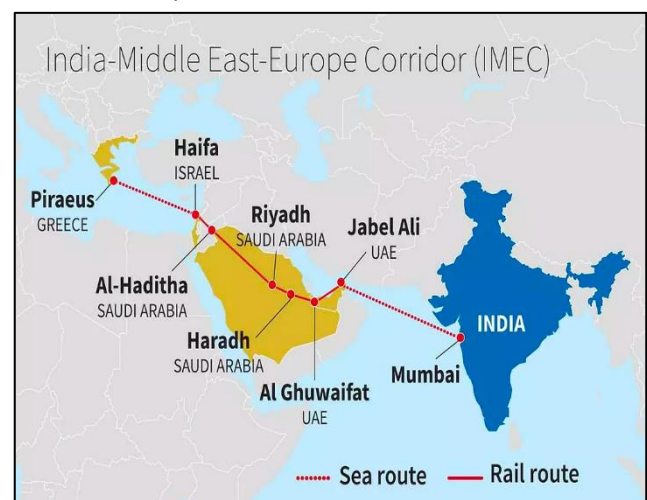
- It is a significant new initiative aimed at enhancing economic integration and connectivity between India, the Middle East, and Europe.
- **Announced:** Announced during the G20 Summit in New Delhi in September 2023.
- **Path:** The IMEC Corridor, which will connect India, the **UAE, Saudi Arabia, Jordan, Israel, and Europe**, is seen as a crucial alternative to China's Belt and Road Initiative.

The IMEEC comprises two main corridors

- **Eastern Corridor:** Connecting India (ports like Mumbai and Mundra) to the UAE.
- **Northern Corridor:** Linking the Gulf region to Europe via Israel and Greece, involving key ports like Dammam and Ras Al Khair in Saudi Arabia, and Messina, Marseille, and Piraeus in Europe.

The Primary Objectives of IMEEC include

- **Trade:** Enhancing trade and investment opportunities.
- **Transportation Networks:** Improving transportation networks (**rail, road, and shipping**) to facilitate faster and more efficient trade.
- **Costs:** Reducing transportation costs and transit times, potentially cutting transit times between India and Europe by up to 40% compared to the Suez Canal route.
- **Job Creation:** Stimulating economic growth and job creation.
- **Development:** Supporting the development of renewable energy projects and reducing greenhouse gas.



2.7 SOUTH CHINA SEA (SCS) DISPUTE

Philippines urges China to allow scrutiny of disputed Scarborough Shoal after it accused Beijing of destroying the shoal's marine environment.

About the South China Sea

- **Geographic Location:** Southeast Asia, bounded by China to the north, the Philippines to the east, Malaysia and Brunei to the south, and Vietnam to the west.
- **Size:** Approximately 3.5 million square kilometers.
- **Importance:**
 - One of the world's busiest waterways.
 - Facilitates about one-third of global maritime trade.
- **Natural Resources:**
 - Rich in oil and natural gas reserves.
 - Abundant fishing grounds, vital for regional economies.
- **Islands and Reefs:** Contains hundreds of small islands, reefs, and atolls, including the Spratly Islands, Paracel Islands, and Scarborough Shoal.
- **Strategic Significance:**
 - Crucial for military strategy and regional security.
 - Presence of major sea lanes and choke points like **the Strait of Malacca**.

Scarborough Shoal

- **Description:** A series of small rocks and islands forming a triangle.
- **Location:** Between **Macclesfield Bank and Luzon**.
- **Control:** Controlled by China since 2012.
- **Dispute:** Claimed by the Philippines, China, and Taiwan.
- **Arbitration:** In 2016, the court ruled against China's nine-dash line, favouring the Philippine.

South China Sea (SCS) Dispute

- **Parties:** China, Taiwan, Brunei, Malaysia, the Philippines, Vietnam, and Indonesia.
- **Territories:** Disputes involve the Spratly Islands, Paracel Islands, Scarborough Shoal, and Gulf of Tonkin boundaries.
- **China's Actions:** Aggressive land reclamation, island-building, and military installations in disputed areas.
- **Reasons for the Dispute:**
 - **Trade Route:** \$3.37 trillion in global trade passes through annually.
 - **Resources:** Estimated 11 billion barrels of oil and 190 trillion cubic feet of natural gas.
 - **Local Economy and Fishing:** Rich fishing zones and natural resources.
 - **Military Use:** China's construction of ports, military installations, and airstrips.
- **Arbitration Award:**
 - **Permanent Court of Arbitration:** In 2016, ruled in favour of the Philippines under UNCLOS.
 - **China's Refusal:** China did not accept the court's authority and continued its claims and activities.



India's Stand

- **Historical Neutrality:** India has traditionally maintained neutrality in SCS disputes.
- **Changing Approach:** Post-2020, India has become more vocal, especially following the **Galwan Valley clash with China**.
- **Act East Policy:** Increased engagement with ASEAN and emphasis on freedom of navigation.

Way Forward

- **Diplomatic Engagement:** ASEAN can play a crucial role in dialogue and cooperation.
- **Arbitration Implementation:** Encourage adherence to the 2016 arbitration verdict.
- **Negotiations:** Pursue parallel negotiations alongside the Code of Conduct.
- **Economic Leverage:** Enhance US economic cooperation with Southeast Asia to counterbalance China's influence.

Nine-dash line

- **Lines:** It is a set of line segments on various maps that accompany the claims of the People's Republic of China (PRC) and the Republic of China ("Taiwan") in the South China Sea.
- **Taiwan:** The nine-dash line, also referred to as the eleven-dash line by Taiwan.



2.8 THE TIBETAN GOVERNMENT IN EXILE

The Central Tibetan Administration (CTA), also known as the Tibetan Government in Exile, has praised the recent visit by a U.S. delegation and the introduction of the "Resolve Tibet Act."

Brief Overview

- **Establishment:** Founded by the **Dalai Lama on April 29, 1959**, after fleeing Tibet due to Chinese suppression of the Tibetan uprising.
- **Headquarters:** Initially set up in Mussoorie, India, and later moved to **Dharamsala**, Himachal Pradesh, India, in May 1960.
- **Objective:** Acts as the continuation of the government of independent Tibet.

Genesis of the Tibet Issue

- **Historical Context:** Tibet functioned as a distinct entity with its own government and cultural identity until the mid-20th century.
- **Chinese Invasion:** In 1950, the People's Liberation Army of China invaded Tibet, which led to the signing of the Seventeen Point Agreement that purported to grant Tibet autonomy under Chinese sovereignty.
- **Uprising and Exile:** Dissatisfaction with **Chinese rule led to the Tibetan uprising in 1959**, which was brutally suppressed, causing the Dalai Lama and thousands of Tibetans to flee to India, where they established the CTA.

Organisation and Structure

- **Headquarters:** Initially set up in Mussoorie, India, the CTA moved to Dharamsala, Himachal Pradesh, India, in May 1960.
- **Objective:** The CTA serves as the continuation of the government of independent Tibet.
- **Historical Names:** Until 2006, it was called the **Assembly of Tibetan People's Deputies (ATPDs)** with a chairman as its head and a vice-chairman. Presently, the Speaker and a Deputy Speaker head the Tibetan Parliament-in-Exile.
- **Tibetan Constitution:** The Constitution of the Tibetan government is called 'The Charter of the Tibetans in Exile'.
- **Structure:** Composed of three branches:
 - **Executive:** Kashag.
 - **Legislature:** Tibetan Parliament-in-Exile.
 - **Judiciary:** The CTA is structured into several departments, including Religion, Home, Education, Health, and Foreign Relations.

International Recognition

- **Status:** Not officially recognized by any country.
- **Engagement:** Countries like the USA and European nations engage with the CTA through various forums.
- **Objectives of the CTA**
- **Rehabilitation of Tibetan Refugees:** Focuses on improving the living conditions and self-reliance of Tibetan refugees through various programs, including education, democratic governance, and economic self-sufficiency.
- **Promotion of Democracy:** Established a democratic governance structure with a parliament responsible for legislative functions and representing the Tibetan diaspora.
- **Restoration of Freedom in Tibet:** Actively works towards achieving genuine autonomy for Tibet within China through non-violent means and diplomatic efforts.

The Resolve Tibet Act

- The "Resolve Tibet Act" is a **legislative initiative in the USA** aimed at supporting the Tibetan cause.
- **Purpose:** The act emphasizes the need for a negotiated solution to the Tibet issue, supporting the CTA's efforts for autonomy.
- **Provisions:** It includes measures to promote human rights and political freedoms for Tibetans, and calls for a dialogue between the CTA and the Chinese government.
- **Impact:** Strengthens international support for the Tibetan cause and highlights the human rights abuses in Tibet

2.9 XINJIANG PROVINCE AND UYGHURS

Campaign groups recently called on the United Nations human rights chief to take action over what they said were documented abuses against Uyghurs and other Muslims in China's Xinjiang region.

About Uyghurs

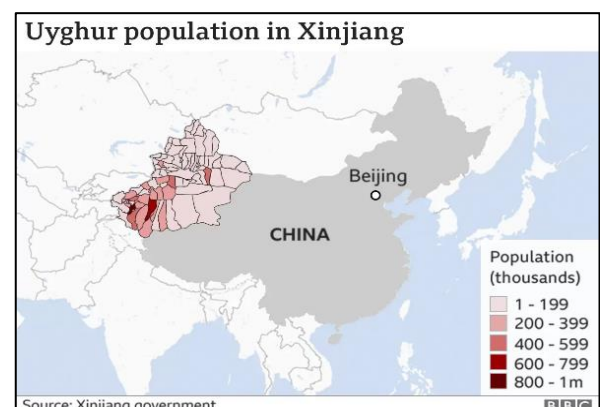
- **Distinct Ethnicity:** Uyghurs are a **Turkic ethnic group** with a rich cultural heritage distinct from China's Han majority.
- **Predominantly Muslim:** Islam plays a central role in Uyghur identity, shaping their customs and traditions.
- **Native to Xinjiang:** Uyghurs have inhabited Xinjiang for centuries, with a significant population of around 12 million concentrated there.

History of Uyghurs in China

- **Ancient roots:** Uyghurs have inhabited the Xinjiang region since the 8th century.
- **Political shifts:** The area has seen various political entities, including independent Uyghur states.
- **Chinese control:** Xinjiang came under firm Chinese control in the **18th century during the Qing dynasty**.
- **Modern tensions:** Increased **Han Chinese migration** and cultural policies have led to growing Uyghur discontent.

China's Treatment of Uyghurs

- **Security Crackdown:** Following violent incidents in Xinjiang in 2014, China intensified security measures in the region.
- **Mass Detention:** Credible reports suggest large-scale detention of Uyghurs in **internment camps**, raising human rights concerns.
- **Allegations of Abuse:** Rights groups allege forced assimilation, cultural suppression, and religious restrictions within the camps.



- **Economic Exploitation:** There are concerns about forced labor practices involving Uyghurs within China's supply chains.

Western Allegations and China's Response

- **Genocide Accusations:** Several Western nations have accused China of committing genocide against Uyghurs.
- **2022 U.N. Human Rights Office Report:** The 48-page U.N. report has blamed China for committing human rights violations against Uyghurs.
- **China's Denial:** China vehemently rejects these accusations, calling them politically motivated fabrications.
- **"Vocational Training" Camps:** China claims the facilities in Xinjiang are vocational training centers aimed at promoting deradicalization and economic development.

2.10 BOLIVIA COUP ATTEMPT

Questions are being raised over the authenticity of the recent coup attempt that took place in Bolivia by the military general Juan José Zúñiga.

News Details

- **Incident:** Bolivian Military General Juan José Zúñiga stormed the presidential palace in La Paz.
- **Outcome:** The coup attempt was foiled, with 17 people arrested for alleged involvement.
- **Authenticity:** Doubts persist about the authenticity of the coup, with allegations that President Arce staged the event to boost his popularity.

About Bolivia

- **Geography:** Bolivia is a landlocked country in central South America, bordered by Brazil, Paraguay, Argentina, Chile, and Peru.
- **Landscape:** The country features a diverse landscape that includes the Andes Mountains, the Amazon Basin rainforest, and the Atacama Desert.

History

- **Independence:** Bolivia gained independence from Spain in 1825.
- **Governance:** The country was governed by military regimes from 1964 to 1982, with democratic rule established since 1982. Bolivia has not faced a serious military takeover threat in over 40 years.

Recent Political Landscape in Bolivia

- **2005:** Evo Morales was elected as Bolivia's first indigenous president.
- **2019:** Morales ran for a third term in defiance of the constitution, was re-elected, but resigned after protests and military pressure.
- **2020:** Luis Arce, from Morales' Movement for Socialism (Mas) party, became president.

Causes of Turmoil in Bolivia

- **Political Causes:**
 - **Power Struggle:** A power struggle exists between President Luis Arce and Evo Morales, who aims to run for president again in 2025.
 - **Policy Paralysis:** This power struggle has led to government standstill.
- **Economic Causes:**
 - **Nationalisation:** Morales nationalised Bolivia's gas fields, attracting significant investment, especially from China.
 - **Commodity Prices:** A drop in global commodity prices led to a balance-of-payment crisis.



- **Foreign Exchange Reserves:** Decreased natural gas exports have depleted foreign exchange reserves.
- **Inflation:** Rising inflation has left the government unable to tackle domestic economic issues.

Possible Solutions

- **Economic Diversification:** Moving away from dependence on fossil fuels is crucial for long-term sustainability.
- **Private Sector Development:** Promoting the private sector and protecting vulnerable populations are essential.
- **Conflict Resolution:** Ending the current political conflict is necessary for stability.
- **International Intervention:** Aligning policies with international practices and seeking aid from institutions like the IMF can help avoid debt traps.

2.11 RATLE HYDROELECTRIC PROJECT

A five-member Pakistani delegation, accompanied by World Bank experts, inspected the Ratle power project. To address Pakistan's technical objections and ensure projects comply with the IWT (Indus Water Treaty).

About Ratle Project

- It is an 850-MW run-of-the-river hydroelectric power project on the **Chenab River in Jammu and Kashmir's Drabshalla village.**

Context and Background

- **Indus Water Treaty (IWT): Signed in 1960, this treaty grants**
 - The IWT allocates the waters of the three western rivers (Indus, Jhelum, and Chenab) to Pakistan.
 - The three eastern rivers (Ravi, Beas, and Sutlej) are allocated to India.
- **Pakistani Objections:** Pakistan has raised technical objections to several Indian projects in J&K, including the Ratle, Kishanganga, and Pakal Dul projects. They argue these projects reduce water flow critical for Pakistan's agriculture.
- **Potential Future Inspections:** The delegation might also inspect the 1,000-MW Pakal Dul project on the Marusudar river, a tributary of the Chenab.

Strategic Implications

- **India's Stance:** India maintains that all projects are compliant with the IWT and that it has the right to utilize river water for hydroelectric projects.
- **India's Transparency:** Allowing the inspection shows India's willingness to adhere to international treaties and address concerns diplomatically.
- **Pakistan's Concerns:** Fear that these projects might significantly reduce water flow into Pakistan, impacting their agriculture.
- **Pakistan's Actions:** Pakistan continues to seek arbitration and expert opinions to ensure water flow is not adversely affected

2.12 EUROPEAN PARLIAMENT

- It is one of the legislative bodies of the European Union and one of its **seven institutions.**
- **The Council of the European Union: It along with the European Parliament adopts European legislation.**
- **Formed:** It was founded on **10th September 1952**
- **Membership:** The Parliament is composed of **720 members,**
- **Election:** The Parliament has been directly elected **every five years by the citizens of the European Union through universal suffrage.**
- It represents the **second-largest democratic electorate** in the world (after the Parliament of India).
- **The EP also approves the EU budget and votes** on international agreements and enlargements of the bloc.
- **Supervisory powers:** MEPs oversee the work of EU institutions, notably the European Commission, which is the executive arm of the European Union.

- **The Lisbon Treaty:** The Lisbon Treaty is the latest revision of the European treaties that gave more powers to the European Parliament

2.13 INDIA-US INITIATIVE ON CRITICAL AND EMERGING TECHNOLOGIES (ICET)

- It was launched by the US President and Indian Prime Minister on the sidelines of the **Quad summit in May 2022**.
- **Objective:** iCET is about the idea of India and US being able to support each other and to encourage greater collaboration in the technology ecosystem, jointly innovate and find solutions to challenges.
- **The initiative will be spearheaded by the National Security Council Secretariat in India** and the US National Security Council.
- Under iCET, the two sides have identified six focus areas of co-development and co-production:
 - Space, semiconductors, advanced telecommunications, artificial intelligence, quantum, biotechnology, and clean energy.
 - It included **new areas within the iCET framework**, including biotechnology, critical minerals and rare earths processing technologies, digital connectivity and digital public infrastructure and advanced materials.

2.14 ORGANIZATION OF THE PETROLEUM EXPORTING COUNTRIES (OPEC)

- It is a **permanent intergovernmental organization** of 12 oil-exporting developing nations that **coordinates and unifies** the petroleum policies of its Member Countries.
- **Founding Members:** Created at the Baghdad Conference in September 1960, **by Iran, Iraq, Kuwait, Saudi Arabia and Venezuela**.
- **OPEC Members:** Member countries are **Algeria, Congo, Equatorial Guinea, Gabon, Iran, Iraq, Kuwait, Libya, Nigeria, Saudi Arabia, United Arab Emirates, and Venezuela**.
- **Angola withdrew** its membership effective 1 January 2024
- Currently, the Organization has a **total of 12 Member Countries**.
- **Objectives:** OPEC's objective is to coordinate and unify petroleum policies among Member Countries.
- **Secure fair and stable prices** for petroleum producers; an efficient, economic and regular supply of petroleum to consuming nations; and
- A **fair return** on capital to those investing in industry.
- **The OPEC Secretariat** is the executive organ of the OPEC.
- **Headquarter:** Located in Vienna

OPEC +

- OPEC+ is also known as the **Organization of the Petroleum Exporting Countries and its allies**, is a coalition of oil-producing countries that collaborate to manage oil production and stabilize prices in the global market.
- OPEC+ countries consisting of the OPEC members and other **non-OPEC oil producers**.
- OPEC+ represents around **40% of world oil production**
- **OPEC Members:** Member countries are Algeria, Congo, Equatorial Guinea, Gabon, Iran, Iraq, Kuwait, Libya, Nigeria, Saudi Arabia, United Arab Emirates, and Venezuela.
- **Non-OPEC Members:** The non-OPEC countries collaborating with OPEC in the alliance include Russia, Kazakhstan, Azerbaijan, Bahrain, Brunei, Malaysia, Mexico, Oman, South Sudan, and Sudan.
- **Decision-Making:** OPEC+ decisions, such as production quotas, are typically made through consensus among member countries.

2.15 EUROPEAN UNION CARBON TAX

- **Carbon tax:** It is levied on **the carbon content of fossil fuels**. The term can also refer to taxing other types of greenhouse gas emissions, such as methane. A carbon tax puts a price on those emissions to encourage **consumers, businesses, and governments to produce less of them**.
- **In news:** EU's carbon border tax could undermine Indian exports.
- **The EU has pledged to reduce its net GHG emissions by at least 55% by 2030** (compared to 1990 levels) and **achieve climate neutrality by 2050**.
- **For this it proposes European Union's Carbon Border Adjustment Mechanism (CBAM)**
- **Purpose:** CBAM aims to **impose a fair price on emissions** during the production of carbon-intensive goods entering the EU and encourage **cleaner industrial production in non-EU countries**.
- **Concern:** India, a **top exporter to the EU**, is expected to be adversely affected, **particularly in sectors like steel**.
 - India is developing its **own Carbon Credit Trading System (CCTS)** to combat climate change and incentivize clean energy investments.

2.16 SCHENGEN VISA

- **Purpose:** Entry permit for non-EU nationals to make a short, temporary visit of up to 90 days in any 180-day period to a country in the Schengen area.
- **Types:**
 - **Single-Entry Visa:** Allows entry into the Schengen area once.
 - **Multiple-Entry Visa:** Permits several visits to the Schengen area for the visa's validity period.
 - **Airport Transit Visa:** Enables connection through the international transit area of an airport in the Schengen area during a stopover or change of flights, without allowing exit from the transit area.

The Schengen Area

- **Area:** Encompasses 29 European countries that have abolished border controls at their mutual borders.
- **Nomenclature:** Named after the 1985 Schengen Agreement and the 1990 Schengen Convention, both signed in Schengen, Luxembourg.
- **Establishment:** Established in 1995.
- **Members:**
 - European Union member states.
 - **European Free Trade Association members:** Iceland, Liechtenstein, Norway, and Switzerland, which have signed association agreements with the EU to be part of the Schengen Area.

3 ECONOMY

3.1 INDIA'S AVIATION SECTOR

In a recent interview the CEO of Sri Lankan Airlines mentioned the opportunities provided by India's aviation sector growth.

History of India's Aviation Sector

- **First flight:** India's aviation journey began in **1911** with the **first commercial flight between Allahabad and Naini**. This marked the inception of air travel in the subcontinent **during British rule**.
- **Post-independence era:** The sector saw significant changes after 1947, with **Air India's nationalization in 1953** and the establishment of a domestic air services monopoly, shaping the industry's structure for decades.
- **Liberalization phase:** The 1990s brought a paradigm shift with the **allowance of private airlines in 1994**. This paved the way for competition and the emergence of low-cost carriers in the early 2000s, revolutionizing air travel accessibility.
- **Recent steps:** The introduction of the **National Civil Aviation Policy in 2016** and **Air India's privatization in 2022** marked significant steps towards modernizing and globalizing India's aviation landscape.

Present Stats

- **Market position:** India currently holds the **third largest** domestic aviation market in the world.
- **Passenger traffic:** Passenger traffic amounted to over **327 million** at airports across India in the financial year 2023, out of which close to 57 million were international passengers.
- **Fleet strength:** In 2024, aviation companies in India had a total of 610 aircraft, catering to domestic and international routes, with plans for significant expansion in the coming years.
- **Airport infrastructure:** There are over 400 airports and airstrips in the country. However, only around **133** of these are currently operational.
- **Major Players:** Major players include **IndiGo, SpiceJet, Air India**, and GoAir. **IndiGo** held around **15.7 percent of the international airlines market** during financial year 2023.

Projected Growth

- **Market expansion:** The Indian aviation market is set to soar, with projections indicating a value of **US\$ 30 billion by 2028**, driven by rising income levels and increasing air travel penetration.
- **Passenger increase:** Forecasts suggest India will handle **520 million passengers annually by 2037**, necessitating substantial infrastructure and capacity enhancements to meet this burgeoning demand.
- **Fleet growth:** Indian carriers are expected to operate over **2,000 aircraft by 2040**, a nearly threefold increase from current levels, reflecting the anticipated boom in air travel demand.
- **Economic impact:** The aviation sector is poised to become a major economic driver, contributing an estimated **US\$ 250 billion to India's GDP by 2030** through direct and indirect benefits.

Significance of Aviation sector

Contribution to GDP

- **Direct Contribution:** In 2019, aviation contributed approximately \$30 billion to GDP through airline operations, airports, and ground services.
- **Indirect Contribution:** The aviation supply chain, including manufacturing and services, adds another \$30 billion to GDP.
- **Induced Contribution:** Spending by those employed in the sector supports other industries, adding around \$15 billion to GDP.

Job Creation

- **Direct Employment:** Over 2.5 million people are directly employed in roles such as pilots, cabin crew, and ground staff.
- **Indirect Employment:** The sector supports around 1.5 million additional jobs in the supply chain.
- **Induced Employment:** Economic activity generated by aviation employees supports another 2 million jobs in the broader economy.

Impact on Tourism and Trade

- **Tourism:** Aviation supports the tourism industry, creating jobs and boosting hospitality and services sectors.
- **Trade:** Air transport is crucial for high-value, time-sensitive goods, supporting trade worth around \$120 billion annually.

Stimulating Regional Development

- **Regional Connectivity:** Enhanced connectivity through regional airports promotes economic development in smaller cities.
- **Infrastructure Development:** Investments in airport infrastructure boost local economies and encourage further infrastructure projects.

Challenges in Aviation Sector

- **Infrastructure Constraints:** Major airports face severe congestion, necessitating urgent capacity expansion and the development of new airports to manage growing traffic.
- **High Operational Costs:** The sector struggles with expensive aviation turbine fuel and high taxation on services, which impacts profitability and increases ticket prices.
- **Skilled Workforce Shortage:** There is a significant shortage of trained professionals due to inadequate training facilities and brain drain, hindering growth and operational efficiency.
- **Regulatory Hurdles:** Complex regulations and lengthy approval processes pose challenges for new entrants and existing players, requiring streamlined regulations for growth.
- **Safety and Security Concerns:** Ensuring robust aviation security measures to counter terrorism and maintaining high safety standards are critical yet challenging.
- **Environmental Concerns:** Aviation's contribution to carbon emissions demands investment in sustainable technologies and practices to mitigate environmental impact.
- **Financial Health of Airlines:** Many Indian carriers face high debt levels and financial instability, with recent bankruptcies highlighting the need for better financial management.
- **Regional Connectivity:** Improving connectivity to remote and underserved regions remains a challenge despite growth in the sector.
- **Technological Integration:** There is a need to better utilize modern technology, including AI and blockchain, to enhance operational efficiency and customer experience.
- **Inconsistent Implementation:** Variability in how different states and institutions implement and enforce aviation policies leads to uneven standards and protection against unfair practices.
- **Global Competition:** Indian airlines face stiff competition from international carriers, necessitating strategic alliances and improved service standards to remain competitive.

Government Schemes and Other Initiatives

- **UDAN scheme:** UDAN (Ude Desh Ka Aam Nagrik) is a **regional connectivity scheme** that aims to develop underserved airports, enhancing air connectivity to smaller cities and remote areas across India.
- **Nabh Nirman:** Next Gen Airports for Bharat (NABH) Nirman Scheme proposes to increase the traffic handling capacity of airports by more than **five times** to handle **a billion trips a year**.
- **Digi Yatra:** A biometric boarding system designed to provide a seamless and paperless travel experience, improving efficiency and passenger convenience at Indian airports.
- **FDI liberalization:** The government has allowed **100% FDI in scheduled air transport and regional air transport services**, encouraging foreign investment and expertise in the sector.

Committees Related to Aviation Sector Reforms

- **Naresh Chandra Committee (2003):** Recommended significant **liberalization of the civil aviation sector**, laying the groundwork for private sector participation and industry growth.
- **Rohit Nandan Committee (2012):** Focused on **Air India's turnaround strategy**, suggesting crucial reforms to improve the national carrier's operational and financial performance.
- **R.N. Choubey Committee (2015):** Proposed the **draft National Civil Aviation Policy**, addressing key aspects of the sector including regional connectivity, cargo operations, and MRO (maintenance, repair and overhaul) services.
- **Jayant Sinha Committee (2019):** Recommended measures to **boost India's drone ecosystem**, focusing on regulations, manufacturing, and applications to leverage this emerging technology.

Way Forward

- **Infrastructure Development:** Prioritize and accelerate airport expansion and modernization projects to address capacity constraints and improve passenger experience across the country. **The Naresh Chandra Committee (2003)** recommended significant investment in airport infrastructure to support the growing demand.
- **Policy Reforms:** Implement a rationalized taxation structure and simplify the regulatory framework to create a more conducive environment for airlines and aviation-related businesses. **The R.N. Choubey Committee (2015)** emphasized the need for streamlined regulations to promote sector growth.
- **Skill Development:** Establish more aviation training institutes and promote industry-academia partnerships to build a skilled workforce capable of meeting the sector's growing demands. **The Rohit Nandan Committee (2012)** highlighted the importance of developing a skilled workforce to improve operational efficiency.
- **Technological Integration:** Embrace emerging technologies like AI, IoT, and blockchain for improved operational efficiency, safety, and customer experience in all aspects of aviation. **The Jayant Sinha Committee (2019)** recommended leveraging technology to enhance the sector's capabilities.
- **Environmental Sustainability:** Invest in green technologies and practices to reduce the sector's carbon footprint. This includes adopting sustainable aviation fuels and implementing green airport initiatives. **The Naresh Chandra Committee** also pointed out the need for environmentally sustainable practices in aviation.
- **Enhancing Regional Connectivity:** Continue to develop underserved airports under the UDAN scheme, enhancing air connectivity to smaller cities and remote areas across India. This aligns with the goals of the **R.N. Choubey Committee**, which focused on improving regional connectivity.
- **Financial Health:** Encourage better financial management practices among Indian airlines to reduce debt levels and prevent bankruptcies. **The R.N. Choubey Committee** suggested measures to improve the financial stability of airlines, including better access to credit and financial restructuring options.
- **Global Competitiveness:** Form strategic alliances and partnerships with international carriers to enhance service standards and remain competitive in the global market. **The Naresh Chandra Committee** emphasized the importance of strategic partnerships in strengthening the aviation sector.

