

UPSC CURRENT AFFAIRS

February 2024



Electoral Bond
Scheme Verdict



Interim Budget 2024



India-UAE
Relations



IPCC Work on
Seventh Climate
Assessment Report



Senior Care





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POLITY AND GOVERNANCE

1.1. ELECTORAL BOND VERDICT

Context

In a landmark verdict, the Supreme Court (SC) recently declared the Electoral Bonds Scheme (EBS) as 'unconstitutional'.

KEY HIGHLIGHTS OF THE VERDICT

- In a historic verdict just weeks before the upcoming Lok Sabha polls, a five-judge Constitution bench of the Supreme Court declared the electoral bonds scheme as **unconstitutional, arbitrary and violative of Article 14**.
- SC held the **scheme violative of the constitutional rights to freedom of speech and expression**, as well as the **right to information**.
- SC also emphasized that the information about funding to a political party is essential for a voter to exercise their freedom to vote in an effective manner.
- Along with the Electoral Bond Scheme, the Supreme Court also declared the proviso to **Section 29C (1)** of the Representation of the People Act, 1951, **Section 182(3)** of the Companies Act, and **Section 13A(b)** of the Income Tax Act as **violative of Article 19(1)(a) and unconstitutional**.
- The court also directed the State Bank of India (SBI), the authorized financial institution under the scheme, to disclose details of electoral bonds purchased since April 12, 2019 till date to the Election Commission by March 6.
 - ✓ The Election Commission will then publish the information on its official website by March 13.

HOW IT WAS INTRODUCED?

- The EBS was introduced after the Finance Act, 2017 made

What is the Electoral Bond Scheme?

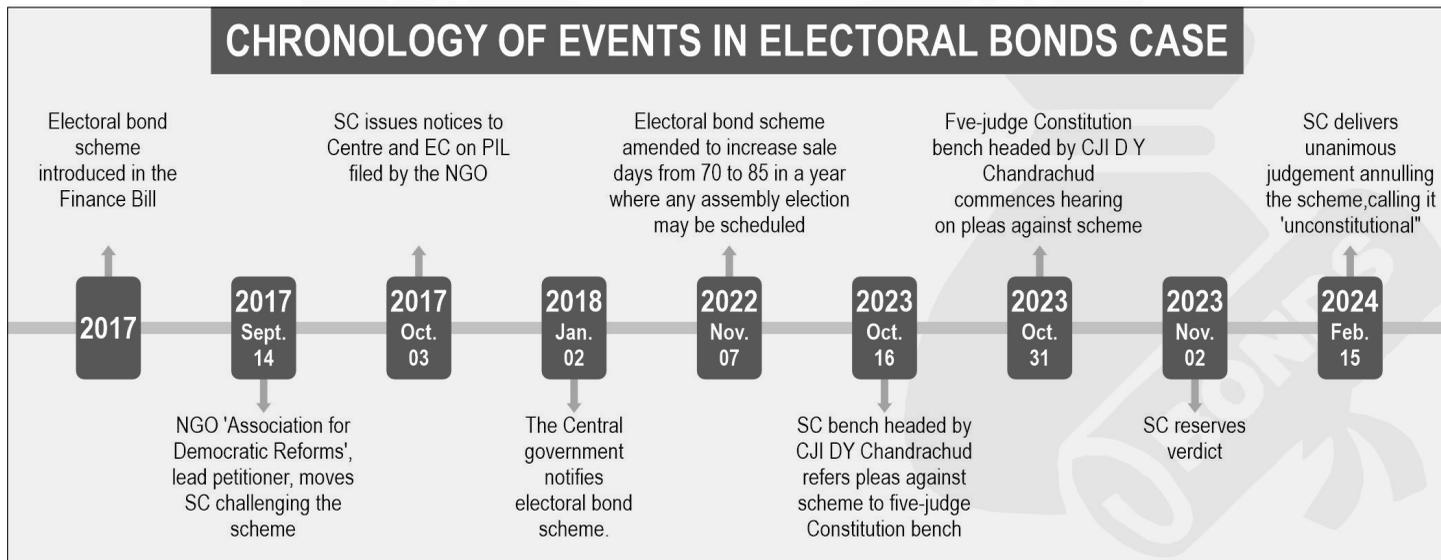
- Electoral Bonds are interest-free bearer instruments resembling a Promissory Note. They are issued in multiples of Rs 1,000, 10,000, 1 lakh, 10 lakh, 1 crore.
- **Eligibility:** Either Indian citizens or bodies incorporated in India, can acquire these bonds from specified State Bank of India (SBI) branches.
- **Condition:** They have a **limited lifespan of 15 days** and can only be used for donations to political parties registered under Section 29A of the Representation of the Peoples Act, 1951, **securing at least 1% of the votes in the last general election** to the House of the People or a Legislative Assembly.

several changes to the Representation of the People Act (RPA), 1951, the Income-tax Act, 1961, and the Companies Act, 2013. These amendments allowed the electoral bond to cut through many of the restrictions on political party funding. Some of the important changes include –

• Representation of the People Act, 1951

- ✓ **Section 29C of the RPA:** It mandated political parties to prepare a report **disclosing all the donations above Rs 20,000** received in a financial year. The report needed to distinguish contributions from individuals and companies.
- ✓ **Amendment by Finance Act, 2017:** It introduced an **exception to Section 29C**, stating that the requirement to disclose all donations above Rs 20,000 would not be

CHRONOLOGY OF EVENTS IN ELECTORAL BONDS CASE



applicable to donations received through Electoral Bonds.