DGCA: Director General of Civil Aviation

Overview

- **Regulatory Body:** The DGCA is India's national regulatory body for civil aviation, operating under the Ministry of Civil Aviation.
- **Headquarters:** Located in New Delhi, with regional offices across major cities to ensure comprehensive oversight.

Objective

- **Primary Goal:** To ensure the safety, security, and orderly growth of civil aviation in India.

Legal Framework

- **Foundational Laws:** The DGCA derives its powers from the Aircraft Act, 1934, and the Aircraft Rules, 1937.

- **Statutory Status:** The Directorate General of Civil Aviation became a statutory body under the Aircraft (Amendment) Act, 2020.
- **Functions:**
 - **Issuing Licenses:** Licensing of pilots, aircraft maintenance engineers, and air traffic controllers.
 - **Aircraft Certification:** Certification of aircraft and components to ensure compliance with safety standards.
 - **Monitoring Airlines:** Conducting regular inspections and audits of airlines to ensure adherence to safety protocols.
 - **Airport Regulation:** Oversight of airport operations to ensure safety and efficiency.

3.2 FARM DISTRESS MEASURES IN INDIA

Prime Minister Narendra Modi recently signed the first file of his third term, authorizing the release of the 17th installment of the Pradhan Mantri Kisan Samman Nidhi.

News Details

- **PM's First Action:** A day after taking oath as Prime Minister for the historic third term, Narendra Modi signed the first file on Monday, June 10, authorizing the release of the **17th installment of the Pradhan Mantri Kisan Samman Nidhi**.
- **Beneficiary Count:** PM Narendra Modi said the scheme will benefit **9.3 crore farmers** and distribute around **₹20,000 crore**.
- **Significance:** This move by the Prime Minister highlights the government's commitment to addressing the challenges faced by the agricultural sector and providing financial assistance to farmers.

Pradhan Mantri Kisan Samman Nidhi Scheme (PM-KISAN)

- **Central Sector Scheme:** The PM-KISAN scheme was launched in **February 2019**. It is completely funded by the Government of India.
- **Income Support:** Under the scheme, income support of **₹6,000 per year** is provided to eligible farmer families.
 - **Transfer:** The income support is transferred directly into the bank accounts of the beneficiary farmer families in **three equal installments of ₹2,000 each**.
- **Beneficiaries:** The scheme covers small and marginal farmer families (landholding up to 2 hectares) across the country.
- **Identification:** Beneficiaries are identified based on the existing land ownership records of the concerned states/UTs.
- **Achievement:** Over 2.42 lakh crore have already been disbursed to more than 11 crore beneficiary farmer families through various installments.

Reasons of Farm Distress in India

- **Farm distress** refers to the challenging conditions faced by farmers, impacting their livelihoods and well-being. In India, several factors contribute to this distress:
- **Declining Farm Income:**
 - **Low and Fluctuating Prices:** Farmers struggle with unpredictable market forces and a lack of control over pricing.
 - **High Input Costs:** Rising costs of seeds, fertilizers, pesticides, and fuel leave little room for profit.
- **Unsustainable Farming Practices:**
 - **Dependence on Monsoon:** Erratic rainfall patterns and water scarcity threaten crop yields.
 - **Land Fragmentation:** Division of landholdings across generations reduces farm size and viability.
- **Debt Burden and Limited Credit Access:**
 - **Predatory Money Lenders:** High-interest loans from informal lenders trap farmers in debt cycles.

- **Inadequate Institutional Credit:** Complexities in obtaining loans from banks discourage many farmers.
- **Market Inefficiencies and Infrastructural Inadequacies:**
 - **Lack of Storage Facilities:** Post-harvest losses due to inadequate storage lead to lower incomes.
 - **Poor Market Access:** Dependence on middlemen and a complex marketing system reduces farmer profits.

Impacts of Farm Distress

- **Rural Indebtedness:** Farmers often fall into debt traps due to crop failures, low market prices, and the inability to repay loans, leading to a vicious cycle of poverty.
- **Farmer Suicides:** According to NCRB (National Crime Records Bureau) data, over **100,000 farmer suicides occurred between 2015-2020**, highlighting the gravity of the issue.
- **Migration to Cities:** Faced with declining incomes and limited opportunities in rural areas, many farmers and agricultural laborers have migrated to urban centers in search of alternative livelihoods.
- **Food Security Concerns:** Farm distress has the potential to impact food production, jeopardizing the nation's food security and putting pressure on food prices.
- **Widening Rural-Urban Income Gap:** Low farm incomes contribute to poverty and hinder overall economic development.
- **Stagnant Agricultural Growth:** Distress discourages investment in agriculture, impacting overall growth.

Important Measures Taken by the Government to Counter Farm Distress

- **MSP (Minimum Support Price) Scheme:** Aims to provide a price floor for certain crops and creating a safety net for the farmers.
- **Irrigation Schemes:** Investments in irrigation projects, **PM Krishi Sinchay Yojana** to facilitate micro irrigation aiming at improving water security.
- **Loan Waiver Schemes:** One-time debt relief measures are provided by some state governments, but have limitations.
- **Crop Insurance Schemes:** **Pradhan Mantri Fasal Bima Yojana** aims to compensate farmers for crop losses due to natural calamities.
- **Soil Health Card Scheme:** The Soil Health Card Scheme provides farmers with soil nutrient status and recommended dosages of fertilizers to improve soil fertility and productivity.
- **e-NAM Platform:** The electronic National Agriculture Market (e-NAM) platform aims to create a unified national market for agricultural commodities, ensuring better prices for farmers.

Core Areas of Improvement

- **Irrigation Infrastructure:** Improving irrigation infrastructure, including the construction of dams, canals, and micro-irrigation systems, is crucial for ensuring water security and increasing agricultural productivity.
- **Crop Diversification:** Encouraging crop diversification and promoting the cultivation of high-value crops can help farmers increase their incomes and adapt to changing market demands.
- **Agricultural Research and Extension:** Strengthening agricultural research and extension services is essential for developing and disseminating improved seeds, farming techniques, and best practices to farmers.
- **Market Reforms:** Implementing market reforms, such as the removal of middlemen, streamlining supply chains, and ensuring fair prices for farmers, can help increase their income and reduce distress.

Challenges

- **Increasing Input Costs:** Rising costs of seeds, fertilizers, and other inputs, coupled with fluctuating market prices, pose a threat to the profitability of farming operations.
- **Land Fragmentation:** Addressing the issue of fragmented land holdings and promoting land consolidation initiatives is a complex challenge that requires careful planning and implementation.

- **Credit and Technology:** Access to Institution credit and adoption of modern technology is sub optimal adversely impacting the productivity of the agriculture sector.
- **Rural Infrastructure Development:** Rural infrastructure, including roads, storage facilities, and cold chains, requires significant investment and coordinated efforts across various stakeholders.
- **Climate Change Adaptation:** Developing and implementing strategies to adapt to the impacts of climate change, such as drought-resistant crops and sustainable farming practices, remains a significant challenge.

Way Forward

- **Sustainable Agriculture Practices:** Promoting sustainable agriculture practices, such as **organic farming, integrated pest management, and water conservation techniques**, can help minimize the environmental impact and improve long-term productivity.
- **Strengthening Farmer Producer Organizations:** Encouraging the formation and strengthening of **Farmer Producer Organizations (FPOs)** can help farmers gain better bargaining power, access to credit, and economies of scale.
- **Diversification of Rural Livelihoods:** Promoting diversification of rural livelihoods through the development of **agro-based industries, rural tourism, and skill development programs** can help reduce over-dependence on agriculture.
- **Streamlining Credit Delivery Systems:** Simplifying loan application processes and ensuring timely access to institutional credit.
- **Public-Private Partnerships:** Fostering public-private partnerships in areas such as agricultural research, infrastructure development, and market linkages can help leverage resources and expertise for the overall development of the agricultural sector.

3.3 EXTERNAL COMMERCIAL BORROWINGS (ECBS)

According to data from the Reserve Bank of India (RBI), registrations by Indian companies for external commercial borrowings (ECBs) almost doubled to \$49.2 billion in the financial year 2023-24 (FY24) from \$26.6 billion in FY23.

News Details

Causes for Increase in ECB registrations:

- **Global Conditions:** The significant increase in ECB registrations can be attributed to **favourable global lending conditions**, including low interest rates and ample liquidity in international markets.
- **Financial Prudence of Indian Borrowers:** Indian companies seized the opportunity to secure foreign loans at competitive rates by **diversifying their funding sources and optimizing their capital structure**.

Significance

- **Confidence in Indian Economy:** The willingness of foreign lenders to extend credit to Indian companies through ECBs reflects their confidence in the Indian economy's growth prospects and the creditworthiness of Indian borrowers.
- This increased confidence could be a result of India's economic resilience, robust macroeconomic fundamentals, and favourable policy reforms.

About External Commercial Borrowings

- **External Commercial Borrowings (ECBs)** refer to the **commercial loans raised by eligible resident entities from recognized non-resident entities**.
- **Types of Loans:** These loans can be in the form of bank loans, buyer's credit, supplier's credit, or securitized instruments like bonds.
- **Objective:** The primary purpose of ECBs is to enable access to foreign capital for Indian businesses and support their long-term financing needs.

- **Maturity Period:** ECBs come with a *minimum average maturity period of 3 years*, ensuring a stable flow of foreign currency.

Current External Commercial Borrowings Regulatory Mechanism

- **Dual Route System:** The current ECB framework in India functions under a dual route system - automatic and approval route - offering flexibility to borrowers.
- **Automatic Route:** Under the automatic route, eligible borrowers can access ECBs without prior RBI approval, subject to certain limits and end-use restrictions.
- **Approval Route:** The approval route caters to situations not covered by the automatic route, requiring RBI's sanction based on specific criteria.
- **Focus on Transparency:** The RBI emphasizes transparency in ECB transactions. Borrowers must register the ECB with the bank and obtain a **Loan Registration Number (LRN)** before utilizing the funds.

Eligible Borrowers and Lenders:

- The RBI has specified a list of eligible borrowers and recognized lenders for ECBs.
- **Eligible borrowers** include companies in the manufacturing and software development sectors, NBFCs, Small Finance Banks, and MFIs.
- **Recognized lenders** include international banks, export credit agencies, multilateral financial institutions, and foreign equity holders.

End-Use Restrictions:

- **ECBs are permitted for specific end-uses**, such as import of capital goods, new projects, modernization/expansion of existing units, and overseas acquisition of companies.
- **ECBs cannot be used for certain purposes**, such as real estate activities, working capital, and on-lending.

Borrowing Limits:

- The RBI has set borrowing limits for ECBs based on factors like the borrower's capital structure, credit rating, and the tenure of the ECB.
- These limits are periodically reviewed and revised to ensure prudent external borrowing.
- **Approval Process:** The approval process considers factors like the borrower's creditworthiness, debt-equity ratio, and the proposed use of ECB proceeds.

Benefits of External Commercial Borrowings

- **Infrastructure Financing:** ECBs provide a valuable source of **long-term foreign currency for financing critical infrastructure projects like power, transportation, and telecom**.
- **Technological Upgradation:** Companies can leverage ECBs to modernize equipment and adopt advanced technologies, enhancing their competitiveness in the global market.
- **Foreign Exchange Inflow:** ECBs contribute to a **steady inflow of foreign currency**, bolstering India's foreign exchange reserves and promoting exchange rate stability.
- **Increased Investment:** ECBs can potentially lead to higher overall investment levels in the Indian economy, fostering economic growth and job creation.

Sector-Specific Impacts of ECBs

- **Manufacturing:** ECBs have facilitated the modernization of manufacturing facilities, enabling companies to adopt advanced technologies and improve operational efficiencies.
- **Infrastructure:** Significant investments in infrastructure projects, such as transportation and power, have been made possible through ECBs, contributing to long-term economic growth.
- **Technology and Software Development:** Access to foreign capital has enabled technology companies to invest in research and development, fostering innovation and enhancing competitiveness.
- **Non-Banking Financial Companies (NBFCs):** NBFCs have utilised ECBs to expand their lending portfolios, supporting the financial inclusion of underserved segments.

Risks Associated with External Commercial Borrowings

- **Exchange Rate Fluctuations:** Fluctuations in exchange rates can expose borrowers to currency risks, potentially increasing the cost of repaying the loan.
- **Interest Rate Volatility:** Rising interest rates in global markets can increase the interest burden on ECBs.
- **Debt Sustainability:** Excessive reliance on ECBs can lead to high external debt levels, posing challenges for debt sustainability in the long run.
- **Macroeconomic Vulnerability:** Sudden changes in global economic conditions can adversely impact the ability of borrowers to repay ECBs.

Committees on External Commercial Borrowings in India

- **High Level Committee on Balance of Payments chaired by Dr C Rangarajan 1993:** The committee recommended strict regulation of external commercial borrowings, especially short-term debt.
- **Sodhani Committee 1994:** The Sodhani Committee recommended lowering restrictions on external commercial borrowings and reducing bureaucratic control on hedging operations related to ECBs.
- **Tarapore Committee 1997:** The Tarapore Committee suggested measures to monitor and manage the associated risks of external commercial borrowings.
- **Sahoo Committee 2013:** The Sahoo Committee proposed complete liberalization of ECB regulations, allowing Indian companies to borrow in foreign currency without an upper ceiling, subject to specific hedging requirements.

Way Forward

- **Diversification of Sources:** Exploring alternative sources of foreign currency funding, such as foreign direct investment (FDI) and portfolio investments, can help mitigate risks associated with ECBs.
- **Hedging Strategies:** Encouraging borrowers to adopt appropriate hedging strategies can minimise the impact of exchange rate fluctuations.
- **Prudent Borrowing:** Companies should exercise caution and borrow only what is essential for their projects, ensuring sustainable debt levels.
- **Regulatory Review:** Continuous review and refinement of the ECB framework by the RBI and DEA can ensure its effectiveness in supporting India's economic growth objectives.
- **Promotion of Local Currency Borrowing:** Encouraging policies that promote borrowing in local currencies to reduce exchange rate risks.
- **Strengthening Institutional Capacity:** Enhancing the capacity of financial institutions to manage and monitor ECB-related risks effectively.
- **Incentives for Green Financing:** Introducing incentives for ECBs aimed at financing environmentally sustainable projects.
- **Stakeholder Engagement:** Fostering greater engagement with stakeholders, including industry associations and financial experts, to continuously refine the ECB framework.
- **Transparency and Reporting:** Improving transparency and reporting requirements for ECB transactions to enhance accountability and risk management.

3.4 EURASIAN ECONOMIC UNION (EAEU)

India seriously considering an FTA with Eurasian Economic Union.

About Eurasian Economic Union

- It is an international economic union and free trade zone comprising countries located in central and northern Asia and Eastern Europe.
- **Established by the Treaty on the Eurasian Economic Union** signed in May 2014, in Astana (now Nur-Sultan).
- **Member states:** Russia, Belarus, Kazakhstan, Kyrgyzstan, and Armenia.

- **Purpose:** The EAEU provides for free movement of goods, services, capital and labor, pursues coordinated, harmonized, and single policy in the sectors determined by the Treaty and international agreements.

Structure:

- **Supreme Eurasian Economic Council:** Comprises the heads of state of the member countries and is the highest decision-making body.
- **The Eurasian Economic Commission, based in Moscow,** is the permanent regulatory body of the union.
- **Court of the Eurasian Economic Union based in Minsk.**
- **Objectives of the EAEU include:**
 - Creating a single market for goods, services, capital, and labor.
 - Harmonizing economic policies and regulations among member states.
 - Promoting sustainable economic growth and competitiveness.
 - Facilitating the free movement of goods and services to boost trade within the union.

3.5 GREAT NICOBAR INFRASTRUCTURE PROJECT

Opposition parties are demanding withdrawal of clearances to the Great Nicobar infrastructure project citing transparency and environmental concerns.

About the Great Nicobar Infrastructure Project

- **Mega Development Plan:** The ₹72,000 crore project aims to establish a major infrastructure hub on the Great Nicobar Island.
- **Strategic Location:** The project location holds immense strategic significance, situated near the **Malacca Strait, one of the world's busiest shipping lanes**. It is intended to bolster India's presence and maritime capabilities in this geopolitically critical region.
- **Multi-Component Project:** The ambitious plan involves the development of **air and water connectivity**. It also envisions better **housing and energy infrastructure** for the region.
- **Massive Scale:** The project area is expected to span a vast **130 square kilometers** of the island's pristine forest land.

Features of the Project

- **Maritime Hub:** A key feature is the establishment of a **major commercial port** to serve as a **hub for maritime trade**, potentially enhancing India's role in global shipping and logistics networks.
- **Air Connectivity:** The construction of a **new international airport** is envisioned to significantly improve air connectivity to the Andaman & Nicobar Islands, **facilitating easier movement of people, goods, and services**.
- **Urban Township:** To support the operational requirements of the port, airport, and other facilities, the plan includes the **development of an entire urban township** to house the necessary workforce and infrastructure.
- **Power Infrastructure:** A critical component is the proposed **450 MVA gas and solar-based power plant**, aimed at meeting the substantial energy demands of this large-scale infrastructure project while also exploring renewable energy sources.

Expected Benefits

- **Economic Opportunities:** It will create numerous employment opportunities and act as a catalyst for economic growth in the region by boosting trade, commerce, and ancillary industries.
- **Strategic Advantage:** Project is expected to enhance the country's strategic hold over this crucial maritime corridor and surrounding waters.
- **Energy Security:** The addition of a large-scale power generation facility is projected to not only meet the energy needs of the project itself but also contribute to the overall energy security and self-reliance of the region.

Challenges and Concerns related to the Project

- **Environmental Concerns:**
 - **Forest Loss:** Potential loss of 130 square kilometers of biologically rich, pristine rainforest, which could have far-reaching consequences for the island's delicate ecosystem.
 - **Climate Impact:** The felling of an estimated 9.6 lakh trees could worsen the impact of climate change by reducing the **island's carbon sequestration capacity and exacerbating greenhouse gas emissions.**
 - **Compensatory Failure:** Doubts have been raised over the efficacy of the government's proposed 'compensatory afforestation' plan, which involves planting trees in Haryana, a state thousands of kilometers away with a vastly different ecological zone.
- **Tribal Displacement:**
 - **The Shompen tribe:** It is **an indigenous Particularly Vulnerable Tribal Group (PVTG)** that inhabits the island. The project raises concerns about their displacement and disruption of their traditional way of life.
 - **Violation of Rights:** Allegations have been made of potential violations of the Shompen's forest rights and a lack of proper consultation with the tribe, as mandated by existing laws and regulations.
- **Legal Challenges:**
 - **NGT Case:** A legal battle is ongoing at the National Green Tribunal, India's premier environmental court, over the clearances granted to the project, with concerns raised about potential violations of environmental norms and regulations.
 - **Due Process Lapses:** The opposition parties have alleged lapses in due process, claiming that the government has compromised on mandatory studies, assessments, and consultations in its rush to secure approvals for the project.
- **Location Concerns:**
 - **Earthquake Risk:** The project site is located in an earthquake-prone zone, raising concerns about the safety and resilience of infrastructure in case of seismic activity.
 - **Tsunami Vulnerability:** The area witnessed significant land subsidence during the **2004 tsunami**, raising questions about the project's long-term sustainability in such a vulnerable location.
- **Lack of Transparency:** Key details about the Great Nicobar project have not been made available to the public.

3.6 DIGITAL PAYMENTS INTELLIGENCE PLATFORM

The RBI recently proposed to set up a 'Digital Payments Intelligence Platform', which will harness advanced technologies to mitigate payment fraud risks.

About Digital Payments Intelligence Platform

- **Objective:** Aims at **mitigating payment fraud risks** and enhancing the safety of digital transactions. Constituted a **committee headed by A.P Hota.**
- **Centralized Monitoring:** The Reserve Bank of India (RBI) has proposed a centralized digital payments intelligence platform **to monitor and analyze digital payment transactions in the country.**
- **Real-time data sharing:** The platform will facilitate real-time exchange of information on suspicious activities. This will allow for quicker intervention and prevention of potential frauds.

Proposed Features

- **Advanced Technologies:** The platform will leverage cutting-edge technologies such as **AI and machine learning** that will identify and mitigate fraud risks effectively.
- **Alert & notification system:** Real-time alerts will be sent to banks and other stakeholders about suspicious activities, allowing for swift action to block fraudulent transactions.
- **Threat intelligence sharing:** The platform will facilitate the sharing of threat intelligence among stakeholders, keeping them updated on the latest fraud tactics employed by criminals.
- **Regulatory compliance reporting:** The platform can streamline regulatory compliance reporting by automating the collection and analysis of data related to digital payment frauds.

Global Examples

- **Singapore's FAST and Paynow:**
 - **Singapore's FAST system** enables instant interbank transfers. It incorporates robust security features and real-time fraud monitoring.
 - **Singapore's PayNow system**, launched by the Monetary Authority of Singapore, provides a centralized platform for digital payments and monitoring.
- **United Kingdom's Confirmation of Payee (CoP):**
 - CoP verifies payee details during transactions, reducing the risk of fraud.
 - It enhances consumer confidence in digital payments.
- **U.S. Federal Reserve's FedNow Service:**
 - The FedNow Service aims to provide real-time payments in the U.S.
 - It emphasizes security and fraud prevention.

Expected Benefits

- **Enhanced security:** The platform will strengthen the overall security of the digital payment ecosystem, fostering trust and encouraging wider adoption of digital payments.
- **Reduced fraud losses:** Enables proactive detection and prevention of frauds, reducing financial losses for consumers and institutions.
- **Improved customer experience:** A secure and reliable digital payment environment will lead to a more positive customer experience, encouraging greater use of digital payment methods.
- **Innovation in fraud prevention:** Acts as a catalyst for innovation in fraud prevention techniques, as stakeholders collaborate to develop new and advanced security solutions.

Challenges

- **Data privacy concerns:** The platform needs to be designed with robust data privacy safeguards to ensure that sensitive customer information is protected.
- **Data ownership and access:** Clear guidelines on data ownership and access rights for different stakeholders need to be established.
- **Interoperability and standardization:** The platform needs to be interoperable with existing systems used by different participants in the digital payment ecosystem.
- **Cybersecurity threats:** The platform itself needs to be fortified against potential cyberattacks to ensure the security of the data it stores and processes.

Way Forward

- **Committee recommendations:** The RBI-constituted committee is expected to submit its recommendations on the design and implementation of the platform within two months. These recommendations will be crucial in shaping the final form of the platform.
- **Stakeholder involvement:** Active participation from all stakeholders, including banks, payment gateways, wallets, and regulators, is essential.
- **Data privacy framework:** A robust data privacy framework needs to be developed to address concerns and ensure compliance with existing regulations.
- **Continuous improvement:** The platform should be continuously monitored and updated to adapt to evolving fraud tactics and technological advancements.

3.7 PALM OIL IMPORT

India's palm oil imports witnessed a **significant surge of 74% in May 2024**, reaching 7,63,300 tonnes compared to 4,39,173 tonnes in the same period last year.

Importance of Palm Oil

- **Versatile Use:** Palm oil is extensively used in food products, cosmetics, and biofuels.
- **Cost-Effective:** Palm oil is one of the most cost-effective edible oils, making it a popular choice globally.
- **Nutritional Value:** Rich in antioxidants, including Vitamin E, and provides a source of healthy fats.
- **Industrial Applications:** Used in the manufacturing of soaps, detergents, and lubricants due to its versatile properties.
- **Renewable Resource:** Being a high-yield crop, palm oil is seen as a more sustainable option compared to other oil crops.

Types of Palm oil

- **Crude Palm Oil (CPO):** Extracted from the pulp of the fruit.
- **RBD Palmolein:** Refined, bleached, and deodorized form of palm oil.
- **Crude Palm Kernel Oil (CPKO):** Extracted from the kernel or seed of the palm fruit

Major Suppliers

- **Indonesia and Malaysia:** The primary suppliers of refined palmolein and CPO to India.
- **Argentina and Brazil:** Major suppliers of soybean oil.
- **Russia, Romania, Ukraine, and Argentina:** Key exporters of sunflower oil to India.

Cause

- **Global edible oil prices surged last month due to supply disruptions** in major exporters like Argentina, Brazil, Russia, and Ukraine, SEA.

Trend

- Rising prices of soybean and sunflower oil in the **global market have pushed domestic mustard prices above the government's support level**, prompting farmers to consider expanding oilseed cultivation in the upcoming kharif season.

Environmental and Social Concerns

- **Deforestation:** Palm oil production is associated with deforestation and loss of biodiversity in tropical regions.
- **Impact on Indigenous Communities:** Expansion of palm oil plantations can negatively impact indigenous communities and their livelihoods.

3.8 JP MORGAN EMERGING MARKETS BOND INDEX

India is set to attract billions of dollars in inflows when JP Morgan Chase & Co. adds the nation's government bonds to its emerging markets index on 28th June 2024.

News Details

- **India's Inclusion:** JP Morgan is set to add Indian government bonds to its emerging markets index.
- **Initial Impact:** Since JP Morgan's announcement in September 2023, nearly **\$11 billion** has already flowed into index-eligible bonds. Forecasts suggest an **additional \$20-25 billion in inflows over the next 10 months**, indicating strong investor interest.

About JP Morgan Emerging Markets Bond Index

- **Global Benchmark:** A widely followed index that serves as a performance benchmark for emerging market bonds. It tracks debt instruments from various developing economies, providing a comprehensive view of this asset class.
- **Data Repository:** The EMBI (Emerging Markets Bond Index) boasts a **rich historical data set**, providing valuable insights for investors and market analysis.

- **Investment Guide:** Utilized by global investors as a crucial tool for allocating funds in emerging markets. The index helps in diversifying international bond portfolios and provides a standardized measure for comparing investment opportunities across different countries.
- **Multiple Facets:** The EMBI caters to different investor needs with **three variations**:
 - **EMBI+**: Encompassing all emerging markets.
 - **EMBI Global**: Focusing on larger and more liquid markets.
 - **EMBI Global Diversified**: Offering a broader spread with weightings based on investable market size.

Significance for India

- **Foreign Investment Boost:** Foreign ownership of Indian bonds is projected to increase from 2.5% to 4.4%. This surge in foreign investment could provide a substantial and stable source of funding for India's growing economy.
- **Unlocking a \$1.3 Trillion Market:** This decision will throw open the doors of India's massive \$1.3 trillion bond market to a global audience of investors.
- **Market Credibility:** Inclusion in the index signals India's growing importance in global financial markets. It enhances the credibility of the Indian bond market among international investors, potentially leading to more diverse and sophisticated market participation.
- **Economic Growth:** The increased foreign investment can support India's economic development by providing additional capital for infrastructure and other key sectors. It may also lead to lower borrowing costs for the government, freeing up resources for development initiatives.

Reasons for Inclusion of India into EMBI

- **Economic Stability:** India's **robust economic growth and stable currency**, supported by prudent central bank policies, have made it an attractive destination for global investors seeking exposure to emerging markets.
- **Market Performance:** **Indian sovereign debt has consistently outperformed its index counterparts** over the past decade. Currently, it stands as the **top-performing Asian government debt**, highlighting its appeal to yield-seeking investors.
- **Market Size and Accessibility:** The \$1.3 trillion Indian bond market is opening up to a broader range of investors. The implementation of the **Fully Accessible Route (FAR)** has improved foreign investor access, meeting a key criterion for index inclusion.

Effect of Inclusion on the Indian Economy

- **Capital Inflows:** Significant foreign capital inflows are expected, leading to increased liquidity in the bond market.
- **Lower Borrowing Costs:** Enhanced credibility and demand for Indian bonds can reduce borrowing costs for the government, freeing up resources for development projects.
- **Economic Growth:** Additional capital can be channelled into infrastructure and other key sectors, supporting overall economic growth.
- **Currency Stability:** While inflows can strengthen the rupee, managing these effectively is crucial to prevent excessive appreciation, which could impact exports.
- **Market Maturity:** Increased foreign participation can lead to a more mature and sophisticated bond market, attracting a broader range of investors.

Fully Accessible Route

- **Introduction:** The Fully Accessible Route is a mechanism introduced by the Indian government in **2020** to allow **non-resident investors to invest in specified government securities** without any restrictions.
- **Purpose:** FAR was designed **to increase foreign investment in Indian government bonds** and pave the way for their inclusion in global bond indices. It **removes caps on foreign investment** for bonds designated under this route.

- **Key Features:** Under FAR, certain government securities are open for **100% foreign investment**, without any upper limit on ownership. This is in contrast to the general category, which has investment limits.
- **Eligibility:** Eligible investors shall mean “any person resident outside India” as **defined by Foreign Exchange Management Act 1999**, and include **Foreign Portfolio Investors (FPIs), Non-Resident Indians (NRIs) and Overseas Citizens of India (OCIs)** and other foreign entities.
- **Impact:** The introduction of FAR has been crucial in meeting the criteria for inclusion in global bond indices, as it addresses concerns about investment limits that previously deterred index providers.

Challenges

- **Managing Inflows:** There's a need to balance the influx of foreign investment with domestic monetary policy objectives. The increased inflows could impact currency valuation and inflation, requiring careful management by financial authorities.
- **Market Volatility:** Higher foreign participation may lead to increased market sensitivity to global events. This necessitates the development of robust risk management strategies to maintain market stability during periods of international financial stress.
- **Regulatory Framework:** Ensuring compliance with global standards while protecting national interests remains a challenge. Regulators must strike a balance between market liberalisation and maintaining financial stability in the face of increased foreign participation.

Way Forward

- **Market Development:** India needs to focus on strengthening its bond market to handle increased volumes efficiently. Enhancing transparency and efficiency in trading mechanisms will be crucial to sustain foreign investor interest.
- **Investor Relations:** Proactive communication with global investors about economic policies and market developments is essential. Regular engagement will help maintain investor confidence and attract long-term, stable investments.
- **Diversification:** India should leverage the increased foreign interest to develop its corporate bond market further. Exploring opportunities for green bonds and other innovative instruments can help broaden the market and attract specialized investors.
- **Policy Coordination:** Ensuring strong coordination between fiscal and monetary policies will be vital. Maintaining macroeconomic stability and implementing consistent, investor-friendly policies will be key to sustaining and growing foreign investor interest in the long term.

Debt Instruments

- Debt instruments are **financial contracts** that represent borrowed funds. Here's a breakdown of some common types:
- **Bonds:** Fixed-income securities issued by governments, corporations, or municipalities. Bondholders lend money to the issuer for a predetermined period in exchange for regular interest payments and principal repayment at maturity.
- **Treasury Bills:** Short-term debt instruments issued by governments, typically with maturities of one year or less. They are sold at a discount to face value and redeemed at full face value upon maturity.
- **Commercial Paper:** Unsecured, short-term debt instruments issued by corporations to meet immediate funding needs. They typically have maturities ranging from a few days to several months and are usually sold at a discount.
- **Certificates of Deposit (CDs):** Time deposit instruments issued by banks and financial institutions. They offer higher interest rates than regular savings accounts in exchange for leaving the money untouched for a specified period.

- **Debentures:** Unsecured debt instruments issued by companies, backed by their creditworthiness rather than specific assets. They typically offer higher interest rates than bonds to compensate for the increased risk.
- **Promissory Notes:** Written promises to pay a specified sum to a named party by a certain date. They are commonly used in business transactions and can be traded in secondary markets.

3.9 GST COUNCIL

Article 279A

- **Constitutional Basis:** Article 279A was inserted by **The Constitution (101st Amendment) Act, 2016**, which deals with the Goods and Services Tax Council.

Formation

- **Date:** The GST Council was formed on 15th September 2016 by the 101st Constitution Amendment Act, 2016.
- **Secretariat:** An office of the GST Council Secretariat was established to assist the Council.
- **Composition**
- **Members:** Consists of the Union Finance Minister and representatives from all States and Union Territories.
- **Chairman:** The Union Finance Minister heads the Council.

Functions

- **Recommendations:** Advises the Parliament on making or amending laws related to taxes on goods and services in India.
- **Regulations:** Acts as an apex body to modify, reconcile, or procure any law or regulation concerning the goods and services tax in India.
- **Quorum**
- **Clause 7 of Article 279A:** One-half of the total number of Members of the GST Council constitutes the quorum at its meetings.

Voting Mechanism

- **Clause 9 of Article 279A:** Specifies the voting mechanism in GST Council meetings.
 - **Majority:** Decisions are made by a majority of not less than three-fourths (75%) of the weighted votes of members present and voting.
 - **Central Government:** Holds a weightage of one-third of the total votes cast.
 - **State Governments:** Together hold a weightage of two-thirds of the total votes cast.
 - **Practical Veto of Centre:** If the Centre opposes a proposal, the weighted vote cannot reach the required 75%, effectively giving the Centre a practical veto power.

3.10 STICKY INFLATION

Overview

- Sticky inflation refers to a situation where inflation remains persistently high despite efforts to control it through monetary or fiscal policy.
- This phenomenon can occur due to various factors, including rigidities in prices and wages, expectations of future inflation, and structural aspects of the economy.

Causes of Sticky Inflation

Cost-Push Factors:

- Higher fuel and food prices
- Supply constraints in key sectors

Wage Push Inflation:

- Slow wage adjustments due to contracts, labour unions, and minimum wage laws

- Firms' reluctance to reduce wages to maintain employee morale and productivity

Temporary Inflation:

- Rise in tax rates (e.g., VAT) increases headline inflation but reduces living standards, leading to lower growth

Supply-Side Factors:

- Persistent supply chain disruptions
- Rising commodity prices
- Structural changes in the economy, such as shifts in labour markets or global trade patterns

Impacts

- **Economic Growth:** Persistent high inflation can slow economic growth as higher costs reduce consumer spending and business investments.
- **Monetary Policy:** Limits the effectiveness of monetary policy tools like interest rate cuts.
- **Living Standards:** Higher inflation erodes purchasing power, reducing the standard of living.

3.11 SAARC CURRENCY SWAP FRAMEWORK

Overview

- **Establishment:** The SAARC Currency Swap Facility came into operation on November 15, 2012.
- **Goal:** To provide a backstop line of funding for short-term foreign exchange liquidity requirements or balance of payment crises in SAARC countries until longer-term arrangements are established.
- **RBI Mandate:** Allows the Reserve Bank of India to enter into bilateral swap agreements with SAARC central banks wishing to avail of the swap facility.
- **Members:** The Currency Swap Facility will be available to all SAARC member countries, subject to their signing the bilateral swap agreements.

Framework for 2024-27

- **Promotion of Rupee:** A separate INR Swap Window has been introduced with various concessions for swap support in Indian Rupee.
- **Corpus:** The total corpus of the Rupee support is ₹250 billion.
- **Swap Arrangements:** The RBI will continue to offer swap arrangements in US\$ and Euro under a separate US Dollar/Euro Swap Window with an overall corpus of US\$ 2 billion.

3.12 COMPREHENSIVE ECONOMIC PARTNERSHIP AGREEMENT

- **Australia is keen** to conclude negotiations for the Comprehensive Economic Cooperation Agreement (CECA) with India.
 - Australia and India first launched negotiations for a Comprehensive Economic Cooperation **Agreement in May 2011.**
- It is intended to enhance mutual provision of services between the economies, by providing open environment and market access for cross border trade of services.
- **ETCA:** The **India-Australia Economic Cooperation and Trade Agreement (ECTA)** which was an early harvest trade deal focussing mostly on goods trade—came into force on December 29 2022.
 - **While the ECTA covered trade in most goods, some sensitive categories** like agriculture and dairy were mostly excluded and the left sectors can be discussed in the CECA.
- It served as a stepping stone for the CECA which is to be a deeper and comprehensive agreement covering five tracks agreed in the ECTA, including goods, services, digital trade, government procurement and Rules of Origin (ROO)-Product Specific Rules Schedule.
- India is actively negotiating Regional Trade Agreements (RTAs)/Free Trade Agreements (FTAs) with the following countries/regions:

SI	Countries/Regions	Name of the Agreement
1	UAE	India-UAE CEPA (signed in 2022)
2	Australia	India - Australia Comprehensive Economic Cooperation Agreement (CECA)
3	Canada	India – Canada Comprehensive Economic Partnership Agreement
4	Israel	India – Israel Free Trade Agreement (FTA)
5	UK	India-UK Enhanced Trade Partnership (ETP)
6	Armenia, Belarus, Kazakhstan, Kyrgyzstan, and Russia	India-Eurasian Economic Union (EAEU) Free Trade Agreement (FTA)
7	EU	India - EU Broad Based Trade and Investment Agreement (BTIA)
8	South Africa, Botswana, Lesotho, Swaziland and Namibia	India - SACU PTA

3.13 MINIMUM SUPPORT PRICE

- The minimum support price (MSP) is the minimum price for select crops raised in kharif and rabi seasons that the Government of India considers as remunerative for farmers and hence deserves support.
- Initiated:** The idea of MSP was first proposed in 1966 and it was inspired by the Green Revolution.
- Crops:** Presently, the Central Government sets MSP for 23 crops including,
 - 7 cereals (bajra, wheat, maize, paddy barley, ragi and jowar);
 - 5 pulses (tur, chana, masur, urad and moong);
 - 7 oilseeds (safflower, mustard, niger seed, soyabean, groundnut, sesame and sunflower);
 - 4 commercial crops (raw jute, cotton, copra and sugarcane).
 - In case of sugarcane a Fair and remunerative Price is announced.
- Announcement:** The Government announces the MSP at the start of each cropping season (Rabi and Kharif).
- Agency:** The MSP is decided by the Government on the recommendations made by the Commission for Agricultural Costs and Prices (CACP).
- The Commission for Agricultural Costs and Prices consists of**
 - A Chairman
 - Member Secretary
 - One Member (Official)
 - Two Members (Non-Official) The non-official members are representatives of the farming community and usually have an active association with the farming community.

3.14 TRAVEL AND TOURISM DEVELOPMENT INDEX

About Travel and Tourism Development Index

- Its biennial index is prepared by the World Economic Forum compiled in collaboration with the University of Surrey. It analyzed the travel and tourism sectors of 119 countries, assessing a range of factors and policies.

Factors Influencing India's Improved Ranking

- India has moved up to the 39th position, a significant climb from 54th in 2021.
- India is highly ranked for its price competitiveness (18th), air transport (26th), and ground and port infrastructure (25th).

- It stands out as one of **only three countries ranked in the top 10 across** all resource pillars, with Natural Resources at 6th and Cultural and Non-Leisure Resources at 9th.
- **Cultural and Natural Attractions:** India's rich cultural heritage and diverse landscapes contribute significantly to its appeal as a travel destination.
- **Investments in Tourism:** Increased investments in tourism infrastructure, along with efforts to enhance sustainability and safety in travel and tourism, have positively impacted India's ranking.
- **Competitive Advantages:** India ranked highest in South Asia and among lower-middle-income economies.
- **Performance Decline Since 2019:** Despite the overall improvement, India's TTDI score in 2024 is 2.1% lower than in 2019, influenced by global inflation and supply issues.

World Ranking

- **The United States tops the index**, followed by Spain, Japan, France, and Australia. Pakistan is ranked 101st.
- Germany ranked 6th, followed by the UK, China, Italy, and Switzerland in the top ten.
- **The Middle East had the highest recovery rates** in international tourist arrivals, exceeding 2019 levels by 20 per cent, while Europe, Africa, and the Americas showed a strong recovery of around 90 per cent in 2023.
- The results highlighted that high-income economies generally have more favourable conditions for travel and tourism development, supported by good business environments, dynamic labour markets, open travel policies, strong transport and tourism infrastructure, and well-developed natural, cultural, and non-leisure attractions.

3.15 PUMP AND DUMP SCHEME

- **A pump and dump scheme** is a type of securities fraud that involves artificially inflating the price of a stock or **other security through false or misleading statements**.
 - Once the price has been "**pumped**" up, the **perpetrators "dump" their shares at the higher price**, leaving new investors with significant losses when the price subsequently plummets.
- This manipulative tactic is particularly prevalent in the **micro-cap and small-cap sectors, where companies** often have limited public information and trading volumes are lower.

How Does It Work?

- **Acquisition of Shares:** Fraudsters acquire large quantities of a low-priced stock, often **one with low trading volume** to make price manipulation easier.
- **Pump Phase:**
 - **Spreading Misinformation:** This can be done through social media, newsletters, online forums, and email campaigns.
 - **Creating Artificial Demand:** The hype leads to a surge in buying activity, driving the stock price up significantly.
- **Dump Phase:**
 - **Selling Shares:** Once the stock price has been inflated, the fraudsters sell their shares at the higher price.
 - **Collapse:** As the false hype dissipates and the reality of the stock's true value becomes apparent, the **price falls rapidly, leaving late investors with heavy losses**.

Regulations around pump and dump

- **Under the Securities and Exchange Board of India's (Sebi) guidelines**, pump and dump schemes are completely banned.
- **Historical Examples:** In the 1990s dot-com bubble and more recently with cryptocurrencies and penny stocks.

3.16 ZOMBIE COMPANY

Overview

- **Definition:** A company that requires bailouts to operate or can only repay the interest on its debts but not the principal.
- **Characteristics:** These companies have not generated enough operational revenue in the **past three years** to cover even the interest on their loans.

Current Situation

- **Global Numbers:** Approximately 7,000 zombie companies worldwide, with about 2,000 in the United States.
- India has approximately 600 zombie companies. These firms contribute to the country's economic challenges by tying up financial resources without contributing to growth.

Reasons for Rise

- **Economic Slowdown:** Prolonged economic slowdowns have reduced revenue streams, making it difficult for companies to service their debts.
- **Banking Sector Issues:** High levels of non-performing assets (NPAs) in the banking sector have led to increased scrutiny and reduced lending, putting further strain on indebted companies.
- **Low Interest Rates:** Historically low interest rates enabled companies to borrow cheaply, but recent inflationary pressures have increased borrowing costs, exacerbating their financial distress.

Impact on Economy

- **Resource Drain:** Zombie companies consume financial resources that could otherwise be allocated to more productive enterprises.
- **Banking Sector Strain:** High levels of bad loans and NPAs affect the overall health of the banking sector, leading to tighter credit conditions and slower economic growth.

3.17 PRAVAH PORTAL

In News

- **Reserve Bank of India (RBI)** Governor Shaktikanta Das on Tuesday unveiled three major initiatives of the Reserve Bank: Pravaah portal, the Retail Direct Mobile App and a FinTech Repository.

About 'PRAVAAH'

- **Full Form:** Platform for Regulatory Application, Validation, and Authorisation
- **Purpose:** Secure, centralized web-based portal for authorisation, licensing, and regulatory approvals
- **Key Features:** Online application submission; Status tracking and monitoring; Responding to RBI queries; Receiving timely decisions from the RBI.
- **Significance:**
 - **Streamlined Process:** Simplifies obtaining regulatory approvals, reducing time and effort.
 - **Transparency:** Enhances clarity in interactions with the RBI.
 - **Efficiency:** Facilitates quicker resolution of applications.

Retail Direct Mobile App

- **Purpose:** Provides retail investors convenient access to transact in government securities (G-secs).
- **Significance:**
 - **Accessibility:** Makes it easier for retail investors to participate in government securities markets.
 - **Convenience:** Offers a seamless and user-friendly platform for transactions.
 - **Market Participation:** Encourages broader participation from retail investors, potentially deepening the market.

FinTech Repository

- **Purpose:** Contains data on Indian FinTech firms to enhance regulatory understanding and policy design.
- **Significance:**
 - **Regulatory Insight:** Helps regulators understand the FinTech landscape better.
 - **Policy Formulation:** Aids in crafting informed and effective regulatory policies.
- **Sector Growth:** Supports the sustainable development of the FinTech sector by providing a rich data resource.

4 SCIENCE AND TECHNOLOGY

4.1 CHANDRAYAAN-4

The Indian Space Research Organisation (ISRO) is set to advance lunar exploration with the Chandrayaan-4 mission, building on the successes and lessons from Chandrayaan-1, Chandrayaan-2, and the ongoing Chandrayaan-3 missions.

About Chandrayaan - 4

- **Launch Configuration:** Due to its large size, Chandrayaan-4 will be launched in multiple parts. These components will be assembled in space, mirroring the construction approach of the International Space Station.
- **Spadex Mission:** Later this year, ISRO will conduct the Spadex mission to test docking capabilities crucial for Chandrayaan-4.

Technological Advancements

- **Docking Systems:** Development of autonomous docking systems to allow the spacecraft modules to connect in space.
- **Robotic Arms:** Utilisation of robotic arms to assist in the assembly of the spacecraft modules.
- **Navigation and Guidance Systems:** Advanced navigation and guidance systems to ensure precise docking and assembly.
- **Communication Systems:** Enhanced communication systems for real-time data transfer and control during docking and assembly operations.

Future Missions and Space Station Plans

- **Vision 2047:** ISRO's long-term vision includes establishing India's own space station by 2035 and sending humans to the Moon by 2040. The Bhartiya Antriksh Station (BAS) will also be assembled in space through multiple launches.
- **Next Generation Launch Vehicle (NGLV):** ISRO is developing the NGLV, a heavy-lift rocket with an upgraded design to handle larger missions. A new launch complex is being created to accommodate this 4,000-ton rocket, which is essential for future missions.

Instruments and Technologies Used

- **Scientific Instruments:** The spacecraft will be equipped with advanced scientific instruments for lunar exploration, including:
 - **Spectrometers:** To analyse the composition of the lunar surface.
 - **Cameras:** High-resolution cameras for detailed imaging of the lunar terrain.
 - **Seismometers:** To study moonquakes and the internal structure of the Moon.
 - **Thermal Sensors:** To measure the temperature variations on the lunar surface.

Significance

- **Technological Milestone:** Chandrayaan-4's approach of in-space assembly marks a significant technological advancement, showcasing India's growing capabilities in space exploration.
- **Strategic Importance:** The mission underscores India's commitment to expanding its presence in space, aligning with global efforts and enhancing its strategic and scientific standing.

4.2 JADES-GS-Z14-0

NASA's James Webb Space Telescope (JWST) has recently spotted JADES-GS-z14-0, the earliest-known galaxy

About JADES-GS-z14-0 Galaxy

- **Age: 290 million years after the Big Bang.** This period spanning the universe's first few hundred million years is called **cosmic dawn**.
- **Distance:** It has now become the **farthest known galaxy to man**. Due to the universe's expansion, the light we see from JADES-GS-z14-0 has been traveling for a staggering **13.5 billion years**.
- **Size:** Despite its early formation, it is surprisingly massive, boasting a **diameter of roughly 1,600 light-years**. This challenges our current models of galaxy development at such an early cosmic epoch.
 - **Light Year:** A light year is the distance light travels in a year, which is **9.5 trillion km**.
- **Intrinsically Luminous:** It is **remarkably bright for its age**, raising questions about how such a young galaxy could produce so much light.
- **Composition:** Due to the limitations of our observations, the exact composition of JADES-GS-z14-0 remains unknown. However, astronomers believe it likely consists primarily of **hydrogen gas, with a sprinkling of heavier elements**.

NASA's James Webb Space Telescope (JWST)

- **Revolutionary Technology:** JWST is the most powerful space telescope ever built, designed specifically to observe the faint **infrared light** emitted by distant galaxies. JWST's infrared vision allows it to see further back in time, to an era shortly after the Big Bang, when the first stars and galaxies were just forming.
- **Unprecedented Sensitivity:** Its massive **6.5 meter (21.3 foot) primary mirror**, the largest ever deployed in space, and advanced instruments allow JWST to **detect incredibly faint objects**, nearly 100 times fainter than its predecessor Hubble.
- **Multi-Wavelength Observations:** JWST can observe across a wide range of wavelengths, from the **ultraviolet to the near infrared**, providing a more comprehensive view of celestial objects.
- **Unfolding the Universe:** Since its launch in December 2021, JWST has captured stunning images of galaxies, nebulae, and exoplanets, providing astronomers with unprecedented data to study the formation of stars and galaxies, the atmospheres of exoplanets, and more.
- **Present location:** The James Webb Space Telescope (JWST) is currently positioned at the **second Lagrange point (L2) of the Earth-Sun system**. L2 is located approximately 1.5 million kilometers (930,000 miles) away from Earth.

JADES Program

- **Deep Field Survey:** The JADES program (**JWST Advanced Deep Extragalactic Survey**) utilizes the James Webb Space Telescope to conduct a deep field survey, aiming to uncover the faintest and most distant galaxies in the universe.
- **Near-Infrared Observations:** JADES observes in the near-infrared spectrum, allowing it to **peer through dust and gas** that would obscure these objects in visible light.
- **Galaxy Selection:** The program uses initial broad-band imaging data to identify candidate galaxies for further spectroscopic analysis. JADES-GS-z14-0 was flagged for its potential due to its faint infrared glow.
- **Spectroscopic Confirmation:** JADES employs the JWST's NIRSpec (Near-Infrared Spectrograph) instrument to capture detailed spectra of promising candidates, confirming their redshifts and, consequently, their distances.

Red Shift

- The observed light from a galaxy or star is usually stretched due to the **universe's expansion**.
- This stretching dims the light's apparent brightness. Correcting for this effect reveals the true luminosity of the galaxy.

Speculations on the Brightness of the Galaxy

- **Three Hypothesis:** Astronomers have presented three hypotheses to explain the brightness of the galaxy-

- **Active Galactic Nuclei (AGN):** One possibility is that JADES-GS-z14-0 harbors an AGN, a supermassive black hole at its center actively accreting matter and releasing tremendous amounts of energy.
- **Higher Numbers:** Second hypothesis is that the galaxy houses astronomically higher numbers of stars than our current models.
- **Brighter Stars:** Third hypothesis is that stars during cosmic dawn could have been brighter than stars of today.
- **Future Observations:** Further observations are needed to determine the exact source of JADES-GS-z14-0's brilliance.

4.3 MULTI-OMICS

Multi-omics' is revolutionising the detection and treatment of diseases such as tuberculosis (TB) and cancers in India by integrating various omic data sets

Understanding Omics

- 'Omics' refers to the comprehensive study of various biological molecules that constitute the structure, function, and dynamics of an organism.
- The primary omics fields include *genomics, epigenomics, transcriptomics, proteomics, metabolomics, and microbiomics*.
- These fields aim to understand the roles, relationships, and actions of the various types of molecules within cells.

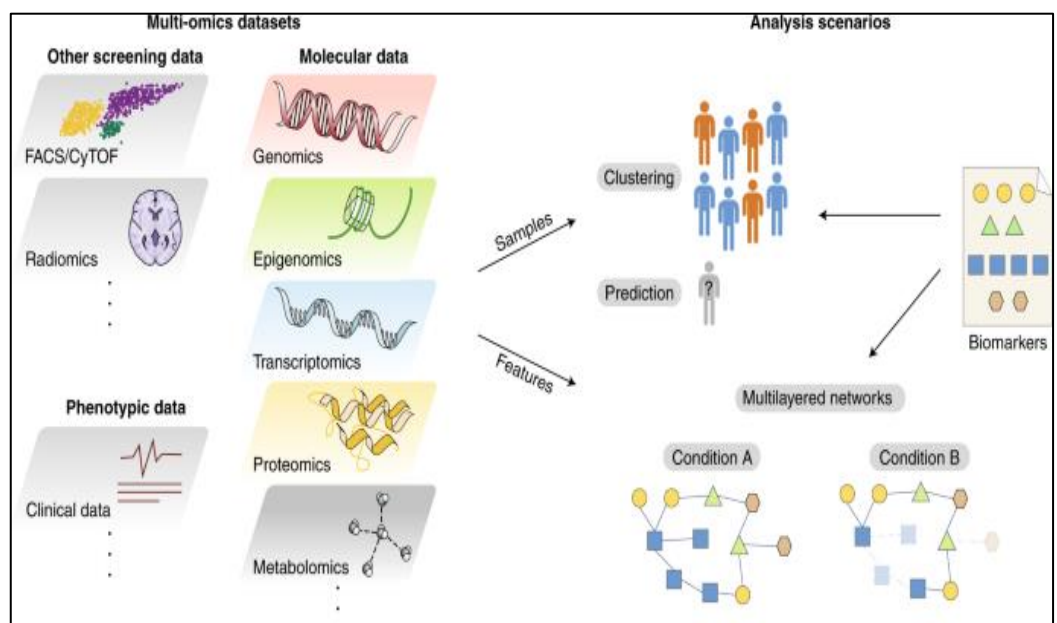
Multi Omics

- It is a new approach where the data sets of different omic groups are combined during analysis.
- **Types:** The different omic strategies employed during multi-omics are **genome, proteome, transcriptome, epigenome, and microbiome**.

Types of Omics in Multi-omics

Genomics

- Genomics is a field which involves **identification of genes and genetic variants** associated with a disease or in response to certain drugs and medication.
- In this approach, *GWAS or Genome Wide Association Studies* are used to identify genetic variants in an entire genome which are associated with a disease.



Epigenomics

- Studies **DNA modifications and DNA-associated proteins**, such as acetylation and methylation, which influence cell fate and function.
- These modifications are environmentally influenced and heritable, impacting gene expression without altering the DNA sequence.

Transcriptomics

- Examines **RNA levels and types in the genome**, identifying which transcripts are present and their expression levels.
- While only 2% of DNA codes for proteins, 80% of the genome is transcribed, including various non-coding RNAs.

Proteomics

- Investigates **protein levels**, modifications, and interactions within the genome.
- Methods like phage display and ChiP-Seq study protein interactions and post-translational modifications such as phosphorylation and glycosylation.

Metabolomics

- Encompasses all **metabolites in cells, tissues, or organisms**, including small molecules and metabolic products.
- Represents the end product of gene transcription, providing insights into cellular processes and functions.

Microbiomics

- Consists of all **microorganisms in a community**, particularly focusing on the human microbiome found on the skin, mucosal surfaces, and gut.
- The human gut alone contains around 100 trillion bacteria, influencing overall health and disease.

Multi Omics strategy

- Recognises that single-omic data cannot answer complex research questions.
- Different omics fields interact, with microbiomes influencing gene and protein expression, which subsequently affect the metabolome. This interconnectedness requires a holistic approach to fully understand and address biological processes.

Significance of multi-omics

- **Holistic Understanding:** By integrating data from multiple omic fields, researchers gain a comprehensive view of biological processes, leading to a deeper understanding of disease mechanisms.
- **Personalised Medicine:** Multi-omics enables the development of personalised treatment plans by considering the unique genetic, epigenetic, and microbial profiles of individual patients.
- **Improved Diagnostics:** Combining different omics data enhances the accuracy of disease diagnostics, allowing for earlier detection and more effective intervention strategies.
- **Interconnected Biological Insights:** Understanding how different omics fields influence each other helps in identifying novel therapeutic targets and understanding the complex interactions within biological systems.
- **Enhanced Research Capabilities:** Multi-omics provides a robust framework for addressing complex biological questions that single-omic approaches cannot resolve, fostering innovation in biomedical research.

4.4 METHANOL

In Tamil Nadu's Kallakurichi district, a tainted liquor incident resulted in over 50 deaths due to methanol poisoning. The locally brewed drink "arrack" was found to be laced with methanol during a departmental survey.

About Methanol

- **Chemical Composition:** Methanol (CH_3OH), also known as methyl alcohol or wood alcohol, is the simplest form of alcohol.
- **Industrial Uses:** Widely used as a solvent, fuel, and raw material in industries such as plastics, paints, and automotive, and in biodiesel production.
- **Appearance:** Methanol is a **colorless, volatile liquid** with a mild alcohol odor, often mistaken for ethanol due to its similar appearance and smell.
- **Natural Occurrence:** Found in small amounts in some fruits and vegetables and produced as a byproduct of the metabolism of certain bacteria.

Methanol Poisoning

- **Metabolic Breakdown:** When ingested, methanol is metabolized into toxic substances like formic acid and formaldehyde.
- **Impact on Organs:** Disrupts the central nervous system, vision, and can lead to liver and kidney failure.

- **Symptoms:** Early signs include nausea, vomiting, abdominal pain, and dizziness. Later stages can lead to vision problems, confusion, seizures, and coma.
- **Treatment:** Immediate medical attention is required, often involving ethanol or fomepizole administration. Hemodialysis may be necessary in severe cases.

Ethanol vs Methanol Difference

Feature	Ethanol (C ₂ H ₅ OH)	Methanol (CH ₃ OH)
Chemical Structure	Contains an extra carbon atom	Simplest form of alcohol
Safety	Safe for consumption in moderation	Highly toxic, even in small amounts
Metabolism	Metabolized into acetaldehyde and acetic acid	Metabolized into formaldehyde and formic acid
Common Uses	Beverages, sanitizers, fuels	Solvents, fuels, antifreeze
Appearance and Smell	Colourless liquid with mild alcohol Odor	Colourless liquid with mild alcohol Odor

4.5 MAGELLAN MISSION

Recent analyses of data from NASA's Magellan mission indicate that Venus may still have active volcanoes, revealing ongoing geological processes. This discovery challenges previous beliefs that volcanic activity on Venus had ceased long ago.

About Magellan Mission

- **Launched:** Launched in 1990, it was the first spacecraft to map the entire surface of Venus using high-resolution radar.
- **Mission Duration:** Operated until October 12, 1994, when it vanished into Venus' atmosphere.
- **Named After:** Portuguese explorer Ferdinand Magellan, the first to circumnavigate the Earth.
- **Launch Vehicle:** Space Shuttle Atlantis (STS-30).
- **Primary Objective:** To map Venus' surface and understand its topography and geology using Synthetic Aperture Radar (SAR).

Key Findings

- **Volcanism:** Evidence of widespread volcanic activity, with large volcanic plains and hundreds of volcanoes. Indications that Venus may still have active volcanoes, suggesting ongoing geological processes.
- **Tectonics:** Detection of tectonic features such as rift valleys and mountain belts, indicating tectonic processes different from those on Earth.
- **Impact Craters:** Analysis provided insights into the age and history of Venus' surface, showing a relatively young surface likely formed by lava flows from volcanic eruptions.

About Venus

- **Second Planet from the Sun:** Often referred to as Earth's "sister planet" due to its similar size and composition.
- **Atmosphere:** Composed mainly of carbon dioxide with clouds of sulfuric acid, creating a strong greenhouse effect.
- **Surface Temperature:** Extremely hot, with average temperatures around 467°C (872°F).
- **Surface Characteristics:** Dominated by volcanic plains, with mountains, valleys, and highland regions.

- **Rotation:** Venus rotates in the opposite direction to most planets and has a very slow rotation period, making one Venusian day longer than a Venusian year.

Significance of Magellan's Discoveries

- **Geological Insights:** The evidence of active volcanism on Venus suggests that the planet is still geologically active. This challenges previous assumptions that Venus's volcanic activity had ceased.
- **Comparative Planetology:** Comparing the geological features of Venus with those of Earth helps scientists understand the evolutionary processes of terrestrial planets. Study of impact crater aids in understanding of frequency and scale of impact.
- **Technological Achievements:** The successful deployment and operation of the Synthetic Aperture Radar (SAR) demonstrated advanced technological capabilities for planetary exploration and set a precedent for future radar mapping missions.
- **Future Exploration:** The findings from the Magellan mission continue to influence current and future missions to Venus, such as NASA's VERITAS and the European Space Agency's EnVision missions, both aimed at further exploring Venus's geological activity and history.

4.6 PUSHPAK

The Indian Space Research Organisation recently conducted the third successful Reusable Launch Vehicle Landing Experiment (RLV LEX) using PUSHPAK vehicle.

News Details

ISRO Successfully Conducts Third RLV LEX

- **Mission Objective:** The test verified key technologies such as *autonomous landing capability and precise navigation* during descent.
- **Significance:** The successful completion of RLV LEX paves the way for developing the Orbital Reusable Vehicle (ORV), capable of reaching space.
- **Test Location:** The experiment was conducted at the Aeronautical Test Range in Chitradurga, Karnataka.

About Pushpak

- **Overview:** Pushpak is a winged, reusable launch vehicle (RLV) being developed by the Indian Space Research Organisation (ISRO).
- **Objective:** The project aims to revolutionise space missions by significantly reducing launch costs.

History of Development

- **Early Conceptualisation:** ISRO began envisioning the Reusable Launch Vehicle program in the early 2000s.
- **First Demonstration:** The initial technology demonstrator flight (RLV-TD HEX-01) was conducted in May 2016.
- **Phased Approach:** ISRO adopted a step-by-step development process to test and refine various technologies.
- **Multiple Experiments:** The program included tests such as the Hypersonic Flight Experiment (HEX) and Landing Experiment (LEX).

Features of Pushpak

- **Delta Wing Design:** Incorporates an aerodynamic delta wing configuration for improved performance during re-entry and controlled landings.
- **Advanced Avionics:** Equipped with state-of-the-art navigation and control systems for autonomous operation and precise manoeuvring.
- **Indigenous Technology:** Utilises homegrown solutions for critical systems, fostering technological self-reliance.
- **Heat-Resistant Materials:** Incorporates specially developed materials capable of withstanding extreme reentry temperatures.

4.7 SPECULOOS-3B

A team from SPECULOOS discovered SPECULOOS-3b, an Earth-size planet orbiting an ultracool red dwarf star, 55 light-years away from Earth using an observatory in the Atacama Desert of Chile.

About SPECULOOS -3b

- It is an **Earth-sized exoplanet (Any planet beyond our solar system)** orbiting an ultracool red dwarf star (most common type of star in the Milky Way galaxy).
- It is located **approximately 55 light-years away from Earth**.
- **Short orbital period:** It takes around 17 hours to complete an orbit of the star.
- **The planet receives almost 16 times more energy per second** than Earth receives from the Sun, probably leaving the planet without an atmosphere.
- **Ultracool dwarf stars**, like the host of Speculoos-3b, constitute about 70% of all stars in our galaxy and are known for their longevity, surviving up to 100 billion years.
- **The extended lifespan of these stars provides a stable environment** that could potentially support the development of life on orbiting planets.

SPECULOOS Project

- The **SPECULOOS (Search for Planets Eclipsing ULtra-cOOl Stars)** Southern Observatory is a project carried out by the University of Liège (**Belgium**) and the Cavendish Laboratory in Cambridge (**United Kingdom**).

4.8 SPACE VARIABLE OBJECTS MONITOR (SVOM)

About the Mission

- **Name:** Space-based multi-band astronomical Variable Objects Monitor (SVOM).
- **Purpose:** To study the most distant explosions of stars, particularly gamma-ray bursts, and to understand the early universe.
- **Launch Date:** June 22, 2024, from the Xichang launch base.
- **Collaborators:** CNES (Centre national d'études spatiales), France, and CNSA (China National Space Administration), China.

Mission Goals

- **Gamma-Ray Bursts:** Investigate the origins and mechanisms of distant gamma-ray bursts.
- **Early Universe:** Provide insights into star and galaxy formation during the early universe.
- **Gravitational Waves:** Contribute to the understanding and detection of gravitational waves.

Technology

- **X-ray Telescope:** The University of Leicester built and tested the microchannel X-ray telescope (MXT) for SVOM.
- **Multi-Band Observations:** Utilizes X-ray, gamma-ray, visible, and infrared instruments for comprehensive data collection.

About Gamma-Ray Burst

- **Brightness:** GRBs are the brightest electromagnetic events known to occur in the universe.
- **Radiation:** They release intense gamma radiation.
- **Origins:** Believed to result from massive star collapses or neutron star mergers.
- **Insights:** Provide crucial insights into the early universe and extreme cosmic events.

Significance

- **Scientific Advancement:** Enhances understanding of cosmic phenomena and their impact on the universe's evolution.

- **International Collaboration:** Highlights the cooperation between France and China in space exploration.
- **Technological Innovation:** Features advanced X-ray optics, marking the second mission this year with Leicester's contributions, following the Einstein Probe.

4.9 EUROPEAN UNION CHAT CONTROL LAW

Overview

- **Formal Name:** Child Sexual Abuse Material (CSAM) Regulation.
- **Objective:** To combat the spread of online child sexual abuse.

Background and Development

- **Proposal:** Introduced by the European Commission to mandate digital platforms to detect, report, and remove CSAM.
- **Criticism:** Initially faced criticism for potentially enabling mass surveillance and undermining encryption, which is crucial for personal privacy and cybersecurity (European Digital Rights (EDRi)).

Key Provisions

- **Detection Orders:** Law enforcement can issue detection orders for specific suspects or groups, but these do not apply to platforms with end-to-end encryption. Client-side scanning, which would have required breaking encryption, is not included.
- **Privacy Safeguards:** The revised proposal aims to balance child protection with fundamental privacy rights.

Importance and Implications

- **Privacy and Security:** The regulation's balance between security and privacy could set a precedent for global tech regulation, similar to the impact of the General Data Protection Regulation (GDPR).
- **Impact on Encrypted Services:** By excluding mandatory client-side scanning, the regulation protects the integrity of encrypted services, which are vital for secure communications in various sectors, including banking and healthcare.
- **Global Influence:** The EU's approach may influence other regions' policies on digital privacy and law enforcement, contrasting with more invasive measures adopted elsewhere.

4.10 PLUTONIUM ISOTOPE

About Plutonium

- Plutonium is a radioactive chemical element with the symbol **Pu** and **atomic number 94**. It belongs to the actinide series of elements, which are typically heavy and radioactive.
- Plutonium is best known for its use in nuclear weapons and reactors, as well as its significant toxicity and potential environmental hazards.

Plutonium Isotopes

- **Common Isotopes:** Plutonium has five common isotopes—Pu-238, Pu-239, Pu-240, Pu-241, and Pu-242. All these isotopes are fissionable, meaning their nuclei can easily split apart when struck by a neutron.
- **Key Isotope Uses:**
 - **Pu-239:** Contains the highest quantities of fissile material and is a primary fuel used in nuclear weapons.
 - **Pu-238:** Used for more benign applications, such as powering batteries for heart pacemakers and providing a long-lived heat source for space missions.

Half-life Periods

- **Pu-239:** Has a half-life of 24,100 years.
- **Pu-241:** Has a half-life of 14.4 years. The half-life of an isotope is the time it takes for one-half of the radioactive substance to decay.

Applications

- **RTGs:** Pu-238 is primarily used as a heat source in radioisotope thermoelectric generators (RTGs) for spacecraft and other devices requiring *reliable long-term power*. E.g., Pu-238 powers the Curiosity rover on Mars and the Voyager spacecraft.
- **Pacemakers:** Pu-238 has been used in pacemakers for patients with heart conditions, providing a reliable energy source for decades.
- **Nuclear weapons:** Pu-239 is used in the core of nuclear weapons, such as the bomb dropped on Nagasaki in 1945.

Production and Occurrence

- **Artificial Production:** Plutonium is produced in nuclear reactors by bombarding uranium-238 with neutrons, converting it into plutonium-239.
- **Natural Distribution:** Extremely rare, found in trace amounts in uranium ores due to cosmic ray interactions.

Properties and Hazards

- **Physical Properties:** Plutonium is a silvery-white metal that tarnishes when exposed to air, forming a dull coating. It is dense, malleable, and reactive, particularly in its finely divided form.
- **Toxicity:** Plutonium is highly toxic due to its radioactivity and chemical properties. Ingesting or inhaling even small amounts can pose serious health risks, including increased risk of cancer and other radiation-related illnesses.
- **Radiation:** Plutonium emits alpha particles, which have low penetration but can be extremely hazardous if the material is ingested or enters the body.

Environmental and Safety Concerns

- **Contamination:** Due to its high toxicity and long half-life, plutonium contamination poses significant environmental challenges. Safe disposal and long-term storage of plutonium waste are critical issues for nuclear facilities worldwide (The Indian nuclear regulatory framework ensures the safe handling, storage, and disposal of plutonium overseen by The Department of Atomic Energy (DAE)).
- **Nuclear Proliferation:** The potential for plutonium to be used in nuclear weapons makes it a significant concern for global security. International regulations and safeguards are essential to prevent the proliferation of plutonium and ensure its safe use.

4.11 NIPAH VIRUS

- **Scientists at the Institute of Advanced Virology (IAV), Thonnakkal, Thiruvananthapuram,** have developed a novel way of generating non-infectious Nipah virus-like particles (VLPs) in the laboratory, which **mimic the wild type Nipah virus (NiV)**.
- **Zoonotic disease:** Nipah virus can be spread to people **from infected bats, infected pigs, or infected people**.
- **First identification:** The first identification of the virus was during an **outbreak among pig farmers in Malaysia in 1998-1999** and has since caused outbreaks primarily in Bangladesh and India.
- **Vector:** **Fruit bats, also known as flying foxes** of the Pteropodidae family, particularly species of the genus Pteropus.
- **Symptoms:** It ranges from **asymptomatic infection to acute respiratory illness and fatal encephalitis**. Initial symptoms include fever, headache, muscle pain, vomiting, and sore throat.
- **Diagnosis:** Diagnostic methods include **real-time polymerase chain reaction (RT-PCR)** from bodily fluids and antibody detection via **enzyme-linked immunosorbent assay (ELISA)**
- **Vaccine:** **There are currently no drugs or vaccines specific for Nipah virus infection.**
- **Status:** WHO has identified Nipah as a **priority disease for the WHO Research and Development**.

4.12 ATLAS V

In News

- Boeing's first Starliner flight with a human crew successfully launched on United Launch Alliance's (ULA) Atlas V rocket.

Atlas V Rocket Overview

- Developed by:** Lockheed Martin
- Operated by:** ULA (a joint venture between Lockheed Martin and Boeing)
- Type:** Versatile expendable launch vehicle

Configurations

- Designations:** Atlas V 401, 501, etc.
- First Digit:** Fairing diameter
- Second Digit:** Number of solid rocket boosters (SRBs)
- Third Digit:** Number of engines on the Centaur upper stage
- First Stage (Common Core Booster):**
- Engine:** RD-180 (Russian-built)
- Thrust:** 3.83 MN
- Propellant:** RP-1 (refined kerosene) and liquid oxygen (LOX)

Upper Stage (Centaur)

- Engine:** Aerojet Rocketdyne RL10
- Configurations:** Single-engine (SEC) and dual-engine (DEC)
- Features:** Pressure-stabilized tanks, lightweight construction
- Thrust-to-Weight Ratio:** Industry best
- Propellant:** Liquid hydrogen (LH2) and liquid oxygen (LOX)
- Significance:**
- Centaur Upper Stage:** World's highest-performing upper stage, providing superior thrust-to-weight ratio.

4.13 HUNTINGTON'S DISEASE

- Huntington's disease (HD)** is a rare, inherited neurodegenerative disorder that causes the progressive breakdown of nerve cells in the brain.
- Effects:** This disease affects a person's physical movements, cognitive functions, and emotions.

- It typically manifests in adults between 30 and 50 years old but can also present in children and older adults. HD is caused by a genetic mutation and worsens over time, eventually leading to death.

Symptoms

Can be categorized into three main types

- Motor Symptoms:**
 - Involuntary jerking or writhing movements (chorea)
 - Muscle problems, such as rigidity or muscle contracture (dystonia)
 - Slow or abnormal eye movements
 - Impaired gait, posture, and balance
 - Difficulty with speech or swallowing
- Cognitive Symptoms:**
 - Difficulty organizing, prioritizing, or focusing on tasks
 - Lack of flexibility or the tendency to get stuck on a thought, behavior, or action (perseveration)
 - Lack of impulse control, which can result in outbursts, acting without thinking, and sexual promiscuity
 - Problems with spatial perception that can result in falls
 - Difficulty learning new information
- Psychiatric Symptoms:**
 - Depression
 - Apathy or withdrawal
 - Irritability, aggression, or lack of awareness
 - Obsessive-compulsive behavior, including repetitive thoughts and actions
 - Mania or bipolar disorder symptoms

Causes

- Huntington's disease is caused by a genetic mutation in the HTT gene, which provides instructions for producing a protein called huntingtin.
- The mutation involves a DNA segment known as a CAG repeat. Normally, this segment is repeated 10 to 35 times within the gene, but in people with HD, it is repeated 36 to more than 120 times.
- The longer the repeat, the earlier the onset of the disease and the more severe the symptoms.

Treatment

- There is currently no cure for Huntington's disease, but treatments are available to manage symptoms:

4.14 WHITE PHOSPHORUS

Characteristics

- **Appearance:** Waxy solid, yellowish or colorless.
- **Odour:** Resembles garlic.

Flammability

- **Ignition:** Instantly ignites with oxygen.
- **Uses:** Military uses for illumination, smokescreens, and incendiary devices.
- **Persistence:** Difficult to extinguish, adheres to skin and clothing.

Effects

- **Health Risks:** Harmful through all exposure routes.
- **Smoke:** Contains harmful phosphoric acids and phosphine.
- **Burns:** Causes deep, severe burns penetrating even bone.

Treatment

- **Priority:** Stop the burning process immediately.
- **Caution:** Avoid secondary exposure to medical personnel.
- **Re-ignition:** Can re-ignite upon contact with oxygen.
- **Procedure:** Use clean water or medically prepared saline.

5 ENVIRONMENT AND GEOGRAPHY

5.1 INDIAN MONSOON

According to India Meteorological Department (IMD), the south-west monsoon, which had slowed down after hitting Mumbai, is gathering pace and is expected to progress further, providing a much-needed relief to north India, which is reeling under an intense heatwave.

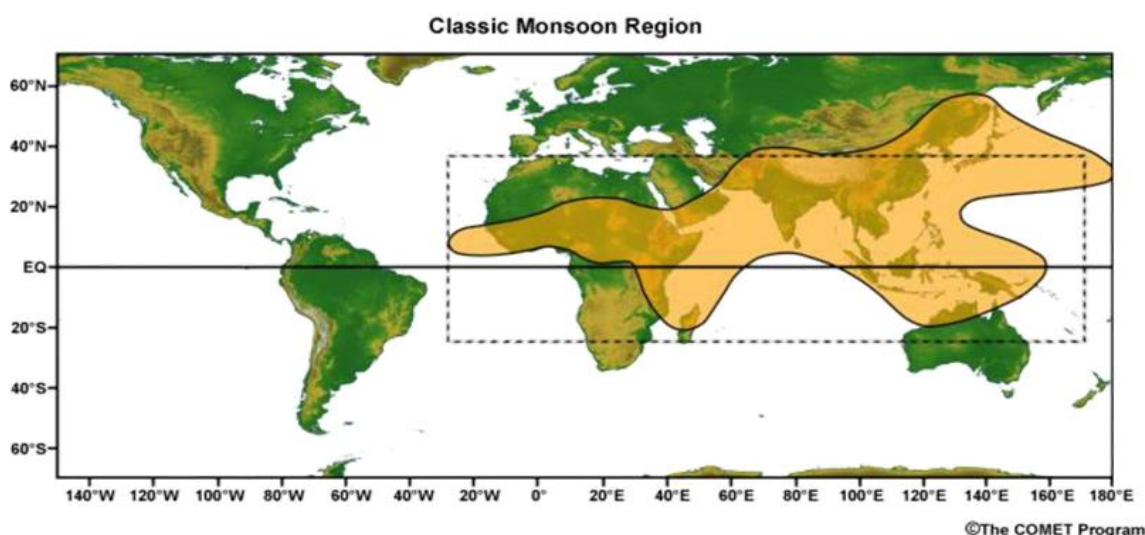
About Monsoon

- **Seasonal Wind Reversal:** Monsoons are characterized by a **seasonal reversal of winds**. During summer, warm, moist winds blow from the **Southwest** Indian Ocean towards land, bringing heavy rainfall. In winter, the winds blow in the opposite (**North east**) direction, bringing dry conditions.
- **Origin of the Term:** The word "monsoon" is derived from the **Arabic word "mausim"**, meaning "season."
- **Types of Monsoons:**
 - **Southwest Monsoon/Summer Monsoon:** This is the dominant monsoon in India, bringing most of the annual rainfall. It lasts from **June to September**.
 - **Northeast Monsoon/Winter Monsoon:** Weaker and drier, blowing from the northeast towards the Indian Ocean, it lasts from **October to December**.
- **Significance for India:**
 - **Agriculture:** Provides 70-80% of India's annual rainfall, crucial for agriculture, as many farmers rely on monsoon rains for their crops.
 - **Water Resources:** Replenishes reservoirs, lakes, and groundwater, vital for drinking water and irrigation.
 - **Hydroelectric Power:** Powers hydroelectric plants, contributing significantly to the country's energy needs.
 - **Economic Impact:** Strong monsoon seasons boost the economy, especially in rural areas dependent on agriculture, while weak monsoons can lead to droughts, impacting food security and livelihoods.

Theories Of Monsoon Origin

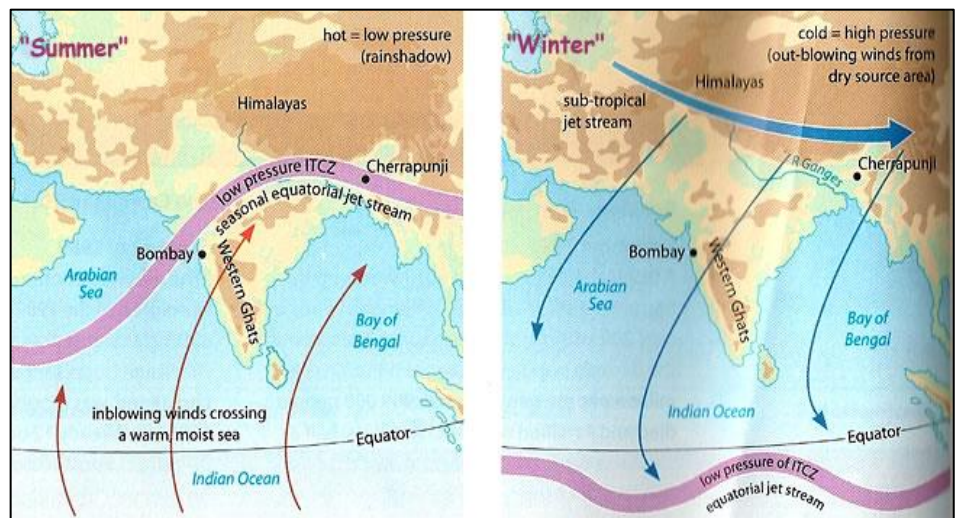
Classical Theory of Monsoon - By Sir Edmund Hailey

- **Land-Sea Breeze Effect:** Sir Edmund Hailey, in 1686 proposed that the monsoon is caused by the **differential heating of land and sea**. During summer, the land heats up faster than the ocean, creating a low-pressure zone over the land. This causes moist air from the ocean to rush towards the land, bringing rainfall.
- **Seasonal Temperature Variation:** In winter, the land cools faster than the ocean, creating a high-pressure zone over the land, causing dry air to flow from the land towards the ocean, resulting in dry conditions.
- **Foundation for Further Studies:** Halley's concept laid the groundwork for understanding the role of temperature gradients in monsoon formation but doesn't explain year-to-year variability.



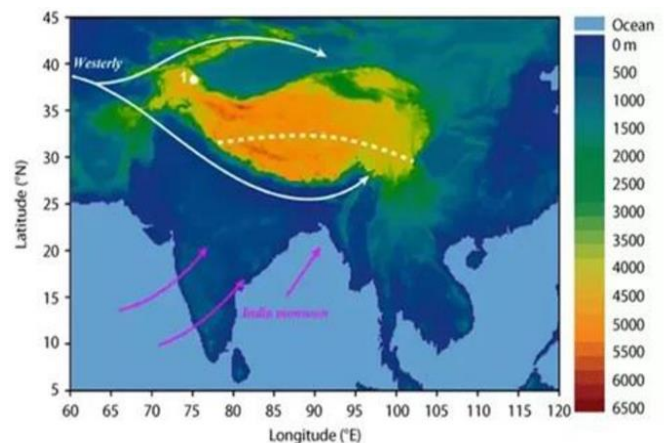
ITCZ Theory of Monsoon

- **Intertropical Convergence Zone (ITCZ):** The ITCZ is a belt of low pressure near the equator where trade winds from the Northern and Southern hemispheres converge.
- **Seasonal Shift of ITCZ:** During summer, the ITCZ migrates northwards, bringing moist winds and heavy rainfall to India.
- **Monsoon and ITCZ:** The seasonal northward and southward movement of the ITCZ influences the onset and withdrawal of the Indian monsoon.
- **Rainfall Distribution:** The position and strength of the ITCZ determine the distribution and intensity of monsoon rainfall in different regions of India.



Jet Stream Theory of Monsoon

- **Upper Atmospheric Winds:** Jet streams are narrow bands of strong winds in the upper atmosphere, typically found at altitudes of 9-16 km.
 - **Tropical Easterly Jet (TEJ):** Forms over the Indian subcontinent during the summer monsoon season, acting as a steering mechanism for the monsoon circulation, influencing rainfall distribution and intensity.
 - **Subtropical Westerly Jet (SWJ):** Flows over the northern parts of India during the winter months, influencing the onset and withdrawal of the monsoon, and the formation of western disturbances.
- **Complex Interactions:** The interaction between these jet streams and the surface weather patterns adds complexity to predicting the monsoon's onset, intensity, and distribution. These upper atmospheric winds can cause abrupt changes and variability in monsoon behavior, making it a challenge for meteorologists to forecast accurately.



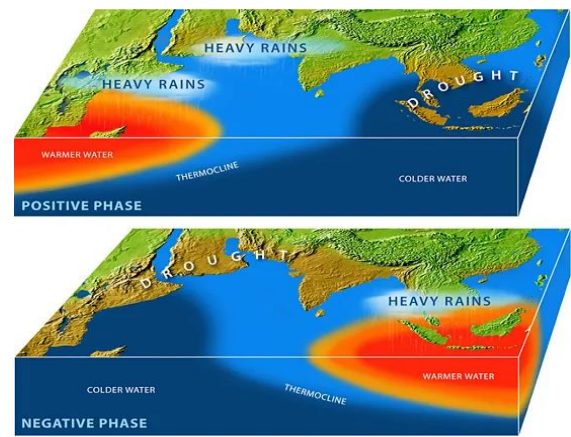
El Nino-La Nina and Indian Monsoon

- **El Nino:** warming of the central and eastern equatorial Pacific Ocean, leading to weaker monsoon winds and reduced rainfall over India.
- **La Nina:** cooling of the equatorial Pacific, often associated with stronger monsoon winds and above-average rainfall in India.
- **Teleconnection:** El Nino and La Nina events in the Pacific Ocean have a teleconnection with the Indian monsoon, impacting its strength and rainfall patterns.



Indian Ocean Dipole Theory of Monsoon

- **Indian Ocean Dipole (IOD):** The IOD is a phenomenon where sea surface temperatures oscillate between the western and eastern equatorial Indian Ocean.
- **Positive IOD:** A positive IOD is characterized by warmer waters in the western Indian Ocean and cooler waters in the east, leading to stronger monsoon winds and higher rainfall in India.
- **Negative IOD:** A negative IOD has the opposite effect, with warmer waters in the east and cooler waters in the west, potentially leading to weaker monsoon winds and lower rainfall in India.



Madden-Julian Oscillation (MJO) and Indian Monsoon

- **Madden-Julian Oscillation (MJO):** The MJO is a recurring pattern (wind and rainfall patterns) of atmospheric circulation that propagates eastward around the global tropics, with periods ranging from 30 to 60 days.
- **Influence on Monsoon:** During its active phase, the MJO can enhance or suppress monsoon rainfall over different regions of India.
- **Monsoon Breaks and Revival:** The MJO plays a significant role in the occurrence of monsoon breaks (periods of reduced rainfall) and their subsequent revival.

Impact of Climate Change on Monsoon

- **Shifting Rainfall Patterns:** Climate change models predict a potential shift in monsoon patterns, with some regions experiencing increased rainfall variability and others facing prolonged droughts. This can disrupt agricultural cycles and water resource management, leading to challenges in maintaining food security and water availability.
- **Increased Intensity of Extreme Events:** Climate change may lead to more intense rainfall events interspersed with longer dry periods. This poses significant challenges for water management, as heavy rains can cause floods, damaging infrastructure and agriculture, while extended dry periods can lead to droughts, affecting crop yields and water supply.
- **Rising Sea Surface Temperatures:** Warming Sea surface temperatures can affect the strength and predictability of the monsoon. Warmer oceans can lead to stronger and more erratic monsoon seasons, impacting the timing and distribution of rainfall, which is crucial for planning agricultural activities.
- **Increased Evaporation Rates:** Higher temperatures lead to increased evaporation rates, which can intensify both drought and rainfall patterns. This contributes to the unpredictability of the monsoon season, making it harder for farmers and water resource managers to plan effectively.
- **Contrasting Rainfall Patterns:** There has been an observed shift in the track of monsoon systems, such as low-pressure systems and depressions traveling south of their usual position. This shift results in some regions receiving excess rainfall while others experience deficits, leading to regional disparities in water availability and agricultural productivity.
- **Socio-Economic Impact:** Variations in monsoon patterns directly affect the socio-economic conditions in India. Poor monsoon seasons can lead to droughts, impacting agricultural output and leading to water scarcity, while excessive rainfall can cause flooding, affecting infrastructure and livelihoods. The Indian economy, heavily dependent on agriculture, becomes highly sensitive to these volatile monsoon patterns.

Way Forward

- **Improved Monitoring Systems:** Continuous improvement of weather monitoring systems and data collection is essential for better monsoon predictions. Investing in advanced technologies like remote sensing and GIS can enhance the accuracy of weather forecasts.

- **Investing in Climate Research:** Increased investment in climate research is necessary to understand the long-term impacts of climate change on the monsoon. Collaborative efforts between government bodies, research institutions, and international organizations can help develop effective adaptation strategies.
- **Water Management Strategies:** Developing efficient water management strategies to store excess water during high rainfall periods and conserve it during droughts is critical. This includes promoting rainwater harvesting, improving irrigation practices, and enhancing watershed management.
- **Sustainable Agricultural Practices:** Promoting sustainable agricultural practices that are less water-intensive will help adapt to potential changes in rainfall patterns. Crop diversification, the use of drought-resistant crop varieties, and implementing efficient irrigation techniques are essential.
- **Socio-Economic Measures:** Addressing the socio-economic impacts of monsoon variability by implementing policies that support vulnerable populations and infrastructure is crucial. This includes developing flood-resilient infrastructure, enhancing community preparedness, and ensuring food security through efficient supply chain management.

5.2 UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE (UNFCCC)

The third Glasgow Dialogue on Loss and Damage took place recently at the 60th Session of the Subsidiary Bodies (SB60) to the United Nations Framework Convention on Climate Change (UNFCCC) in Bonn, Germany.

About UNFCCC

- **Establishment:** Formed during the 1992 Earth Summit in Rio de Janeiro.
- **Objective:** Address climate change by reducing greenhouse gas emissions.
- **India's Stand:** Commitment to mitigating climate impacts while ensuring sustainable development.
- **Global Cooperation:** Framework for global cooperation, bringing together nations to tackle climate change.
- **Climate Finance:** Mechanisms such as the Green Climate Fund to facilitate financial flow from developed to developing nations.
- **Adaptation and Resilience:** Focus on adaptation and building resilience, especially for vulnerable countries and communities.

Treaties under UNFCCC

- **Kyoto Protocol (1997):** Legally binding emission reduction targets for developed countries.
- **Paris Agreement (2015):** Commitments to keep global temperature rise well below 2°C and pursue efforts to limit it to 1.5°C.
- **Glasgow Climate Pact (COP26):** Reaffirms Paris Agreement goals, calls for increased ambition.
- **Sharm El-Sheikh Implementation Plan (COP27):** Enhances implementation of the Paris Agreement, addresses loss and damage, and scales up climate finance for developing countries.

Mode of Action

- **Conferences:** Annual global forums for discussing climate change, including COP, CMP, and CMA meetings.
- **National Climate Policies:** Development and implementation of national strategies aligned with UNFCCC commitments.
- **International Cooperation:** Initiatives like the International Solar Alliance and Global Methane Initiative.
- **Climate Finance Mechanisms:** Support for developing countries through funds like the Green Climate Fund and Adaptation Fund.
- **Technology Transfer:** Promoting mechanisms for transferring climate-friendly technologies and knowledge-sharing.

Challenges

- **Balancing Development and Climate Action:** Developing countries must address poverty, economic growth, and sustainability, making it challenging to prioritise climate action without compromising development goals.

- **Energy Access and Transition:** Ensuring affordable, reliable energy access while transitioning to low-carbon sources is critical, especially for countries with limited financial and technological resources.
- **Finance and Technology Transfer:** Mobilising adequate finance and facilitating the transfer of climate-friendly technologies from developed to developing nations remain crucial challenges hindering effective implementation of climate strategies.
- **Political Will and International Cooperation:** Achieving consensus and sustained commitment among nations, often with conflicting interests and priorities, is essential for global climate action.
- **Implementation of National Commitments:** Ensuring that national pledges are translated into effective actions and policies on the ground is crucial for meeting global climate targets.
- **Public Awareness and Engagement:** Raising awareness and mobilising public support for climate action are vital for driving policy changes and the adoption of sustainable practices.

Way Forward

- **Enhancing Ambition and Implementation:** Countries need to continuously enhance their climate ambition and accelerate the implementation of their commitments under the Paris Agreement and other UNFCCC mechanisms.
- **Scaling Up Renewable Energy:** Accelerating the deployment of renewable energy sources and implementing ambitious energy efficiency measures across all sectors will be crucial for achieving a low-carbon transition globally.
- **Innovative Financing Mechanisms:** Developing new financial instruments and mechanisms to mobilise private sector investment in climate action is essential for scaling up efforts.
- **International Cooperation and Climate Diplomacy:** Strengthening international cooperation, fostering climate diplomacy, and promoting equitable burden-sharing will be critical in addressing the global challenge of climate change and achieving the goals of the UNFCCC and the Paris Agreement.
- **Capacity Building and Education:** Providing training and resources to build local capacities for climate mitigation and adaptation is essential for empowering communities to tackle climate challenges effectively.
- **Regular Review and Adjustment:** Establishing mechanisms for regular review and adjustment of policies and commitments based on new scientific insights and changing circumstances is necessary to ensure the continued relevance and effectiveness of climate actions.

5.3 SUSTAINABLE DEVELOPMENT GOALS

A UN report highlighted the significant lagging in most of the sustainable development targets set in 2015, including combating poverty and hunger attributing to funding shortfalls, geopolitical tensions, and the COVID-19 pandemic.

Progress and Challenges of SDGs

- **Stagnant Progress:** Only 16% of SDG targets are advancing well, highlighting significant obstacles in policy implementation and achieving concrete results.
- **Key Areas of Concern:**
 - **Zero Hunger (SDG 2):** Food insecurity and hunger are on the rise.
 - **Sustainable Cities and Communities (SDG 11):** Issues with urban planning and inadequate infrastructure.
 - **Life Below Water (SDG 14) and Life on Land (SDG 15):** Increasing biodiversity loss and environmental degradation.
 - **Peace, Justice, and Strong Institutions (SDG 16):** Declining press freedom and a rise in conflicts pose challenges.
- **Impact of COVID-19:**
 - **SDG 3 (Good Health and Well-being):** Life expectancy and health disparities worsened.
 - **Poverty Reduction and Education (Multiple SDGs):** Setbacks in poverty reduction efforts and disruptions in education were observed.

About Sustainable Development Goals

- **The Sustainable Development Goals (SDGs)**, established by the United Nations in 2015, serve as a universal call to action to address various global challenges by 2030.
- **Poverty Eradication:** SDGs strive to eradicate poverty in all its forms and ensure access to basic necessities like food, water, shelter, and healthcare for everyone.
- **Environmental Protection:** They tackle critical environmental issues such as climate change, biodiversity loss, and pollution, promoting sustainable practices for conserving natural resources and reducing environmental degradation.
- **Social Inclusion:** SDGs promote equality and inclusion by addressing gender inequality, discrimination, and social exclusion. They aim to ensure equal opportunities and access to resources for all individuals.
- **Economic Growth:** SDGs emphasize sustainable economic growth that is inclusive and equitable, creating jobs, fostering innovation, and building resilient economies.
- **Global Partnership:** They call for global cooperation between governments, businesses, civil society, and individuals to achieve the goals collectively and sustainably.
- **Improved Health and Well-being:** SDGs aim to ensure healthy lives and well-being for all, focusing on access to quality healthcare, nutrition, clean water, and sanitation.
- **Reduced Inequalities:** SDGs aim to reduce inequalities within and among countries, addressing disparities in income, wealth, opportunity, and access to resources.



India's Performance toward Achieving various SDGs

- **Progress:** India has made strides in poverty reduction, renewable energy adoption, economic growth, and gender equality under the Sustainable Development Goals (SDGs).
- **Challenges:** Persistent issues include addressing hunger, improving education quality, ensuring access to clean water, mitigating climate change impacts, and reducing inequality.
- **Impactful Initiatives:** Programs like PMAY, MGNREGA, PDS, Ayushman Bharat, and Swachh Bharat have shown positive results in their respective areas.
- **Further Efforts Needed:** Continued focus is required to achieve sustainable access to clean water, enhance educational standards, reduce healthcare disparities, and strengthen climate change resilience.
- **Commitment to SDGs:** India demonstrates strong commitment through various policies and programs aimed at achieving the SDGs.
- **Key Areas for Improvement:** Addressing infrastructure gaps, promoting technological innovation, tackling social inequalities, and fostering sustainable urban development are crucial for future progress.

- **Collaborative Approach:** Collaboration between government, private sector, and civil society is essential for accelerating progress towards achieving the SDGs by 2030.

5.4 BIODIESEL

A global team comprising Assam-based scientists developed a superhydrophobic catalyst that can cut biodiesel cost from about \$1.2 now to 37 cents per liter.

- **Biodiesel:** It is a **renewable, biodegradable fuel manufactured domestically from vegetable oils**, animal fats, or recycled restaurant grease.
- **Production:** Biodiesel is **produced through a chemical process called transesterification**. In this process, the glycerin is separated from the fat or vegetable oil.
- **Byproducts:**
 - **This leaves behind two products:** methyl esters (the chemical name for biodiesel) and glycerin (a valuable byproduct used in soaps and other products).

Common feedstocks for biodiesel include:

- **Vegetable oils:** Soybean oil, canola oil, palm oil, sunflower oil, etc.
- **Animal fats:** Tallow, lard, yellow grease (used cooking oil), etc.
- **Other sources:** Algae oil, jatropha oil, and other non-food crops.

Benefits

- **Environmental Benefits:**
 - **Reduced Emissions:** Biodiesel produces fewer greenhouse gases and air pollutants compared to petroleum diesel.
 - **Biodegradable:** Biodiesel is non-toxic and biodegradable.
 - **Renewable:** Made from renewable resources, biodiesel helps reduce dependence on fossil fuels.
- **Biodiesel is a domestically produced, clean-burning, renewable substitute for petroleum diesel.** Using biodiesel as a vehicle fuel improves public health and the environment, provides safety benefits, and contributes to a resilient transportation system.

5.5 2024 PARIS OLYMPICS (HOTTEST OLYMPICS EVER)

A report titled "Rings of Fire: Heat Risks at the 2024 Paris Olympics" highlights that the 2024 Paris Olympics, scheduled to start on July 24, may be the hottest in history, posing significant risks to athletes

Climate Change and Sports

- **Rising Temperatures:** Since the last Paris Olympics in 1924, average temperatures during the Olympic months have risen by 3.1°C.
- **Global Impact:** The 2023 heatwave in France claimed nearly 5,000 lives, with 2024 on track to be even hotter.
- **Report "Rings of Fire: Heat Risks at the 2024 Paris Olympics"**
- **Health Risks:** The report, prepared by the University of Portsmouth and other institutions, warns of severe health risks for athletes. Leading athletes, including Indian triathlete Pragnya Mohan and Russian tennis player Daniil Medvedev, express concerns about heat-related illnesses and fatalities.

Performance Impact:

- High core body temperatures and cardiovascular strain reduce endurance, with studies showing time to exhaustion can be 42 minutes shorter at 31°C compared to 11°C.
- Athletes may experience reduced power output and increased blood lactate, impairing muscle function and leading to quicker fatigue and potential heat stroke.

Recommendations

- **Preventive Measures:** The report advises smart scheduling, heat acclimatization and hydration; cooling techniques and monitoring to avoid peak heat times and enhanced rehydration and cooling strategies to protect athletes and spectators.
- **Long-Term Solutions:** The global sports community is urged to view climate change as an existential threat to sports and take proactive measures to mitigate its impact.

5.6 PARAPARATRECHINA NEELA

Recently, the researchers discovered a new blue ant species "*Paraparatrechina neela*" while on Expedition To Arunachal Pradesh's remote Siang Valley.

About Paraparatrechina neela

- The new ant has been named **Paraparatrechina neela** – the word "**neela**" derived from its unique blue coloration.
- It is **less than 2mm** long with a **metallic blue body**, has a **sub triangular head with large eyes and a triangular mouthpart with five teeth**.
- The ancestors of these ants evolved in continental **Southeast Asia** between **45 and 60 million** years ago and then gradually dispersed and colonized India and other parts of the world.
- **Blue coloration** in insects usually comes from **biological photonic nanostructures**, not pigments.

About Siang Valley in Arunachal Pradesh

- Siang Valley is located in the **northeastern state of Arunachal Pradesh**, India.
- It is part of the Eastern Himalayas and is traversed by the **Siang River**, which later becomes the **Brahmaputra River**.
- The valley is recognized as a biodiversity hotspot, **housing a wide range of flora and fauna, many of which are endemic to the region**.

5.7 GIBBON

The forest departments of Assam State Forest Department, Wildlife Institute of India (WII) are set to install canopy bridges inside Hollangapar Gibbon Sanctuary in Assam's Jorhat.

Gibbon

- **Gibbons are the smallest and fastest of all apes**, inhabiting tropical and subtropical forests in Southeast Asia.
- They have high intelligence, distinct personalities, and strong family bonds like other apes.
- **Global Gibbon Network (GGN)** recently convened its inaugural meeting in Haikou, China has raised concern over India's only ape species Hoolock Gibbon.



Hoolock Gibbon

- **The Hoolock gibbon is the only ape species found in India.** There are two species of Hoolock Gibbon in India - Western Hoolock Gibbon (*Hoolock hoolock*) and Eastern Hoolock gibbon (*Hoolock leuconedys*).
- Approximately a maximum of 10,000 gibbons are now left in India.

Western Hoolock Gibbon (<i>Hoolock hoolock</i>)	Eastern Hoolock Gibbon (<i>Hoolock leuconedys</i>)
• Habitat: The Western Hoolock gibbon inhabits tropical evergreen forests and semi-evergreen forests, primarily in the states of Assam (notable populations in the Hoollongapar Gibbon Sanctuary in Assam), Arunachal	• Habitat: Specific pockets of Arunachal Pradesh and Assam in India, and southern China and north-east Myanmar. • IUCN Status: Vulnerable

Pradesh, Meghalaya, Manipur, Mizoram, Nagaland, and Tripura. • Conservation Status: • IUCN Status: Endangered • Wildlife (Protection) Act of India, 1972: Schedule I	• Wildlife (Protection) Act of India, 1972: Schedule I
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5.8 EMBLICA CHAKRABARTI

Recently, New plant species was discovered from Edamalayar forest range of Kerala

About Emblica Chakrabarti

- **Species name:** *Emblica chakrabartyi*
- **Family:** gooseberry (Phyllanthaceae)
- Family has been named after **Tapas Chakrabarty**, former scientist at the **Botanical Survey of India**, for his contribution to the study on Phyllanthaceae.

Characteristics:

- **Height and Structure:** The plant grows to approximately 2 meters in height and generally thrives as a shrub in tropical rainforests.
- **Leaves:** It features large, shiny, elongated oval leaves that can grow up to 13 cm in length.
- **Flowers and Fruiting:** The flowering and fruiting period occurs from December to June. Male flowers are found in inflorescences, while female flowers appear singly on the leaf axils. Each flower has six yellowish-green petals.
- **Fruits and Seeds:** The fruits turn from brown to black when they ripen, and the seeds are black, measuring about 8-9 mm in diameter.

5.9 NAGARAHOLE TIGER RESERVE

- **In news:** Mysuru Dasara elephant Ashwatthama dies of electrocution in Nagarhole Tiger Reserve.

About

- **Location:** Also known as Rajiv Gandhi National Park, it is located in the **Mysuru** and **Kodagu** districts of Karnataka, India.
- **Name Origin:** The name 'Nagarahole' means serpent stream (Nagara – serpent, hole – stream) in Kannada

Geographic and Ecological Context

- **Biosphere Reserve:** Part of the Nilgiri Biosphere Reserve, contiguous with Wayanad Wildlife Sanctuary to the south and Bandipur Tiger Reserve to the southeast.

Landscape

- Features swampy areas called '**Hadlus**', preferred by wild herbivores.
- Terrain includes dense forests, streams, and valleys, providing diverse habitats.

Wildlife

- **Carnivores:** Tiger (*Panthera tigris*), Leopard (*Panthera pardus*), Asiatic Wild Dog (*Cuon alpinus*), Sloth Bear (*Melursus ursinus*).
- **Herbivores:** Asiatic Elephant (*Elephas maximus*), Gaur (*Bos gaurus*), Sambar (*Rusa unicolor*), Chital (*Axis axis*), Muntjac (*Muntiacus muntjak*), Four-Horned Antelope (*Tetracerus quadricornis*), Wild Pig (*Sus scrofa*), Mouse Deer (*Tragulus meminna*).



Flora/Vegetation

- The reserve boasts diverse vegetation, including tropical moist-deciduous and tropical dry-deciduous forests.
- The western part receives more rainfall and supports lush vegetation, while the eastern section is drier.
- Notable tree species include teak, rosewood, sandalwood, and bamboo.

Conservation Efforts

- Operates under the guidelines of the **Wildlife Protection Act of 1972**.
- **Highest Tiger Density:** Nagarhole Tiger Reserve boasts the highest tiger density in Karnataka, with 11.82 tigers per 100 square kilometers, ranking third in the country.
- **Elephant Conservation:** The reserve is part of Project Elephant and hosts one of the largest congregations of Asiatic elephants, especially during the summer at the Kabini backwaters.

5.10 PHTHEIROSPERMUM LUSHAIORUM

- A new hemiparasitic plant species named *Phtheirospermum lushaiorum* has been discovered in **Phawngpui National Park, Mizoram**.
- This species has been named in honor of the Lushai tribe, recognizing their efforts in biodiversity conservation.
- **Plant Characteristics**
 - **Type:** Terrestrial hemiparasitic plant.
 - **Habitat:** Attaches to the roots of host plants, typically found **growing with *Melastoma malabathricum* and *Argentina lineata* plants**.
 - **Root System:** Lacks a fully developed root system, forms haustoria to tap into host plants for water and minerals.
 - **Flowering Period:** July to September.
 - **Distinct Features:** Shorter height, bilabiate yellow flowers, and didynamous stamens.
- **Threats:** Collection of leaf litter by local villagers poses a significant threat.



Phawngpui National Park

- **Location:** It is in the **Lawngtlai district under the Lai Autonomous District Council of Mizoram**, towards the southeast bordering Myanmar.
- **Name:** It derives its name from the Phawngpui Mountain, the highest peak in the state, reaching 2157 meters.

Lushai tribe

- The Lushai tribe, also known as the **Mizo people**, predominantly reside in the **northeastern Indian state of Mizoram**.
- They are also **found in parts of neighboring states such as Manipur, Assam, and Tripura**, as well as in the Chittagong Hill Tracts of Bangladesh and the Chin State of Myanmar.
- The Lushai people belong to the **larger Tibeto-Burman ethnic group**.
- **Festivals:** Chapchar Kut, Mim Kut, and Pawl Kut are some of the major festivals of the tribe.

5.11 WILD BOARS

The Tamil Nadu government has approved the controlled hunting of wild boars causing distress to farmers near forest areas.

About Wild Boars

- **Scientific Name:** *Sus scrofa cristatus*.
- **Habitat and Distribution:** High grass, bushes, forests, high crops, dense forests, grasslands, scrublands, agricultural areas; Indian subcontinent, various altitudes from sea level to mountains.

- **Behavior and Social Structure**
 - Matriarchal '*sounders*' led by an elder female;
 - Solitary adult males or loose bachelor groups;
 - Active during evening and night;
 - Territorial fights with predators.
- **Diet**
 - **Omnivorous:** excreta, tubers, roots, leaves, fruit, vegetables, standing crops, carrion, small animals, baby deer;
 - Prefers marshy areas and roots in swampy places.
- **Reproduction**
 - Breeding year-round, peak seasons vary by region;
 - Gestation: around four months; Litter size: multiple piglets
 - **Ecological Role:** Seed dispersal aiding plant propagation; Important prey species maintaining predator-prey balance in the ecosystem.
- **Conservation Status**
 - **IUCN Red List: Least Concern**
 - Wildlife (Protection) Act, 1972: **Schedule III**
 - Proposed reclassification to **Schedule V (vermin)** due to agricultural damage.
 - Presently, Wild boars are **NOT listed as Vermin** under the **Schedule V** of the Wildlife Protection Act, 1972.
 - **Present Culling:** Section 11-B (1) of the Wildlife (Protection) Act, 1972 allows the Chief Wildlife Warden to issue special orders to kill dangerous wild animals.

Zoning for Culling Operations

- Areas adjacent to reserve forests will be divided into three zones:
 - **Zone A:** Within one kilometre from forest limits.
 - **Zone B:** One to five kilometres from forest limits.
 - **Zone C:** Beyond five kilometres from forest limits.
- **Restrictions:** Shooting of wild pigs is prohibited within five kilometres of the reserve forest (Zones A and B).

Scientific Approach to Culling

- **Scientific Methodology:** The shooting of wild boars must adhere to a scientific approach, considering the intensity and frequency of conflict incidents.
- **Expert Concerns:** Experts highlight the ecological role of wild boars and caution against indiscriminate killing.

About the Farmers' Conflict Resolution Committee

- The Committee includes representatives from the Departments of Forest, Revenue, Agriculture, and Horticulture, along with scientific experts and wildlife enthusiasts.
- **Objective:** The committee was formed to study the impact of raids by elephants and wild pigs on agricultural crops.
- **Implementation Protocol:**
 - **Approval Process:** The culling will require approval from a local three-member checking body.
 - **Composition of the Checking Body:** The body will include a forester or forest guard, the Village Administrative Officer, and the ward member.
 - **Supervision:** Culling operations must be conducted in the presence of these three members.

5.12 HIMALAYAN SEROW

In News

- A Himalayan serow was spotted in the central part of Nameri National Park and Tiger Reserve.

- **About Himalayan Serow**
- **Scientific Name:** *Capricornis sumatraensis*.
- **Description:** Resembles a **cross between a goat, donkey, cow, and pig**. Medium-sized with a large head, thick neck, short limbs, long mule-like ears, and a dark coat. Very elusive.

Status

- **IUCN:** Vulnerable.
- **CITES:** Appendix I
- **Wildlife Protection Act, 1972- Schedule I**
- **Habitat:** High altitudes (2,000 to 4,000 metres) in eastern, central, and western Himalayas; not in Trans Himalayan region.
- **Diet:** Herbivore
- **Distribution:** Restricted to the Himalayan region
- **Conservation:** Significant decline in population, range, and habitat due to human impact.
- **About Nameri National Park:**
- **Location:** Bordered by Jia Bhoroli (Kameng River in Arunachal Pradesh) to the west and Bor Dikorai to the east. Pakke Tiger Reserve is to the north.
- **Flora:** Tropical evergreen, semi-evergreen, and moist deciduous forests, cane brakes, and narrow grassland strips along rivers.
- **Fauna:** Home to 54 mammalian species, including Pygmy Hog, Royal Bengal Tiger, Indian Bison, Asiatic Elephant, Clouded Leopard, Wild Dog, Black Bear, Sambar, and hog deer.



5.13 HIMALAYAN IBEX

Basic Information

- **Species:** Wild goat (*Capra sibirica hemalayanus*)
- **Habitat:** Found in diverse environments such as cold deserts, rocky outcrops, steep terrain, highland flats, mountain ridges, low mountains, and foothills. Inhabit high-altitude regions of the Himalayas, **between 3,000 and 5,800 meters**.
- **Size:** The largest and heaviest member of the genus *Capra*, weighing up to 130 kg.

Conservation Status

- **IUCN:** Near Threatened
- **Wildlife Protection Act:** Schedule I.
- **Threats**
- **Illegal Hunting:** Reduces population significantly.
- **Human Disturbance:** Disrupts natural habitat and behavior.
- **Habitat Loss:** Due to deforestation, construction, and agricultural expansion.
- **Competition for Forage:** Domestic livestock competes for the same food resources.



Other Names

- Altai ibex,
- Central Asian ibex
- Gobi ibex
- Siberian ibex
- Mongolian ibex
- Tian Shan ibex

5.14 WORLD CROCODILE DAY

Recently, India celebrated the 50th year of India's Crocodile conservation project and World Crocodile Day on June 17th.

About World Crocodile Day

- **Objective:** To protect natural habitats and revive crocodile populations through captive breeding.
- In 1975, just three years after the **Wild Life (Protection) Act of 1972**, crocodilians in India were nearly extinct due to commercial hunting and habitat loss.
- The **Gharial and Saltwater Crocodile Conservation Program** was launched in Odisha in early 1975, followed by the **Mugger Conservation Program**.

Types of crocodiles in India

- **Saltwater Crocodile (*Crocodylus porosus*)**, (IUCN Status - Least Concern)
- **Mugger Crocodile (*Crocodylus palustris*)** (IUCN Status - Vulnerable),
- **Gharial (*Gavialis gangeticus*)** (IUCN Status - Critically Endangered)

Achievements

- **Bhitarkanika National Park:** Started breeding and rearing saltwater crocodiles in 1975.
- **Population Growth:** As a result of the programme, the estimated number of saltwater crocodiles in India increased from **96 in 1976 to 1,640 in 2012**.
- **Successful Programme:** Bhitarkanika's saltwater crocodile conservation is one of India's most successful.

Challenges

- **Human-Crocodile Conflict:** 50 deaths since 2014 due to crocodile attacks in Bhitarkanika.
- **Political Impact:** Local dissatisfaction with politicians over safety measures influenced recent elections.
- **Future Directions**
- **Balanced Approach:** Ongoing efforts to balance wildlife conservation with human safety.
- **Education and Awareness:** Enhancing public understanding and support for conservation initiatives

5.15 CAECILIANS

News Details

- **Discovery:** A new species of striped *caecilian* has been discovered in **Kaziranga National Park**.
- **Survey:** The discovery was made during a departmental survey of amphibians and reptiles, conducted from June 14 to June 17.

About Caecilians

- **Description:** Caecilians are limbless, vermiform (worm-shaped) or serpentine (snake-shaped) amphibians with small or sometimes nonexistent eyes.
- **Habitat:** They mostly live hidden in soil or streambeds, making them among the least familiar amphibians.

Kaziranga National Park

- **Location:** Situated in the Golaghat and Nagaon districts of Assam.
- **Formation:** Established in 1908 on the recommendation of Mary Curzon.
- **Species:**
 - Hosts two-thirds of the world's Indian **rhinoceroses**.
 - Conservation efforts focus on the '**big four**' species: *Rhino*, *Elephant*, *Royal Bengal Tiger*, and *Asiatic Water Buffalo*.
- **Reserves and Recognition:**

- UNESCO World Heritage Site: Declared in 1985.
- Tiger Reserve: Declared in 2006.
- **Important Bird Area:** Recognized by BirdLife International for the conservation of avifaunal species.

5.16 UNITED NATIONS CONVENTION TO COMBAT DESERTIFICATION (UNCCD)

- UNCCD is an **international agreement** that aims to address the problem of desertification and mitigate the effects of drought.
 - **The UNCCD was adopted in Paris on June 17, 1994**, and entered into force on December 26, 1996.
- The UNCCD is one of the three Rio Conventions, the other two being:
 - Convention on Biological Diversity (UNCBD)
 - United Nations Framework Convention on Climate Change (UNFCCC)
- **Nature: It is the only legally binding international agreement** that links environment and development to sustainable land management.
- **Status:** Signatories: 114, Parties: 197
- **India status: It ratified the Convention to Combat Desertification in December 1996.**
- **Recent COP meet:** 16th Conference of Parties (COP16) to the UNCCD in Riyadh, Saudi Arabia.
- **Significance: Up to 40 per cent of the world's land and nearly half the world's population are affected by land degradation.**
 - The highest costs are borne by those who can least afford it: indigenous communities, rural households, smallholder farmers, and especially youth and women.

Objectives

- To combat desertification and land degradation.
- To mitigate the effects of drought.
- To promote sustainable development in affected areas.
- To improve the living conditions of people in drylands.

Mechanisms and Implementation

- **National Action Programs (NAPs):** Each Party to the UNCCD is required to develop and implement NAPs, which outline specific actions and strategies to combat desertification at the national level.
- **Regional and Subregional Action Programs:** These programs encourage cooperation and coordination among countries in the same geographic region.
- **International Cooperation and Partnerships:** The UNCCD fosters collaboration between governments, non-governmental organizations, and the private sector to achieve its objectives.
- **Science and Technology:** The convention emphasizes the role of scientific research and technological innovation in combating desertification and managing land resources sustainably.
- **Key Institutions**
- **Conference of the Parties (COP):** The COP is the supreme **decision-making body of the UNCCD**, which meets biennially to review the implementation of the Convention and its annexes.
- **Committee on Science and Technology (CST):** This committee provides scientific advice to the COP and other bodies of the Convention.
- **Global Mechanism (GM):** The GM supports Parties in mobilizing resources to implement the Convention.

5.17 ONE HORNED RHINO

- **Names:** Indian rhinoceros, *Rhinoceros unicornis*.
- **Species:** There is total **5 species of rhino in the world**
 - Two African rhino species - black and white rhinos

- **Asian rhino species, which include**
 - Greater one-horned
 - Sumatran and
 - Javan rhinos
- **Size:** It is the second largest extant species of rhinoceros (reaches a height of 6 feet and weighs between 4000 and 6000 pounds).
- **Social behavior:** The Indian rhinoceros is a largely solitary animal, only associating in the breeding season and when rearing calves.
- **Gestation:** Their gestation period is around 15.7 months, and birth interval ranges from 34 to 51 months
- **Status:** It is listed as Vulnerable on the IUCN Red List and
 - **Appendix I of CITES.**

Other Facts

- **Lifespan:** The Indian rhinoceros has a lifespan of **35 to 45 years**.
- **Speed:** These rhinos are **excellent swimmers and can run at speeds of up to 35 miles per hour for short periods of time on land**.

5.18 RHINO HORN IMPLANT TAGS

- **Rhino horn implant tags:** These tags use **radio-tracking technology to allow conservationists** to track the movements and location of rhinos without imposing significant stress or interference on the animals.
- The implant **tag is embedded inside the rhino's horn through** a minimally invasive procedure.
- This method has minimal impact on the horn's structure and does not hinder the rhino's natural movements,

Radio-Tracking System

- The implant tags are **long-range wildlife transmitters**. They emit signals that can be picked up **by radio-tracking systems**, allowing conservationists to monitor rhinos over vast areas.

Rhino horn

- **Made up of:** Rhino horns are made **primarily of keratin**, the same type of protein that makes up human hair and nails.
- **Unlike the horns of other animals, such as cattle**, which have a bony core, rhino horns are composed entirely of **compacted keratin fibers**.
- **Use:** In **traditional Chinese medicine**, rhino horn is believed to have various medicinal properties, including fever reduction and detoxification. However, scientific evidence does not support these claims.

5.19 STELLARIA MCCLINTOCKIAE

- It is the first species of the **genus *Stellaria*** reported from south India.
- **Nomenclature:** It is named after Nobel laureate Barbara McClintock.
 - The American scientist who won the 1983 Nobel Prize for her discovery of the 'jumping genes.'
- **Growing conditions:** This is an annual herb growing up to 15 cm in height. Known to be found only in the Nelliampathy hills as of now, and that too at an elevation of 1,250-1,400 meters.
- **Recommended IUCN status:** The researchers have recommended that *Stellaria mcclintockiae* be classified as **critically endangered under** the International Union for Conservation of Nature (IUCN) criteria.



Jumping genes

- Jumping genes or Transposable elements (TEs) or transposons, are DNA sequences that move (or jump) from one location on the genome to another. E.g. Transposons may inhibit or block pigment production in some cells like in maize.

5.20 TADOBA-ANDHARI TIGER RESERVE

- **Location:** Located in Chandrapur district of Maharashtra, India.
- **Parks Included:** Comprises Tadoba National Park and Andhari Wildlife Sanctuary.
- **Established:** Created in 1955.
- **Significance:** Maharashtra's oldest and largest national park.

Name Origin

- Tadoba-Named after the god "Tadoba" or "Taru," revered by the local tribals.
- Andhari-Named after the Andhari river, which flows through the forest.

Important Facts

- **Biodiversity:** Known for its rich biodiversity, including a significant population of Bengal tigers, leopards, sloth bears, and various herbivores like deer and gaur.
- **Flora:** The park features tropical dry deciduous forests with prominent tree species such as teak, bamboo, and mahua.
- **Fauna:** Home to a variety of wildlife including Bengal tigers, Indian leopards, sloth bears, gaur, several species of deer, and birds.
- **Conservation Efforts:** Managed under the guidelines of Project Tiger to protect and preserve the tiger population and its habitat.

National Tiger Conservation Authority (NTCA)

- **Purpose:** The NTCA is a statutory body under the Ministry of Environment, Forest and Climate Change in India, responsible for strengthening tiger conservation.
- **Establishment:** Formed in 2005 following recommendations from the Tiger Task Force.
- **Monitoring:** Oversees the implementation of Project Tiger and other conservation measures.
- **Funding:** Provides financial support for various tiger reserves across India.
- **Regulation:** Sets protocols and guidelines for tiger conservation and management practices.
- **Research and Development:** Conducts research on tiger ecology and conservation strategies.

5.21 MAINLAND SEROW

Overview

- **Species:** The mainland serow is a mammal that appears somewhere between a goat and an antelope, closely related to the red serow.
- **Recent Sightings:** It has been recorded at the lowest elevation beyond Bhutan, its natural home.

Habitat

- **Geographical Range:** Found in central and southern China, Vietnam, Cambodia, Laos, Myanmar, Thailand, and the Indonesian island of Sumatra.
- **Preferred Terrain:** Inhabits steep, rugged hills up to an elevation of 4,500 m. It prefers rocky terrain but is also found in forests and flat areas.



- **Swimming Ability:** It can swim to small offshore islands.

Appearance

- **Description:** A goat-like animal with short annulated horns, occurring in montane regions between the Sutlej and Teesta Rivers, also known as "Bubaline Antelope."

Conservation Status

- **IUCN:** Listed as Vulnerable.
- **CITES:** Listed in Appendix I.

Social Behaviour

- **Territoriality:** The mainland serow is territorial and lives alone or in small groups.
- **Reproduction:** Females give birth to single young after a **gestation period of about eight months.**

6 SOCIETY AND SOCIAL JUSTICE

6.1 GIRL EDUCATION IN INDIA

Non-governmental organization Child Rights and You (CRY) has launched a nation-wide awareness campaign, "Poori Padhai Desh Ki Bhalai", with an aim to increase the faltering participation of the girl child in Indian schools.

Status of Girl Education in India

- **Higher Secondary Education Enrollment:** According to recent data, only 60% of girls in India are enrolled in higher secondary education (11th and 12th standard), indicating a significant gap. Comparative data over the past decade shows a gradual increase, yet the pace remains slow.
- **Out-of-School Rate:** A concerning 35% of girls in the corresponding age group are out of school at the secondary level, with regional disparities exacerbating the issue in rural and remote areas.
- **Dropout Rate:** Approximately 12.25% of girls drop out before completing secondary education, influenced by socio-economic constraints and cultural pressures. Case studies from various states illustrate these challenges.
- **Gender Disparity:** Despite improvements in enrollment and infrastructure, completion rates for girls lag behind. This calls for targeted interventions to bridge the gap and ensure sustained educational engagement.

Reasons for Dropouts

- **Socio-economic Factors:** Poverty and financial constraints often force families to **prioritize boys' education over girls'**, leading to higher dropout rates among female students, especially in economically disadvantaged communities.
- **Cultural Norms:** Deeply ingrained **gender discrimination and the prevalence of early marriages** in many parts of India continue to hinder girls' educational journey and personal development.
- **Inadequate Infrastructure:** Shortage of girls' toilets, proper sanitation facilities, and other gender-specific infrastructure in schools often leads to increased dropout rates among female students.
- **Safety Concerns:** Lack of safe transportation and security issues on the way to school, especially in remote areas, often compel parents to withdraw their daughters from education to ensure their safety.
- **Lack of Female Teachers:** A shortage of female teachers in many schools makes parents hesitant to send their daughters to school, especially in conservative communities. The presence of female teachers can act as a motivator and a role model for girl students.
- **Poor Academic Performance:** Girls struggling with academic performance often receive less encouragement and support compared to boys, leading to higher dropout rates. Inadequate remedial education and tutoring options for girls exacerbate this issue.
- **Lack of Awareness and Value of Education:** In some communities, there is a lack of awareness about the importance and long-term benefits of girls' education. Families often view education as unnecessary for girls who are expected to marry early and take up domestic roles.
- **Health Issues:** Health problems, including malnutrition and adolescent health issues, can lead to higher dropout rates among girls. Lack of access to healthcare and support for girls during puberty often results in absenteeism and eventually dropping out.

Historical evolution of Girl Education in India

- **Pre-Independence Era:** Before 1947, girls' education was largely neglected, with literacy rates for women as low as **2.9% in 1931**. Social reformers like **Raja Ram Mohan Roy and Ishwar Chandra Vidyasagar** advocated for women's education.
- **Post-Independence Initiatives:** After 1947, the Indian government prioritized universal education. The **National Committee on Women's Education (1958-59) headed by Durgabai Deshmukh** recommended measures to reduce the gender gap in education.

- **Kothari Commission (1964-66):** This landmark commission emphasized the importance of girls' education for national development, recommending measures to increase female enrollment and reduce dropout rates.
- **Post-1990s Developments:** Global initiatives like the *Millennium Development Goals (MDGs)* and *Sustainable Development Goals (SDGs)* have further influenced policy directions. Programmes such as *Sarva Shiksha Abhiyan (2001)* and the *Right to Education Act (2009)* have been pivotal in enhancing access to education for girls. **The Beti Bachao, Beti Padhao campaign, launched in 2015**, specifically targets improving the education and welfare of girls.

Poori Padhai Desh Ki Bhalai Campaign: Complete education is beneficial to the nation

- **Campaign Objective:** The nationwide awareness campaign aims to **increase the participation of girl children in Indian schools**, focusing on addressing gender disparities in education and promoting complete education for girls.
- **Campaign Reach:** Launched by **Child Rights and You (CRY)** in five major cities - **Delhi, Mumbai, Bengaluru, Chennai, and Kolkata** - the campaign seeks to create a wide-reaching impact across diverse urban centers.
- **Duration:** The seven-week campaign will be running from **24th June to 15th August 2024**.
- **Stakeholder Engagement:** The initiative aims to involve all stakeholders, including parents, educators, policymakers, and community leaders, to collectively address the challenges in girls' education and find sustainable solutions.

Benefits of Girl Education

- **Economic Growth:** Educating girls has a significant positive impact on economic growth. **According to World Bank estimates, a one percentage point increase in female education** raises the average GDP by 0.3 percentage points.
- **Health Outcomes:** Educated girls are more likely to have better health outcomes for themselves and their families. They tend to marry later, have fewer and healthier children, and are more aware of healthcare practices.
- **Intergenerational Impact:** Education of girls has a strong intergenerational effect. Educated mothers are more likely to send their own children to school, creating a positive cycle of education and development.
- **Women's Empowerment:** Education equips girls with knowledge, skills, and confidence, enabling them to participate more actively in society, politics, and the workforce, thereby promoting gender equality and women's empowerment.

Efforts by Government to improve Girl Education Status

- **Right to Education Act:** The RTE Act ensures **free and compulsory education for all children aged 6-14 years**, providing a legal framework to support universal education, including for girls.
- **Beti Bachao, Beti Padhao:** This national campaign aims to promote girl child education, improve the child sex ratio, and create awareness about the importance of girls' education in society.
- **Kasturba Gandhi Balika Vidyalaya:** These residential schools for girls from disadvantaged communities provide quality education and a safe learning environment, particularly in educationally backward blocks.
- **Mid-Day Meal Scheme:** By providing nutritious meals to school children, this scheme encourages school attendance and retention, especially benefiting girls from economically weaker sections of society.
- **Promoting quality education:** Initiatives like the **National Education Policy 2020** aim to improve the quality of education and make it more engaging for girls.

Success Stories and Achievements

- **Increased Enrollment Rates:** The Sarva Shiksha Abhiyan has raised girls' enrollment in primary schools to 94.3%. Rajasthan saw a 20% increase in secondary education enrollment over five years.

- **Improved Infrastructure:** Separate toilets for girls in over 90% of schools have reduced dropout rates by 11%. Kasturba Gandhi Balika Vidyalaya has provided residential schooling for over 3 million disadvantaged girls.
- **Enhanced Awareness:** The Beti Bachao, Beti Padhao campaign increased community support for girls' education by 30% in targeted districts. Community initiatives in Maharashtra and Haryana improved attitudes towards girls' education by 15%.
- **Community-Based Initiatives:** Grassroots organizations like Educate Girls have enrolled over 380,000 girls back into school in Rajasthan and Madhya Pradesh.
- **Role Models:** Success stories of local champions like Kiran Bedi and Laxmi Agarwal have inspired many girls to continue their education.
- **Policy Impact:** The National Education Policy 2020's pilot programs have improved girls' retention rates by 12%. Government scholarships support over 2 million girl students annually.

Challenges

- **Deep-rooted social mindsets:** Changing societal attitudes that undervalue girls' education requires sustained awareness campaigns and community engagement.
- **Implementation gaps:** Ensuring effective implementation of government schemes at the grassroots level is essential to reach the most marginalized girls.
- **Quality of education:** Beyond access, ensuring quality education that empowers girls and equips them with relevant skills remains a challenge.
- **Lack of career counseling:** Many girls lack guidance on career options and don't see the link between education and future opportunities.
- **Financial Barriers:** Economic hardships often force families to prioritize boys' education over girls', leading to higher dropout rates.
- **Early Marriage:** The prevalence of early marriages in certain regions interrupts girls' education and restricts their personal development.
- **Limited Access to Secondary Schools:** In rural areas, secondary schools are often located far from communities, making access difficult for girls.
- **Gender-based Violence:** Incidents of harassment and violence in and around schools discourage girls from continuing their education.
- **Inadequate Teacher Training:** Teachers often lack training in gender-sensitive approaches, impacting the learning environment for girls.

Way Forward

- **Multi-pronged approach:** A collaborative effort involving government, NGOs, communities, and parents is needed to address the various challenges.
- **Community mobilization:** Empowering communities to value girls' education and hold authorities accountable for its implementation is crucial.
- **Skilling and career guidance:** Equipping girls with vocational skills alongside education can improve their employability and future prospects.
- **Addressing adolescent health needs:** Providing access to menstrual hygiene products and education on adolescent health issues can help girls stay in school during puberty.
- **Financial Incentives:** Offering scholarships, financial aid, and conditional cash transfers to families can encourage them to keep their daughters in school.
- **Legal Enforcement:** Strengthening laws against child marriage and ensuring their strict enforcement can prevent early marriages and support girls' education.
- **Infrastructure Development:** Improving school infrastructure, including building more secondary schools and ensuring gender-specific facilities, can enhance access for girls.

- **Safe Transportation:** Providing safe and reliable transportation options can address safety concerns and encourage school attendance.
- **Teacher Training:** Investing in teacher training programs that focus on gender-sensitive pedagogy can create a more supportive learning environment for girls.

Child Rights and You (CRY)

- **Founded: 1979**
- **Nature:** Non-governmental organization
- **Core Focus Areas:** CRY operates in four key areas: education, healthcare, child protection, and child participation.
- **Issues Covered:** The organization's efforts address critical issues such as child labor, early marriage, malnutrition, and lack of access to quality education.
- **Operational Model:** CRY employs a unique model by partnering with grassroots-level organizations across India. It provides financial support, capacity building, and advocacy assistance to these local partners, enabling them to work effectively in their communities.
- **Advocacy and Awareness:** Beyond direct intervention, CRY plays a significant role in advocating for child rights at both national and state levels. It conducts comprehensive research, organizes awareness campaigns, and engages with policymakers to influence and shape child-centric policies and their effective implementation.

7 SECURITY

7.1 MONEY LAUNDERING

A day after a trial court granted bail to Delhi Chief Minister Arvind Kejriwal who is in jail on charges under the Prevention of Money Laundering Act (PMLA), the Delhi High Court stayed the order.

News Details

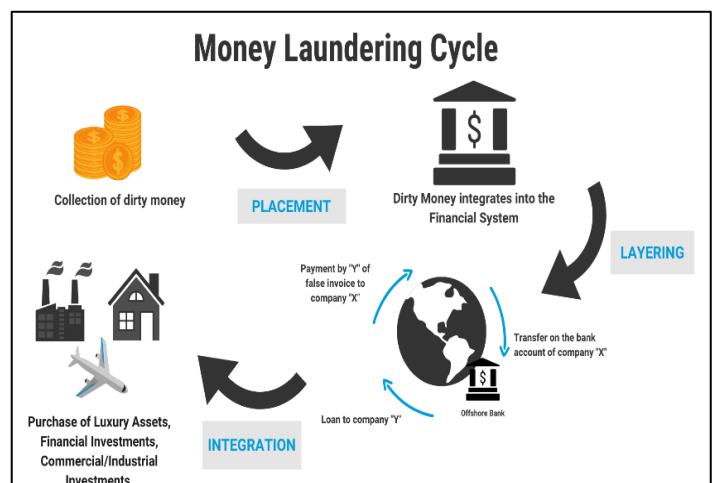
- The Enforcement Directorate (ED) argued that the trial court had failed to apply the **"twin test" for granting bail under PMLA**. This accusation suggests that the ED believes the lower court's decision was not in line with established legal procedures for cases involving money laundering charges.
- Twin Test:** The "twin test" under PMLA for granting bail typically involves **two key conditions**.
 - First**, the court must be satisfied that there are reasonable grounds to believe the accused is not guilty of the offense.
 - Second**, the accused is not likely to commit any offense while on bail.
- This stringent test is designed to ensure that individuals accused of serious financial crimes are not released without careful consideration.

About Money Laundering

- Definition:** Money laundering involves taking money generated from illegal activities and making it appear legitimate by concealing its source, nature, and ownership.

Step-by-Step Mechanism of Money Laundering

- Placement:** The initial stage where **illicit funds are introduced into the financial system** through cash deposits, purchasing assets, or using money transfer services, often **breaking large sums into smaller, less suspicious amounts**.
- Layering:** Conducting a **series of complex financial transactions to obscure the money trail**, such as transferring funds between multiple accounts, countries, or financial institutions to create confusion and evade detection.
- Integration:** The process of **merging laundered funds with legitimate business operations or investments**, making it appear as though the money comes from legal sources and enabling its use in the mainstream economy.
- Extraction:** The final stage where **"clean" money is withdrawn for personal use or reinvestment** in further criminal activities, often through seemingly legitimate channels such as salary payments or business profits.



Objectives of Money Laundering

- Concealment:** Money laundering allows criminals to hide their wealth and **avoid detection by law enforcement agencies**.
- Maintaining social status:** It allows criminals to lead lavish lifestyles and integrate into respectable society without raising suspicion, often using laundered money to acquire luxury goods, properties, and influential social connections.
- Funding Activities:** Clean money can be used to **finance further criminal operations** or bribe corrupt officials.
- Evade Taxes:** Criminals can use laundering to evade taxes on their illicit earnings.

Sources Involved in Money Laundering

- **Organized crime:** Major contributors include **drug trafficking syndicates, human trafficking networks, and extortion rackets**, which generate large amounts of cash that need to be laundered to appear legitimate.
- **Corruption:** High-level bribery, embezzlement, and misappropriation of public funds by **politicians, government officials and corporate executives**, often involving complex schemes to hide the stolen money.
- **Tax evasion:** Undeclared income and profits from **legitimate businesses**, where individuals or companies attempt to hide their true earnings from tax authorities through various laundering techniques.
- **Terrorist Organizations:** Funds raised through various means, including donations, front businesses, and criminal activities, which are then laundered to support extremist activities and evade detection by security agencies.
- **Real Estate:** The real estate sector can be vulnerable to money laundering due to high-value transactions and opaque ownership structures.
- **Hawala System:** The Hawala system, an informal money transfer network, can be misused to move funds across borders without detection.
- **Trade-Based Laundering:** Over/under invoicing in international trade can be used to illegally move money across borders.

Negative Impact of Money Laundering

- **Economic instability:** Money laundering distorts market dynamics and undermines financial system integrity by introducing large amounts of illicit funds, which can lead to unpredictable economic fluctuations and reduced foreign investment.
- **Governance erosion:** It weakens institutions through corruption and loss of public trust, as money laundering often involves bribing officials and compromising the integrity of government and financial institutions.
- **Social inequality:** Money laundering widens the wealth gap and promotes unfair competition by allowing criminals to amass significant wealth and influence, while legitimate businesses struggle to compete on an uneven playing field.
- **National security threats:** It facilitates terrorism and other criminal activities that endanger public safety by providing a means for illegal organizations to finance their operations and expand their reach within society.
- **Financial Inclusion:** Efforts to promote financial inclusion can inadvertently increase the risk of money laundering if anti-money laundering (AML) safeguards are not adequately implemented in new financial products and services (Press Information Bureau).

Challenges in Tackling the Money Laundering

- **Technological Advances:** the rise of cryptocurrencies and digital assets provides new avenues for laundering money, making it difficult for authorities to track and regulate transactions due to their anonymous and decentralized nature (Press Information Bureau).
- **Globalization:** The increasing ease of conducting cross-border transactions complicates the detection and enforcement of money laundering activities, requiring greater international cooperation and coordination (Press Information Bureau).
- **Resource Constraints:** Many countries, particularly developing nations, face resource constraints that limit their ability to effectively implement and enforce AML measures (Press Information Bureau).
- **Complexity and Adaptability:** Money launderers continually develop more sophisticated methods to evade detection, necessitating continuous adaptation and enhancement of AML strategies (Press Information Bureau).
- **Political and Institutional Barriers:** Corruption within law enforcement and regulatory bodies can hinder AML efforts, allowing money launderers to operate with impunity (Press Information Bureau).

Global Initiatives to Curb Money Laundering

- **FATF recommendations:** International standards set by the **Financial Action Task Force for combating money laundering and terrorist financing**, providing a comprehensive framework for countries to implement effective anti-money laundering measures.

- **UN conventions:** Global agreements such as the **United Nations Convention against Transnational Organized Crime** and the Convention against Corruption, which establish international cooperation mechanisms to tackle money laundering.
- **Basel Committee guidelines:** Best practices developed for banks in customer due diligence and risk management, aimed at strengthening the global financial system's resilience against money laundering and other financial crimes.
- **Egmont Group:** An international network facilitating **cooperation among Financial Intelligence Units (FIUs)** from different countries, enabling the secure exchange of expertise and financial intelligence to combat money laundering.

Steps Taken by India to Curb Money Laundering

- **Legislative framework:** Enactment of the **Prevention of Money Laundering Act (PMLA) in 2002**, providing a robust legal basis for combating money laundering and confiscating proceeds of crime.
- **Institutional setup:** Establishment of the **Financial Intelligence Unit-India (FIU-IND)** to collect, analyze, and disseminate information related to suspicious financial transactions and coordinate with various law enforcement agencies.
- **KYC norms:** Implementation of **strict Know Your Customer regulations for financial institutions**, requiring thorough verification of customer identities and regular monitoring of transactions to detect suspicious activities.
- **International cooperation:** Active participation in **global anti-money laundering initiatives and information sharing agreements**, including membership in the FATF and collaboration with foreign FIUs to track cross-border money laundering.

Way Forward

- **Technology adoption:** Leveraging advanced technologies such as artificial intelligence and blockchain for enhanced transaction monitoring and traceability, enabling faster detection of suspicious patterns and improved transparency in financial flows.
- **Capacity building:** Strengthening the capabilities of law enforcement agencies and financial regulators through specialized training, better resources, and improved coordination to effectively investigate and prosecute complex money laundering cases.
- **Public-private collaboration:** Fostering closer collaboration between government agencies and the private sector, particularly financial institutions, to share intelligence, develop best practices, and create a united front against money laundering.
- **Awareness campaigns:** Educating the public about money laundering risks and the importance of reporting suspicious activities, empowering citizens to play an active role in combating financial crimes and protecting the integrity of the economy.

Prevention of Money Laundering Act (PMLA)

- **Introduction:** The Prevention of Money Laundering Act (PMLA) was enacted in India in **2002** and came into force in 2005.
- **Objective:** It aims to combat the serious threat to the financial systems of countries worldwide and to the integrity and sovereignty of nations posed by money laundering activities.
- **Key Provisions:**
 - **Defining Money Laundering & Proceeds of Crime:** Clear definitions establish what constitutes these offenses.
 - **Reporting Obligations:** Financial institutions and other entities must report suspicious transactions.
 - **Attachment & Confiscation:** Authorities can freeze and seize assets suspected to be linked to money laundering.

- **Investigation & Trial Procedures:** The Act outlines procedures for investigating and prosecuting money laundering offenses.
- **Enforcement:** The Directorate of Enforcement (ED) under the Department of Revenue, Ministry of Finance, is responsible for investigating offenses under PMLA.

7.2 STOCKHOLM INTERNATIONAL PEACE RESEARCH INSTITUTE

According to the latest report from the arms tracker SIPRI, India's nuclear weapons stockpile has exceeded Pakistan's for the first time in 25 years.

News Details

- **SIPRI Report:** India's nuclear arsenal has surpassed Pakistan's for the first time in **25 years**.
- **Estimated Stockpile:** The report estimates **India's nuclear warhead stockpile at 172**, compared to **Pakistan's 170**.
- **Shifting Balance:** This development signifies a shift in the regional nuclear balance between the two South Asian neighbors.

About Stockholm International Peace Research Institute (SIPRI)

- **Establishment:**
 - **Founded in 1966:** SIPRI was established on the basis of a decision by the Swedish Parliament.
 - **Independent:** SIPRI does not function under the Swedish government. It is an Independent international institute.
 - **Headquarter:** The institute is headquartered in Stockholm, Sweden.
- **Objective:**
 - Provide data, analysis, and recommendations for armed conflict, security policies, and international relations.
 - Promote dialogue and transparency on military matters.
 - Contribute to peace, democracy, and economic development.
- **Funding**
 - SIPRI receives a substantial part of its funding in the form of an **annual grant from the Swedish Government**. The Institute also seeks financial support from other organizations in order to carry out its research
- **Functions:**
 - Conducts research on global security, armaments, and disarmament.
 - Maintains databases on military expenditures, arms transfers, and nuclear forces.
 - Publishes yearbooks, policy papers, and reports on security issues.
- **Structure:** SIPRI's organizational structure comprises the Governing Board and the Director, a Deputy Director, the Research Staff Collegium, and Support Staff, together numbering around 100 people.

7.3 NATIONAL SECURITY ADVISOR

Overview

- **Role:** The NSA is a senior official on the National Security Council of India, serving as the chief advisor to the Prime Minister on national security policy and international affairs.

Creation and Evolution

- **Creation:** Established on 19 November 1998 by the Atal Bihari Vajpayee government.
- **Merger and Demerger:** Separated into foreign and internal departments in 2004 by the Manmohan Singh government; merged again in 2005.

Appointment and Tenure

- **Appointment:** Made by the Appointments Committee of the Cabinet.
- **Tenure:** No fixed tenure; serves at the Prime Minister's discretion. Terms and conditions are notified separately.
- **Rank:** Determined by the Prime Minister; current NSA Ajit Doval was elevated to **Cabinet Minister rank** in 2019.

Roles and Responsibilities

- **Advise:** Advises the Prime Minister on national and international security issues.
- **Special Interlocutor:** Acts as the Prime Minister's Special Interlocutor with China and as envoy to Pakistan and Israel on security matters.
- **Intelligence Coordination:** Receives and coordinates intelligence reports from various agencies (R&AW, IB, NTRO, MI, DIA, NIA) for the Prime Minister.

7.4 VISHING

- It is a voice-based fraud or social engineering attack done through voice call to win trust and convince victims to complete an action or give up sensitive information.
- **Mode of action:** Vishing attacks exploit human emotions such as greed, lust, fear, compassion, or urgency, and trick victims into giving up sensitive information or carrying out an action.
 - a fake charity requesting donations for a noble cause like disaster relief.
 - a stranger impersonating an IRS official threatening the victim with fines or imprisonment unless they make an immediate tax payment.
 - a romance scam where the perpetrator pleads for the victim to transfer funds for a family emergency

Some other forms of phishing attacks

- **Phishing** - Phishing is done through **e-mail**. A typical phishing message will appear to be from a well-recognized company containing a link to a web site requiring one to fill their personal information.
- **Smishing** - Smishing is **SMS phishing**. It is a form of phishing that uses cell phone text messages instead of email messages.
- **Pharming** - Instead, it uses malicious code to **redirect a person to the criminal's site without their consent or knowledge**, making it more difficult to detect.

7.5 THE RIM OF THE PACIFIC EXERCISE (RIMPAC)

- **The Rim of the Pacific Exercise (RIMPAC):** It is the world's largest multilateral international maritime exercise, held biennially in and around the Hawaiian Islands.
- India is an active participant in RIMPAC 2024, deploying the indigenous stealth frigate INS Shivalik.
- **Objective:** Aims to enhance interoperability among participating naval forces, improve readiness for a wide range of potential operations, and strengthen relationships among participants.
- **Formation:** RIMPAC was first held in 1971
- **RIMPAC 2024:** It will be held in the Hawaiian Islands.

7.6 LIGHT COMBAT HELICOPTER (PRACHAND)

- HAL received a request for proposal from the Defence Ministry for **156 light combat helicopters worth ₹45,000 crore**.
- **Type:** The HAL Prachand is an **Indigenous multi-role light attack helicopter** designed and manufactured by **Hindustan Aeronautics Limited (HAL)**.
- **Concept:** It was conceptualized **after the 1999 Kargil conflict** when the need for a dedicated platform capable of operating in high altitudes was felt.
- **Engines:** It is a **twin-engine rotary wing craft of 5-8 tonne class**.

-
- **Service ceiling:** It is the **only attack helicopter in the world which can land and take-off at an altitude of 5,000 m** (16,400 ft) with considerable load of weapons and fuel.
 - **Weapons:** It has 20mm nose gun, 70 mm rockets, anti-tank guided missile 'Dhruvastra' and air-to-air missile 'Mistral-2' of MBDA whichever has a maximum interception range of 6.5 km.

8 HISTORY AND CULTURE

8.1 NALANDA UNIVERSITY

PM inaugurates Nalanda University Campus in Rajgir, Bihar.

Revival of Nalanda - Background

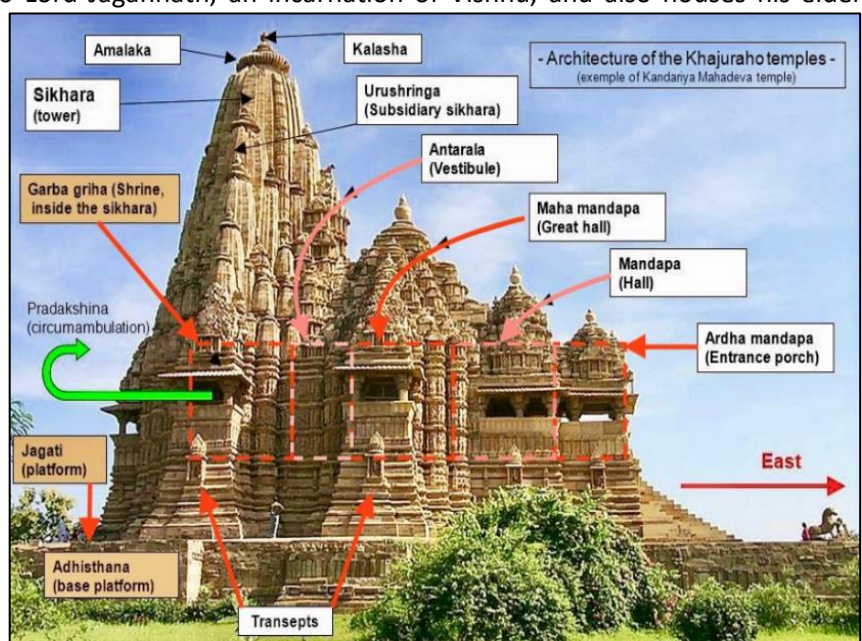
- **Nālandā University:** It is a central research university located in the ancient city of Rajgir in the state of Bihar, India. Designated as an Institute of National Importance (INI) and excellence, it is the flagship project of the Ministry of External Affairs of the Government of India.
- **Resurgence idea:** In 2010, the Government of India passed a resolution to revive the famous university, and a contemporary institute, Nalanda University, was established at Rajgir **based** on decisions taken at the **East Asia Summits in 2007 and 2009**.
- **Former President Pranab Mukherjee laid the foundation stone for the permanent campus in 2016 at Pilkhi village in Rajgir.**
- **International Participation:** It has participation from 17 nations, including Australia, Bangladesh, Bhutan, China, and others, who have signed MoUs in support of the university.
- **Ancient Nalanda University - History**
- **Founder: Kumaragupta (Shakraditya) of the Gupta dynasty** founded Nalanda University in modern Bihar in the early 5th century, and it flourished for 600 years until the 12th century.
- **Popularity:** During the era of Harshavardhana and the Pala monarchs, it rose to popularity.
 - Until the 12th century 1193 AD, when **Turkish ruler Qutbuddin Aibak's general Bakhtiyar Khilji** demolished Nalanda University, the university remained a hub of intellectual activity.
- It is a UNESCO World Heritage Site.

8.2 JAGANNATH TEMPLE

Odisha's newly elected government in its first Cabinet meeting approved a proposal to re-open all four gates of Shree Jagannath Temple in Puri and set up a corpus fund for immediate requirements.

About Jagannath Temple

- **Dedication:** The temple is dedicated to Lord Jagannath, an incarnation of Vishnu, and also houses his elder brother Balabhadra and sister Subhadra.
- **Historical Background:** The current structure was rebuilt by the **Ganga dynasty king Anantavarman Chodaganga** in the 12th century CE. The original temple's origins are unclear.
- **Architectural Style:** Built in the **Kalinga style**, a sub-type of the **Nagara style**, featuring towering structures adorned with intricate carvings. The main temple has a curvilinear tower crowned by the eight-spoked wheel of Vishnu.



- **Rath Yatra:** The annual Rath Yatra (chariot procession) is a major festival, where massive chariots carry the deities through the city streets, drawing throngs of devotees.
- **Spiritual Significance:** It is one of the Char Dhams, the four sacred pilgrimage sites in India, holding immense significance for Hindus, particularly Vaishnavites.

Nagara School of Temple Architecture

- **Sacred Architecture:** The Nagara style represents a significant school of Hindu temple architecture that originated in **northern India**.
- **Symbolic Representation:** These temples are designed to symbolize the sacred **Mount Meru**, the mythical abode of the gods, through their towering **shikharas** (spires).
- **Abode of Shaivism and Vaishnavism:** Primarily associated with Shaivism and Vaishnavism, two prominent Hindu denominations, Nagara temples reflect the spiritual aspirations of these faiths.
- **Origins and Evolution:** Dating back to the 5th century AD, it evolved through influences from the Guptas and other regional kingdoms, incorporating elements from Central Asian styles.

Sub-schools of Nagara Style and their Distinctions:

Sub-school	Region	Key Characteristics	Example
Khajuraho / Chandela	Central India (Madhya Pradesh)	• Sandstone construction. • Shikhara curve from bottom to top. • There are a number of miniature Shikharas rising from the central tower. • Sensuous sculptures.	Khajuraho Temples
Solanki	Gujarat	• Black or red sandstone construction. • They have a carved ceiling that looks like a real dome. • A distinctive feature of these temples is small and intricate decorative motifs. • Carvings can be seen both inside and outside the walls, except for the central temple. • Emphasis on pillared halls (mandapas)	Modhera Sun Temple
Kalinga	Odisha	• Sandstone construction. • The most prominent distinguishing feature is the Shikara (Deul) which rises vertically before curving inwards at the top. The main type is square while the upper reaches are circular. • These temples have intricately carved exteriors and usually bare interiors. • Unlike Nagara temples of the north, most Odisha temples have boundary walls. • Profuse use of lion sculptures.	Konark Sun Temple

Characteristics of Nagara Style of Temple Architecture

- **Vastu Purusha Mandala:** Aligns the temple plan with cosmic forces.
- **Garbhagriha (Sanctum Sanctorum):** The innermost chamber housing the principal deity.
- **Pradakshina Patha:** A circumambulatory path around the garbhagriha.
- **Vimana (Tower):** The main spire representing Mount Meru.

- **Mandapa (Congregation Hall):** A space for rituals and gatherings.
- **Antarala (Vestibule):** Transitional space between the garbhagriha and mandapa.
- **Ardha Mandapa (Entrance Porch):** The entrance, featuring ornate pillars and carvings.
- **Peripheral Structures:** Smaller shrines surrounding the central shrine.

8.3 AHILYABAI HOLKAR

31st May 2024 was celebrated as the 300th birth anniversary of the Maratha queen Ahilya Bai Holkar.

About Ahilyabai Holkar

- **Birth:** Born in 1725 to a shepherd (Dhangar/Gadariya) family in what is today Maharashtra's Ahmednagar district.
- **Marriage:** At a young age Ahilyabai was **married to Khande Rao Holkar, a commander in the service of the Maratha Peshwa Balaji Baji Rao and lord of the Malwa territory.**
- Ahilya Bai rose to prominence after the deaths of her husband and father-in-law.
- Defying societal norms, Ahilya Bai never observed purdah (seclusion) and held daily public audiences, ensuring her people had direct access to their queen.

Contribution to Art and Culture

- **A Patron of the Arts:** Ahilya Bai was a great patron of art and culture. She supported renowned scholars, poets, musicians, and artists, fostering a vibrant cultural scene in her kingdom.
- **Revival of Hinduism:** She actively promoted the revival of Hinduism, sponsoring the restoration of ancient temples and pilgrimage sites.
- **Maheshwar's Transformation:** Her capital, Maheshwar, flourished under her patronage and became the center of cultural transformation.
- **Textile Industry:** She established a thriving textile industry renowned for its exquisite Maheshwari **sarees**, even today a symbol of cultural heritage.
- **A Legacy of Tolerance:** Ahilya Bai respected all religions and cultures, creating an environment of harmony and inclusivity within her kingdom.

Women Empowerment

- **Champion of Women's Education:** Ahilya Bai actively promoted girls' education. She established schools and encouraged women to pursue knowledge, breaking societal barriers and empowering them through intellectual freedom.
- **Opposing Societal Restrictions:** Ahilya Bai actively discouraged practices that limited women's mobility and participation in society. **Sati**, the forced burning of widows on their husband's funeral pyres, was a prevalent custom she vehemently opposed.
- **Economic Independence:** Understanding the importance of economic self-sufficiency, Ahilya Bai established initiatives that provided women with opportunities to earn a livelihood. The famed Maheshwari textile industry is a great example.

Administration

- **A Just Ruler:** Her administration was known for its fairness and efficiency. She implemented reforms to ensure equal justice for all, irrespective of caste or social status.
- **Focus on Infrastructure:** She prioritized infrastructure development, building roads, bridges, wells, and irrigation systems to improve connectivity and boost agriculture.
- **Promotion of Education:** She placed great emphasis on education, establishing schools and educational institutions to promote literacy and knowledge among her people.
- **Economic Prosperity:** Her wise economic policies fostered trade and commerce, leading to increased prosperity for her subjects.

- **Social Welfare:** She championed social welfare initiatives, abolishing oppressive practices like the confiscation of property from childless widows.

8.4 SATNAM PANTH

The Satnami community had been protesting for weeks to seek a CBI probe into the attack on 'jaitkhamb' worshipped by the community in Girodpuri area

About Satnami Community

- Socio-religious group.
- Predominantly scheduled caste.
- Found in Chhattisgarh, Madhya Pradesh, and Haryana.

About Satnampanth

- **Foundation:** Established in 1657 by Birbhan in Narnaul (present-day Haryana).
- **Influence:** Popularised the expression "sat naam" (true name) by the 15th-century poet Kabir.
- **Origins:** Offshoot of the Ravidassia sect; Dhodas, the first priest, was a disciple of Saint Ravidas.
- **Principles:**
 - Emphasises social equality and rejects caste-based discrimination.
 - Adorn the attire of a Satnami devotee.
 - Earn money through proper means.
 - Do not tolerate any injustice or oppression.

Satnami Revolt 1672:

- Occurred during the reign of Mughal Emperor Aurangzeb in Narnaul.
- **Reasons:** Revival of Islamic *Jizya tax*, banning music and art, and destroying Hindu temples.
- **Trigger:** Killing of a Satnami by a Mughal soldier.
- **Impact:** Despite limited resources, the Satnamis fiercely resisted Mughal forces, symbolising defiance against religious persecution.

8.5 KOYA TRIBE

Andhra's Koya tribe faces brewing conflict over sacred Mahua flower.

About Koya Tribe

- **Location:** The Koya tribe is a multi-racial and multi-lingual tribal community inhabiting forests, plains, and valleys on both sides of the Godavari River, **specifically in the states of Andhra Pradesh, Telangana, Chhattisgarh, and Odisha.**
- Historically, they are believed to have migrated to central India from their original **home in Bastar, northern India.**
- **Language:** Koyi, (Dravidian language closely related to Gondi and strongly influenced by Telugu).
- **Occupation:** Koya were pastoralists and practiced shifting cultivation. Today, they have largely transitioned to settled cultivation.
- **Religion:** Own ethnic religion while also worshiping several Hindu deities. Worshiping female deities "**mother earth**" is most significant.
- **Kommu Koya dance**, during which two **Bison horns** are adorned on the head as part of the attire, and the **Permakore flute**, which is made of a single horn.
- **Community Practices:** The Koya maintain community funds and grain banks at the village level to support needy families and ensure food security. They either bury or cremate their dead and erect **menhirs in memory of the deceased.**

Mahua Liquor

- Mahua liquor is essential in social rituals and festivals such as Weddings, Bhumi Panduga, Pachha Panduga, Chikkudukai Panduga, Kolupu, Maamidi Panduga, Sammakka-Sarakka Jatara etc.
- **Concern:** The Andhra Pradesh Prohibition Act, 1995, does not exempt Koya tribe's traditional brewing of Mahua liquor, clashing with their cultural practices.
- Despite the **PESA Act empowering gram sabhas** to protect tribal customs, enforcement by the State Excise Bureau often ignores these provisions, leading to intensified raids and restrictions under current government policies.

8.6 DARJEELING HIMALAYAN RAILWAY

Toy train death puts in focus encroachment along iconic Darjeeling railway

Overview

- **Location:** Runs between New Jalpaiguri and Darjeeling in West Bengal, India.
- **World Heritage Status:** Designated as a UNESCO World Heritage Site in 1999.
- **History:** Built between 1879 and 1881 by British engineers.
- **Gauge:** Operates on a narrow two-feet gauge track, spanning 88 kilometers.

Significance

- **Engineering Feat:** Renowned for its engineering ingenuity and scenic route.
- **Tourist Attraction:** Major draw for tourists, offering views of the Himalayas and Darjeeling's landscapes.
- **Community Engagement:** The DHR hosts events like the **Ghum Winter Festival** to attract tourists and engage the local community, promoting cultural heritage and tourism.
- **Related Railways:** Along with the Nilgiri Mountain Railway and the Kalka Shimla Railway, it is **one of India's three mountain railways** designated as UNESCO World Heritage Sites.

Current Issue

- Recent incidents, such as the toy train death, have highlighted the issue of encroachment along the railway.
- **Reasons for Encroachment:**
- **Population Pressure:** Increasing population in the region leads to unauthorized settlements near the railway tracks.
- **Lack of Enforcement:** Inadequate enforcement of laws and regulations contributes to the proliferation of encroachments.
- **Economic Factors:** Locals often build makeshift structures for commercial purposes, such as small shops, to benefit from tourist footfall.

8.7 PANDIT RAJEEV TARANATH

In News

- Sarod maestro Pandit Rajeev Taranath passes away at age 92.

About Pandit Rajeev Taranath

Early Life:

- Born on October 17, 1932, to Pandit Taranath and Sumathi Bai.
- Originally a vocalist, he transitioned to the **sarod** under the tutelage of Ustad Ali Akbar Khan.

Education:

- Obtained a PhD in "Image in Poetry of T S Eliot" from the University of Mysore under Prof. C.D. Narasimhaiah.



Musical Journey:

- Started musical training with **Ustad Ali Akbar Khan**.
- Known for imaginative power, technical excellence, and emotional depth in his music.
- Also mentored by Pandit Ravi Shankar and Annapurna Devi.
- Prominent figure in the **Senia Maihar Gharana**.

Awards:

- Padma Shri (2019).
- Sangeet Natak Akademi Award (2000).
- Rajyotsava Award (1996).
- Chowdiah Memorial Award (1998).
- Sangeet Vidhwan Award (2018).
- Nadoja Award (2019).

Work:

- Composed music for several acclaimed Kannada films, including "Samskara," "Pallavi," and "Anuroopa."
- Served on the faculty of the California Institute of the Arts (1995-2005).

Legacy:

- Renowned for his ability to evoke profound emotions through the sarod.
- Recognized for his role in promoting Hindustani classical music globally.
- Performed at prestigious venues worldwide, including the Sydney Opera House and the Smithsonian Institution.

8.8 VISVA BHARATI UNIVERSITY

- It is a public central university and an **Institute of National Importance** located in Shantiniketan, West Bengal.
- **Founder:** the Nobel laureate Rabindranath Tagore
- **Established:** It was established in the year 1921
- **Purpose:** University embodies Tagore's vision of an institution that integrates the best of Eastern and Western educational traditions, fostering holistic development.
- The institution's name, meaning "**Communion of the World with India**," reflects its global outlook.
- **Initial status:** It was initially established as an open-air school, Vishwa Bharati evolved into a renowned university by 1951.

Ideals

- **Tagore's philosophy:** Emphasizing learning in harmony with nature, artistic expression, and the importance of international understanding.
- **Peace:** To uphold its founder's legacy by promoting values of peace, harmony, and cultural exchange and stands as a beacon of education and cultural Heritage
- **Contributions:** It has produced numerous distinguished alumni who have made significant contributions to various fields, including literature, arts, science, and politics.

8.9 SARCOPHAGUS

- **Definition:** A sarcophagus is a coffin, typically carved from stone, often displayed above ground but may also be buried.
- **Discovery:** In 2009, a sarcophagus was found in an Egyptian burial chamber with ancient writing indicating it had been reused.
- **Identification:** The sarcophagus has been identified as belonging to King Ramesses II.
- **Earliest Stone Sarcophagi:** Used by Egyptian pharaohs of the 3rd dynasty, which reigned from approximately 2686 to 2613 B.C.

Importance of Sarcophagi

- **Cultural Significance:** Sarcophagi provide insights into the religious beliefs and burial practices of ancient civilizations, particularly the Egyptians.
- **Artistic Value:** These coffins are often elaborately decorated with carvings, paintings, and inscriptions, showcasing the artistry and craftsmanship of the period.
- **Historical Records:** Inscriptions on sarcophagi can offer detailed accounts of the lives and achievements of the individuals interred within, providing valuable historical information.
- **Archaeological Insights:** The study of sarcophagi helps archaeologists understand ancient funerary customs and the social and political context of the era.

Ramesses II

- **Title:** Third king of the 19th dynasty of Egypt.
- **Reign:** From 1279 to 1213 BC, the second longest reign in Egyptian history.
- **Achievements:** Known for his military campaigns and architectural projects, commissioning numerous monuments and statues of himself.
- **Legacy:** Often referred to as "Ramesses the Great," he is considered one of Egypt's most powerful and influential pharaohs.
- **Mummy:** Currently housed at the National Museum of Egyptian Civilization in Cairo.

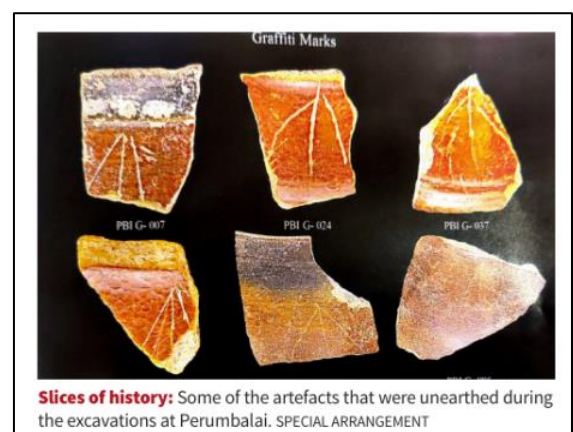
8.10 INTERNATIONAL DAY OF YOGA

- **UN Recognition:** The United Nations proclaimed **21 June** as the International Day of Yoga on 11 December 2014, through **resolution 69/131**.
- **2024 Theme:** "**Yoga for self and society**" focuses on the role of Yoga in fostering individual well-being and societal harmony. This year marks the **10th anniversary** of the International Day of Yoga.
- **Ancient Practice:** Yoga, an ancient discipline integrating physical, mental, and spiritual practices, originated in India. The term 'yoga' is derived from the Sanskrit word meaning *to join or unite*, symbolizing the *union of body and consciousness*.
- **Pioneer:** *Maharshi Patanjali*, often regarded as the father of Yoga, compiled the **Yoga Sutras**, a foundational text on Yoga philosophy.
- **Significance of Date:** 21 June, being the **longest day of the year** in the Northern Hemisphere, holds special significance, representing the shift to *Dakshinayana*. This period is believed to aid in spiritual practices.
- **Objective:** The day aims to raise awareness worldwide about the numerous health and wellness benefits of practicing Yoga, promoting a holistic approach to health.

8.11 PERUMBALAI

News details

- Tamil Nadu's Department of Archaeology has uncovered ancient graffiti-marked potsherds at Perumbalai, **Dharmapuri district**, dating back to the 6th Century BCE.
- **Overview**
- **Location:** Situated on the bank of the Nagavathi (ancient Palar), a tributary of the Cauvery River.
- **Significance:** Perumbalai features potsherds inscribed with Tamil (Tamil-Brahmi) and graffiti, similar to other early historic sites like Vallam, Kodumanal, Keeladi, Uraiyur, and Karur.



Key Findings

- A total of 1,028 inscribed potsherds were recovered, predominantly featuring **geometrical signs**.

- The pottery from the lowermost levels is thin and fine, primarily **Black and Red Ware (BRW)** and **black ware**.
- The clay used for the pottery was fine and well-levigated, indicating advanced pottery techniques.
- A fully shaped black-and-red ware bowl with a **Swastika sign** was uncovered.
- Various terracotta objects and metal artefacts, including human and bird figurines, beads, and a copper coin, were found, providing insights into daily life, trade, and artistic practices during the Iron Age and early historic period.

Interpretation and Implications

- **Cultural Development:** The presence of geometrical signs and sophisticated pottery techniques indicates a high level of cultural development.
- **Social Structure:** The artefacts suggest a complex social structure with rich artistic traditions and extensive trade networks.
- **Historical Importance:** This excavation reinforces the importance of Tamil Nadu in the broader narrative of ancient Indian history.
- **Artistic Expressions and Trade Practices:** The discovery at Perumbalai adds significant value to our understanding of early Tamil civilisation, particularly in terms of artistic expressions and trade practices.

9 INSTITUTION IN NEWS

9.1 CENTRAL BOARD OF FILM CERTIFICATION

A thirteen-member Nepal delegation visited the Central Board of Film Certification (CBFC) Mumbai to strengthen ties between film development and censor authorities of both countries.

Basic Details

- **Statutory Body:** Operates under the Cinematograph Act, 1952.
- **Ministry:** Functions under the Ministry of Information and Broadcasting.
- **Purpose:** Certifies the suitability of feature films, short films, trailers, documentaries, and theatre-based advertising for public viewing.
- Films can only be exhibited to the public after certification by the CBFC.

Headquarters and Offices

- **HQ:** Mumbai
- **Regional Offices:** Nine offices in Bangalore, Chennai, Cuttack, Guwahati, Hyderabad, Kolkata, Mumbai, New Delhi, and Thiruvananthapuram.
- **Leadership and Composition**
- **Chairperson:** Usually a notable figure from the arts and entertainment industry.
- **Members:** Supported by a team of 25 administrative members.

Certification Categories

- **U (Universal):** Unrestricted public exhibition.
- **UA (Parental Guidance):** Unrestricted public exhibition with parental discretion advised for children under 12 years.
- **A (Adult):** Restricted to adult audiences.
- **S (Special):** Restricted to a special class of persons.

9.2 INDIA'S 2036 OLYMPIC BID TO ADD INDIC SPORTS

India's bid for the 2036 Olympics includes a proposal to add six sports to the Olympic program: yoga, T20 cricket, kabaddi, chess, squash, and kho kho.

2024 Olympic Games

- **Host City:** Paris
- **Dates:** July 26 to August 11, 2024
- **New Sports:** *Breaking (breakdancing)* will debut. Surfing, skateboarding, and sports climbing were introduced in the Tokyo 2021 Games.

Policy on Inclusion of New Sports

- The **International Olympic Committee (IOC)** allows the **host country to propose new sports** for inclusion, provided they meet specific criteria. Examples include the inclusion of *karate in Tokyo 2020* and *flag football in Los Angeles 2028*.

Criteria for a sport to be included in the Olympics

- **Governance by Recognised International Federations (IFs):** The sport must be governed by an IF recognised by the IOC.
- **Adherence to the Olympic Charter:** The sport must follow the rules and principles of the Olympic Charter, which dictate the organization of the Olympic Games.

- **Compliance with the World Anti-Doping Code:** The sport must adhere to a unified anti-doping policy that standardizes rules and regulations across all sports and nations.
- **Adherence to the Olympic Movement Code for the Prevention of Tampering in Competition:** The sport must ensure the integrity of competition by preventing any form of cheating.

9.3 CENTRAL CONSUMER PROTECTION AUTHORITY

The CCPA issued these directions to the company under the Section 21 of the Consumer Protection Act, 2019.

Overview

- **Formation:** Established in 2020 under the Consumer Protection Act, 2019.
- **Control:** Operates under the Ministry of Consumer Affairs.
- **Purpose:** To promote, protect, and enforce the rights of consumers as a class.

Composition

- **Leadership:** Led by a Chief Commissioner.
- **Members:** Includes two commissioners, one for goods and one for services.

Functions

- **Investigations:** Conducts inquiries into consumer rights violations and prosecutes offenders.
- **Recall Orders:** Mandates the recall of unsafe goods and services.
- **Unfair Practices:** Discontinues unfair trade practices and misleading advertisements.
- **Penalties:** Imposes fines on manufacturers and endorsers of misleading advertisements.

Powers

- **Inquiries:** Can initiate suo motu investigations or act on complaints and government directions.
- **Review:** Evaluates matters affecting consumer rights and suggests remedial measures.
- **Research:** Promotes research and awareness in consumer rights.
- **Advisory Role:** Advises government bodies on consumer welfare measures.
- **Safety Notices:** Issues warnings about dangerous or hazardous goods and services.

9.4 QS RANKING

Recently, QS World University Rankings 2025 have been announced, featuring an impressive 1,500 universities across 105 higher education systems.

About QS World University Rankings 2025

- **Announcement:** QS World University Rankings 2025, featuring 1,500 universities across 105 higher education systems.
- **Publisher:** Quacquarelli Symonds (QS), a higher education analytics firm.

Key Highlights

- **Largest Ever:** The 2025 ranking is the largest ever, with over 1,500 universities.
- **Top Represented Countries:** **United States: 197 institutions; United Kingdom: 90 institutions; Mainland China: 71 institutions.**

Evaluation Criteria

- Four Key Areas:
 - Research
 - Teaching
 - Employability
 - International Outlook

Performance Indicators:

- Academic Reputation (30%)
- Employer Reputation (15%)
- Faculty/Student Ratio (10%)
- Citations per Faculty (20%)
- International Faculty Ratio (5%)
- International Student Ratio (5%)
- International Research Network (5%)
- Employment Outcomes (5%)
- Sustainability (5%)

Top Ranked Universities

- Massachusetts Institute of Technology (MIT), 2. Imperial College London, 3. University of Oxford, 4. Harvard University.

Regional Highlights

- Europe: ETH Zurich remains the top institution in Continental Europe for the 17th year.
- Asia: National University of Singapore (NUS) holds its position at eighth place.
- Top Ranked Universities in India
- IIT Bombay: Climbed from 149th in 2024 to 118th in 2025.
- IIT Delhi: Moved up from 197th to 150th.
- New Entry: Symbiosis International (Deemed University) ranked between 641-650 globally.

Significance

- **Global Benchmark:** QS World University Rankings are trusted for assessing academic excellence, research impact, and institutional reputation.
- **Guidance Tool:** Essential for prospective students, researchers, and academics in choosing educational and collaboration opportunities.
- **Policy Influence:** Helps governments and policymakers identify strengths and weaknesses in higher education systems, influencing policy decisions.

9.5 PENSION FUND REGULATORY AND DEVELOPMENT AUTHORITY (PFRDA)

Establishment and Legal Framework

- **Established:** 2003 in India as the Interim Pension Fund Regulatory & Development Authority (IPRDA).
- **Statutory Basis:** PFRDA Act enacted in 2014, provides the legal foundation for its operations.
- **Nodal Ministry:** Ministry of Finance.
- **Headquarters:** Located in New Delhi.
- **Regional Offices:** Distributed across the country to ensure comprehensive oversight and accessibility.

Objectives and Functions

- **Regulating NPS and Applicable Pension Schemes:** Overseeing the National Pension System (NPS) and schemes like Atal Pension Yojana (APY) through policy formulation and guidelines.
- **Establishing and Regulating Pension Funds:** Promoting the stability and growth of the pension industry.
- **Protecting Subscriber Interests:** Implementing mechanisms to safeguard the rights and benefits of contributors.
- **Registration and Regulation of Intermediaries:** Overseeing intermediaries in the pension sector.
- **Approval of Schemes and Norms:** Establishing and approving pension schemes and norms, ensuring regulatory compliance.
- **Grievance Redressal Mechanisms:** Developing systems for addressing grievances and protecting subscribers.

Governance Structure

- **Composition:** As specified in Section 4 of the PFRDA Act:
- **Chairperson:** Appointed by the Central Government.
- **Three Whole-Time Members:** Appointed by the Central Government.
- **Three Part-Time Members:** Appointed by the Central Government, selected from individuals of ability, integrity, and standing with expertise in economics, finance, or law.

9.6 TA 912 AUTHORITY

In response to a tragic collision involving a goods train and the Kanchanjunga Express in West Bengal, which resulted in 10 fatalities and 43 injuries, Eastern Railway has banned the issuance of Travel Authority (TA-912).

About TA 912 Authority

- **Definition:** TA-912 is a Travel Authority issued by railway officials, authorizing Locopilots to pass a signal displaying danger (red) during signal failures.
- **Purpose:** This authority is meant to ensure the continuation of train operations when signals malfunction.
- **Safety Measure:** The recent decision to ban TA-912 aims to strengthen safety protocols and prevent similar incidents in the future.

Eastern Railway

- **Overview:** Eastern Railway (ER) is one of the 18 zones of Indian Railways, headquartered in Kolkata, West Bengal.
- **Formation:** Established in 1952 through the amalgamation of the Howrah, Asansol, and Danapur divisions, along with the complete Bengal Nagpur Railway.
- **Network:** ER operates extensive rail networks across the eastern and northeastern regions of India, covering parts of West Bengal, Jharkhand, and Bihar. It is crucial for connecting major cities and towns, facilitating both passenger travel and freight transportation.
- **Divisions:** Eastern Railway is divided into four key divisions:
 - Howrah
 - Sealdah
 - Asansol
 - Malda

Significance of the Ban

- **Enhanced Safety:** The ban on TA-912 is expected to significantly improve safety measures by preventing Locopilots from bypassing signals under potentially hazardous conditions.
- **Operational Impact:** While this measure enhances safety, it may require the development of new protocols to manage train operations during signal failures effectively.
- **Future Preventive Measures:** This incident underscores the need for continuous evaluation and improvement of railway safety standards to avoid such tragedies.

10 PLACES IN NEWS

10.1 KOLAR GOLD FIELDS

The Karnataka government has approved a proposal from the Centre to revive gold mining and auction 13 tailing dumps over 1,003.4 acres at Kolar Gold Fields (KGF) by Bharat Gold Mines Ltd. (BGML).

About Kolar Gold Fields (KGF)

- **Location:** KGF is situated in the Kolar district of Karnataka, India.
- **Historical Significance:** KGF was one of the major gold mining centers in India and among the deepest mines globally, reaching depths up to 3.2 kilometers.
- **Early Operations:** Gold mining began in 1871 under the British firm John Taylor & Sons.
- **Post-Independence:** BGML took over in 1972 but ceased operations in 2001 due to economic non-viability.
- **Revival Efforts:** Recently, efforts to restart gold mining have been initiated, aiming to boost employment and the local economy.

Legislative Approval and Framework

- **Approval:** The proposal was approved under Column 17 of the **Mines and Minerals Development and Regulation (MMDR) Act, 1957**, following the Centre's request for State consent.
- **Framework:**
 - **State Ownership:** The state government owns minerals within its boundaries (List II, Entry 23).
 - **Central Ownership:** The central government owns minerals within the exclusive economic zone (List I, Entry 54).
 - **MMDR Act of 1957:** Regulates mineral development and mining.
 - **MMDR Amendment Act of 2015:**
 - Introduced mineral concessions through auctions.
 - Established the District Mineral Foundation (DMF) to address the grievances of mining-affected people.
 - Created the National Mineral Exploration Trust (NMET) to encourage exploration and curb illegal mining.

India's Gold resources in terms of the metal ore (primary) are located in

- India's gold resources are primarily concentrated in specific states, with both primary ore and metal content.
- **Primary Gold Ore Locations:**
 - **Bihar:** 45% of India's primary gold ore.
 - **Rajasthan:** 23%.
 - **Karnataka:** 22%.
 - **Other States:** West Bengal (3%), Andhra Pradesh and Madhya Pradesh (2% each).
- **Gold Metal Content:**
 - **Major States:** Karnataka, Rajasthan, Bihar, Andhra Pradesh, Jharkhand, among others.
 - **Key Gold Fields:**
 - **Kolar Gold Fields (KGF):** Historically significant and currently under revival.
 - **Hutti Gold Fields:** Located in Raichur district, Karnataka.
 - **Ramgiri Gold Fields:** Situated in Andhra Pradesh.

Socio-Economic Impact

- **Employment:** Reviving mining operations at KGF is expected to create job opportunities and support local economies.
- **Community Development:** The DMF funds can be utilised for the socio-economic development of mining-affected communities.

- **Economic Growth:** Increased gold production can boost revenue for the state and central governments, contributing to overall economic growth.
- **Skill Development:** Mining projects can facilitate skill development and training programs for local workers, enhancing their employability and economic prospects.

Environmental Concerns

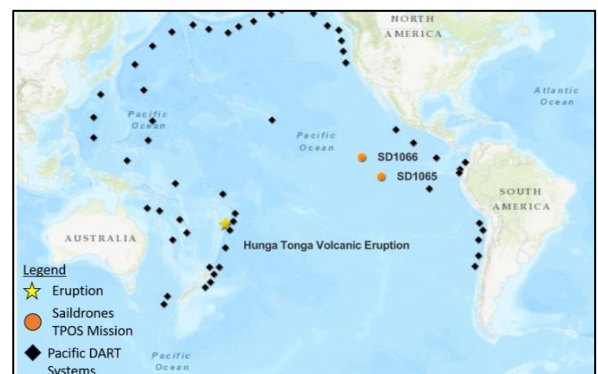
- **Sustainability:** Ensuring sustainable mining practices to minimise environmental impact.
- **Rehabilitation:** Proper rehabilitation of mined areas to restore ecological balance.

Way Forward

- **Modern Mining Technologies:** Utilise hydraulic mining, the cyanidation process, and automated mining equipment to enhance efficiency and safety.
- **Geospatial Technologies:** Employ advanced mapping and exploration techniques for accurate resource identification and extraction planning.
- **Sustainable Practices:** Implement real-time environmental monitoring systems to ensure compliance with sustainability standards and minimise ecological impact.
- **Community and Infrastructure Development:** Engage local communities in decision-making processes and strengthen infrastructural safeguards like dams and drainage systems to support sustainable operations and socio-economic growth.

10.2 TONGA VOLCANO

- **Type:** It is a submarine volcano.
- **Location:** It is in the Tongan archipelago in the southern Pacific Ocean about 65 km (40 mi) north of Tongatapu, Tonga's main island.
- **Tonga–Kermadec Islands volcanic arc:** It is part of the highly active Tonga–Kermadec Islands volcanic arc, a subduction zone extending from New Zealand to Fiji.
- **Threats:** This volcano triggered a Pacific-wide tsunami and sent sound waves globally multiple times.



10.3 HATHNIKUND BARRAGE

Overview

- **Location:** Yamuna River, Yamuna Nagar district, Haryana.
- **Construction:** 1999-Concrete barrage.
- **Purpose:** Divert water for irrigation and water supply.
- **Replacement:** Superseded the Tajewala Barrage (constructed in 1873, located 3 km downstream, now out of service).

Key Features

- **Water Diversion:** Channels water into the Western and Eastern Yamuna Canals.
- **Wetland Creation:** The small reservoir functions as a wetland.
- **Biodiversity:** Supports 31 species of waterbirds.

Difference between Dam and Barrage

Feature	Dam	Barrage
Purpose	Create a storage reservoir upstream.	Divert river flow.

Function	Storage headwork	Diversion headwork
Water Elevation	Significant	Few feet
Reservoir	Significant upstream storage	Not significant

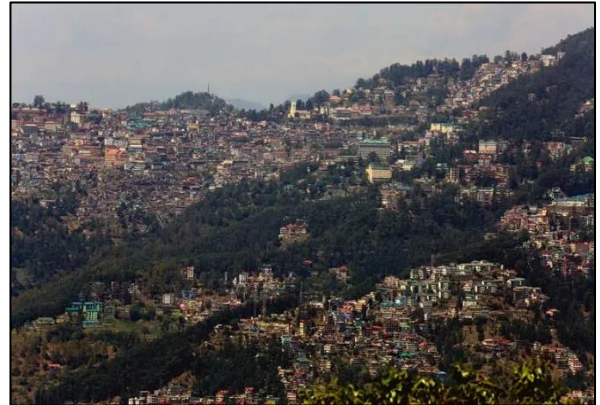
10.4 JAKHU HILL TUNNEL PROJECT

Why in News

- Construction of an 890-meter double lane tunnel from Nav-Bahar near Petrol Pump to Circular Road near Indira Gandhi Medical College (IGMC), Shimla, beneath Jakhu Hill.
- Purpose:** Decongest Shimla traffic.

About Jakhu Hill

- Elevation:** Highest peak in Shimla at 2,454 meters.
- Jakhu Temple:** Dedicated to Lord Hanuman.
- Tourism:** Known for its scenic views and popular ropeway.
- About Shimla**
- Historical Significance:** Summer capital of India during British rule since 1864.
- Location:** Situated in the mountainous region of Himachal Pradesh



10.5 DELOS

- Location:** Delos is an island near Mykonos, situated in the center of the **Cyclades archipelago, Greece**.
- Significance:** It is one of the most important mythological, historical, and archaeological sites in Greece, recognized as a **UNESCO World Heritage site**.

Current Threat:

- The ancient sanctuary on Delos is at risk of sinking, with scientists warning that its 2,000-year-old structures could be lost within half a century.
- Rising sea levels and increased storm activity threaten to submerge the island.



Cultural Value:

- The site features temples guarded by stone lions.
- Offers a wealth of information on daily life during the Hellenistic and Roman periods.
- Contains remnants of ancient Greek and Roman architecture, art, and religious artifacts.
- Historically served as a major religious center, dedicated to the god Apollo, attracting pilgrims from across the Greek world.
- Delos was also a significant commercial hub in antiquity, reflecting the economic activities and trade networks of the time.

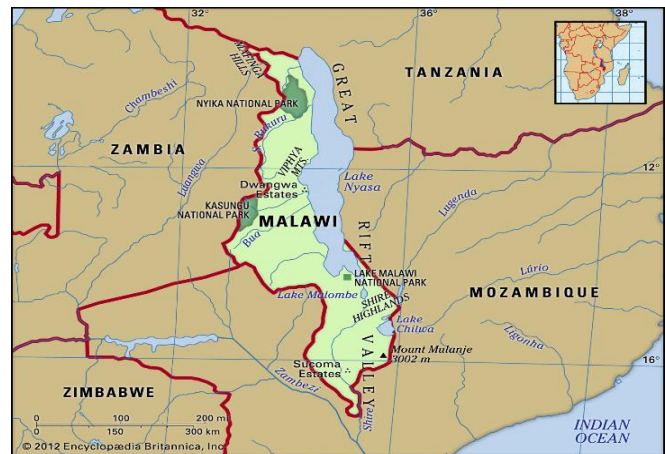
10.6 MALAWI

In News

- Aircraft carrying Malawi's Vice President goes missing.

About Malawi

- **Location:** Landlocked country in southeastern Africa, along the East African Rift Valley.
- **Capital:** Lilongwe.
- **Highest Peak:** Sapitwa, located in the Mulanje Massif.
- **Former Name:** Nyasaland, a British Protectorate until 1964.
- **Major Drainage System:** Lake Malawi, the third largest lake in Africa.



Main Rivers:

- **Western Coast:** Lufira, Songwe, Rukuru, Dwangwa, Bua, and Linthipe.
 - **Eastern Coast:** Ruhuhu and Rio Lunho.
 - **Connection:** The Shire River connects Lakes Malawi and Malombe.
- **Climate:** Subtropical, with a distinct rainy season from November to April.

Economy and Demographics

- **Major Occupation:** Predominantly cash-crop and subsistence agriculture, with tobacco, tea, and sugar as main exports.
- **Population:** Approximately 19 million people.
- **Languages:** English (official), Chewa, Lambya, Lomwe, Ngoni, Nyakyusa, Nyanja, Sena, Tonga, Tumbuka, Yao.
- **Currency:** Malawian Kwacha (MWK).
- **Governance:** Democratic, multi-party republic with a President as head of state and government.

Additional Facts

- **Independence:** Gained from the United Kingdom on 6 July 1964.
- **UNESCO World Heritage Site:** Lake Malawi National Park, known for its biodiversity and endemic fish species.
- **Tourism:** Known for its wildlife reserves and national parks, such as Liwonde National Park and Nyika National Park.

10.7 ADYAR RIVER

- The Water Resources Department (WRD) has deployed additional machinery to complete dredging work in the Adyar river mouth by the end of June.
- **Origin:** Near the Chembarambakkam Lake in Kanchipuram, Tamil Nadu.
- **Mouth:** Adyar estuary, Bay of Bengal (a protected wildlife reserve since 1987)
- **Urban proximity:** It is one of the three rivers which winds through Chennai.
- **The river is also supplied by surplus water from about 40 pounds.**

11 SCHEMES

11.1 JAL JEEVAN MISSION

The success of the demand-driven model of Jal Jeevan Mission is serving as the new benchmark for devolution of power and policy implementation in rural areas.

About Jal Jeevan Mission

- **Launch:** Initiated by the Government of India on August 15, 2019.
- **Objective:** To provide safe and adequate drinking water through individual household tap connections to every rural household by 2024.
- **Ministry:** Implemented by the Ministry of Jal Shakti.

Features

- **Decentralized Approach:** Empowers local communities and Panchayati Raj Institutions to plan, implement, and manage water supply systems.
- **Community Participation:** Focuses on involving the community, particularly women, in decision-making processes.
- **Convergence:** Integrates with schemes like MGNREGS and PMAY for resource leverage.
- **Sustainability:** Promotes renewable energy use, rainwater harvesting, and greywater management.
- **Implementation of JJM**
- **Bottom-up Planning:** Village-level planning with community involvement to identify water sources.
- **Funding:**
 - Himalayan and North-Eastern States: 90:10 ratio between Centre and states.
 - Other States: 50:50 ratio between Centre and state
 - UTs: 100% funding by the Central government.
- **Support:** Technical guidance and assistance from the Central Government.
- **Equity Focus:** Prioritizes water-scarce regions and marginalized communities.
- **Awareness Campaigns:** IEC campaigns on water conservation and hygiene.

Achievements

- **Coverage:** Over 77% of rural households now have tap water connections.
- **Certified Districts:** Over 100 districts have achieved 100% Functional Household Tap Connections (FHTC).
- **Women Empowerment:** Significant involvement of women in water management roles.
- **Behavioral Change:** Increased awareness about water conservation and hygiene.

Challenges

- **Geographic Diversity:** Addressing the diverse geographic and climatic conditions across India, ranging from arid regions to mountainous terrains, poses a significant challenge for the mission.
- **Water Source Sustainability:** Ensuring the long-term sustainability of water sources, particularly in areas with depleting groundwater levels, is a critical concern that needs to be addressed.
- **Capacity Building:** Building the capacity of local communities, Panchayati Raj Institutions, and other stakeholders to effectively manage and maintain the water supply systems remains a challenge.
- **Operation and Maintenance:** Ensuring proper operation and maintenance of the water supply systems, including the management of funds and resources, is crucial for the mission's sustainability.

Way Forward

- **Innovative Solutions:** Exploring and adopting innovative solutions, such as desalination plants, water recycling techniques, and advanced water treatment technologies, can help address water scarcity and improve water quality.
- **Integrated Water Management:** Implementing an integrated water management approach that considers all aspects of the water cycle, including surface water, groundwater, and wastewater management, is essential for long-term water security.
- **Stakeholder Collaboration:** Fostering greater collaboration among stakeholders, including local communities, government agencies, non-governmental organizations, and the private sector, can facilitate knowledge-sharing and effective implementation of the mission.
- **Monitoring and Evaluation:** Establishing a robust monitoring and evaluation system to track progress, identify challenges, and make data-driven decisions for course correction and continuous improvement.

Jal Jeevan Mission (Urban)

- **Launched:** JJM Urban wasn't formally launched as a separate mission but emerged alongside the rural JJM in the 2021-22 Union Budget.
- **Objective:** The mission's objective is to ensure that every household in all 4,378 statutory towns has access to functional tap connections, in line with **Sustainable Development Goal 6**. It also focuses on sewerage/septage management in 500 AMRUT cities to make them water secure
- **Ministry:** JJM (U) falls under the **Ministry of Housing and Urban Affairs**, which is responsible for implementing urban development and housing projects in India.

11.2 DIGITAL AGRICULTURE MISSION

Launch of Rs 2800 crore Digital Agri Mission part of govt's agenda for first 100 days

Brief overview

- **Launch:** The Digital Agriculture Mission (DAM) is a significant initiative by the Indian government launched in September 2021, aiming to transform the agricultural sector through digital technologies like AI, blockchain, remote sensing, robots, and drones.
- **Time Period:** The mission will be implemented over five years, from 2021 to 2025.
- **Objective:** To ensure universal access to digital tools for better agricultural practices, increase productivity, and improve farmers' livelihoods.

Key Features

- **Farmers' Registry:** Creation of a nationwide farmers' registry with unique IDs for each farmer, already initiated in states like Uttar Pradesh and Maharashtra.
- **Crop Sown Registry:** Development of a registry detailing the crops sown by farmers to aid in planning and production estimation.
- **Georeferencing of Village Maps:** Mapping and georeferencing of village maps to create a digital infrastructure for agricultural planning and resource allocation.
- **India Digital Ecosystem of Agriculture (IDEA):** Establishing an "Agristack" as a foundation for innovative agri-focused solutions using digital technologies.

Implementation

- **Pilot Projects:** Partnerships with private firms like Cisco, Ninjacart, Jio Platforms, ITC Limited, and NCDEX e-Markets Limited to pilot digital agriculture projects.
- **Technological Integration:** Utilization of AI and ML models for crop monitoring, yield prediction, and pest control.
- **Funding and Support:** Financial assistance and technical support from the central government, including funding for state-level digital agriculture projects under the National e-Governance Plan in Agriculture (NeGPA).

Significance

- **Enhanced Productivity:** AI and other digital tools help in crop selection, resource management, and disease prediction, leading to higher yields.
- **Sustainability:** Promotes the use of renewable energy sources, water-saving techniques like micro-irrigation, and precision farming practices to ensure long-term agricultural sustainability.
- **Economic Growth:** Aims to boost farmers' incomes by improving market linkages and providing better access to credit, subsidies, and insurance.

Challenges

- **Data Collection:** Ensuring high-quality data collection for effective AI model functioning.
- **Digital Literacy:** Improving digital literacy among farmers to effectively use new technologies.
- **Infrastructure:** Developing robust digital infrastructure in rural areas.

Way Forward

- **Capacity Building:** Enhance digital literacy among farmers through training programs and workshops to ensure effective utilization of digital tools.
- **Infrastructure Development:** Invest in robust digital infrastructure, including reliable internet connectivity in rural areas, to support the implementation of digital agriculture technologies.
- **Collaboration and Partnerships:** Foster greater collaboration between government agencies, private sector, and non-governmental organizations to drive innovation and share best practices.
- **Data Security and Privacy:** Establish strong data protection frameworks to ensure the privacy and security of farmers' data.
- **Continuous Monitoring and Evaluation:** Implement robust monitoring and evaluation mechanisms to track progress, identify challenges, and make data-driven adjustments to the mission's strategies.

11.3 MISSION KARMAYOGI

Establishment: 2020.

- **Role:** Provide policy guidance and tools to enhance capabilities of civil services.
- **Vision:** To transform the Indian civil services capacity-building landscape by establishing a robust digital ecosystem and to keep the civil service at the center of all change, empowering them to deliver in challenging environments.
- **Capacity Building Commission (CBC)** was constituted in 2021 to provide policy guidance and tools to enhance the capabilities of all levels of India's vast civil services.

Key Components

- **iGOT Karmayogi Platform:** An integrated Government Online Training (iGOT) digital platform to deliver and manage training content.
- **Competency Framework:** Establish a framework for competency mapping and developing a framework of roles, activities, and competencies (FRACs).
- **Monitoring and Evaluation:** Implement mechanisms for continuous monitoring, evaluation, and assessment of training programs and their impact.
- **Institutional Framework:** Establish a capacity building commission to oversee the implementation of the program and ensure that training programs meet the required standards.

11.4 PM-WANI SCHEME

- **Prime Minister's Wi-Fi Access Network Interface (PM-WANI) Scheme** aims to enhance internet connectivity and promote the Digital India mission by creating a robust public Wi-Fi network through the country's Public Data Offices (PDOs).
- **Launched by:** the Department of Telecommunications (DoT) in December, 2020.
- **License:** There is no license required from DoT for providing Broadband Internet through these public Wi-Fi networks.

Objectives

- **Enhance Broadband Connectivity:** To provide affordable and widespread broadband connectivity across India, especially in rural and remote areas.
- **Boost Digital Inclusion:** To promote digital literacy and inclusion by making internet access more widely available.
- **Encourage Entrepreneurship:** To facilitate the growth of small and medium businesses by creating opportunities for local entrepreneurs to set up and run Public Data Offices.

Key Components

- **Public Data Office (PDO):** These will be small entities or shops that will establish, maintain, and operate Wi-Fi access points and provide internet access to the public. They do not need a license to operate, simplifying the process.
- **Public Data Office Aggregator (PDOA):** Entities that will aggregate PDOs and perform the functions relating to authorization and accounting.
- **App Providers:** They will develop applications to register users and allow them to discover and access the Wi-Fi network.
- **Central Registry:** This will maintain the details of PDOs, PDOAs, and App Providers. The Centre for Development of Telematics (C-DOT) will maintain the central registry.

How It Works?

- **Registration:** PDOs can register online without any license fees. They need to submit basic details to the DoT.
- **Setup:** PDOs can install Wi-Fi access points in their establishments, which will be connected to the internet through an Internet Service Provider (ISP).
- **Access:** Users can download the PM-WANI app, which will allow them to discover nearby Wi-Fi networks and connect by registering on the app.

11.5 MEMBERS OF PARLIAMENT LOCAL AREA DEVELOPMENT SCHEME

In News

- The Delhi High Court ruled that the Chief Information Commissioner cannot comment on MPLADS fund utilisation, as the RTI Act only provides access to information.
- **About MPLADS**
- Government initiative allowing MPs to recommend development projects in their constituencies.
- Focuses on creating durable community assets based on local needs.
- **Nodal Ministry:** Ministry of Statistics and Programme Implementation (MoSPI)

Key Features:

- Each MP can suggest works worth Rs. 5 Crores per annum to the District Collector.
- Funds are non-lapsable and carried forward if not utilised within a year.
- MPs do not receive funds directly; the Centre transfers the sanctioned amount in two instalments of Rs. 2.5 crore to district authorities after project approval.
- Rajya Sabha MPs can recommend works in multiple districts within their elected state.

- Nominated MPs can select districts from any state for their projects.
- **Implementation and Monitoring:** The **district authority** acts as the nodal implementing agency.

Special Focus:

- At least 15% of MPLADS funds must be utilised for Scheduled Castes areas.
- Another 7.5% should be used for Scheduled Tribes areas.

11.6 DIGI YATRA

- **Purpose:** Digi Yatra is an initiative under Digital India to digitally transform air travel processes, reducing paperwork and enhancing passenger convenience.
- **Launched:** 1 December 2022, At Delhi, Varanasi, and Bengaluru Airports by the "Digi Yatra Foundation".
- **Initiative Lead:** Coordinated by the Ministry of Civil Aviation, Digi Yatra is spearheaded by the Digi Yatra Foundation, a private not-for-profit entity owned by the
 - Airports Authority of India (26%) and
 - 5 other private airports - Hyderabad, Cochin, Bangalore, Mumbai and Delhi all having a 14.8% stake each.
- **Atal Innovation Mission (AIM):** The app was developed by Hyderabad-based startup Dataevolve Solutions. The company was selected through the national start-up challenge conducted by NITI Aayog under Atal Innovation Mission (AIM).

Services:

- **Digitalization:** Digital processing of passengers at the airports.
- **Facial recognition and Paperless travel:** Passengers will be **automatically processed based on facial recognition systems** at checkpoints like; Entry point check, Entry into Security Check, Aircraft Boarding.
 - Also facilitate **self-Bag Drop and Check-in**, using facial recognition to identify pax and data recall.