- ✓ **Supreme Court Ruling:** The SC struck down the amendment and asserted that the original provision effectively balanced voters' right to information with donors' right to privacy.
- **The Companies Act, 2013**
 - ✓ **Section 182 of the Companies Act, 2013:** It initially imposed a cap on the amount of money a company could donate in a single financial year, limiting it to 7.5% of the company's average net profits during the previous three financial years.
 - ✓ **Finance Act, 2017 Amendment:** It removed the donation cap and thus companies were no longer limited in the amount they could donate, and only the total contribution had to be disclosed without specifying the political party or the amount.
 - ✓ **Supreme Court Ruling:** It stated that allowing unlimited corporate contributions would permit unrestrained influence of companies in the electoral process, thus violating the right to free and fair elections.
- **The Income-tax Act, 1961**
 - ✓ **The Income-tax Act, 1961:** Section 13A(b) mandated political parties to exclude voluntary contributions from their total income and maintain records for donations above Rs 20,000, including the donor's name and address.
 - ✓ **Finance Act, 2017 Amendment:** It amended Section 13A(b) to include the words "other than contribution by way of Electoral Bond". Additionally, a new Section 13A(d) required that all donations exceeding Rs 2,000 must be given through certain methods, which included Electoral Bonds.
 - ✓ **Supreme Court Ruling:** The court struck down both the amendment to Section 13A(b), and the new Section 13A(d). The court held that not requiring political parties to record donations received through Electoral Bonds violated voters' right to information under Article 19(1) (a) of the Constitution.

ON WHAT GROUND SC HAS STRUCK DOWN THE EBS

1. **EBS violates voter's Right to Information under Article 19 (1) (a):**
 - The court ruled that the **electoral bond scheme breaches the Right to Information** as outlined in Article 19(1)(a) of the Constitution.
 - The SC highlighted the "deep association" between money and politics, and how economic inequality contributes to political inequality by increasing the possibility of quid pro quo arrangements.
2. **The right to donor privacy is not absolute:**
 - The Supreme Court ruled that the **right to privacy in political affiliation** extends only to contributions made as genuine

forms of political support, **not those intended to influence party policies.**

3. **Unlimited political contributions by companies are unconstitutional:**
 - The court differentiated between contributions from companies and individuals, noting that **company contributions were business transactions for securing benefits in return.**
 - It emphasized that unlimited corporate contributions allow unrestrained influence, **violating the right to free and fair elections.**
 - The court emphasized that without the cap, **loss-making companies might engage in quid-pro-quo arrangements with the government.** Consequently, it struck down the amendment to **Section 182 of the Companies Act**, reinstating the cap on political contributions from companies.
4. **Restrictions are disproportionate to the stated goal of curbing the circulation of black money:**
 - The court emphasized that **restrictions on the Right to Information (RTI) can only be justified based on Article 19(2)**, which outlines reasonable restrictions on freedom of speech and expression. **Curbing black money is not listed as a permissible restriction under Article 19(2).**
 - The court held that even if curbing black money is a legitimate purpose, the restrictions imposed by the scheme are not proportional to achieving this goal.
 - The court applied the **proportionality test** based on its 2017 verdict in the **KS Puttaswamy case** on the right to privacy.

Test of proportionality

- It is a widely used legal approach, commonly applied by constitutional courts globally to resolve conflict between two rights claims or between a right and a legitimate government interest.
- The test was formally laid down as the best practice in the Puttaswamy Case of 2017.
- The determination of proportionality in Indian courts typically follows a four-pronged approach.
 1. The action is sanctioned by a law;
 2. The law must demonstrate a legitimate state interest;
 3. whether the encroachment on fundamental rights is proportional to the intended objective
 4. There must be procedural guarantees against abuse of such interference.

WAY FORWARD/SUGGESTIONS

- **State Funding of Political Parties:** The **1998 Indrajit Gupta Committee report**, initiating discussions on state funding, proposed providing state funds to candidates affiliated with recognized political parties. The committee justified state funding as constitutionally and legally justified and recommended establishing a distinct election fund to cover election expenses.

- **Bringing Political Parties under RTI:** Making political parties subject to the Right to Information Act (RTI) would require them to disclose information about their finances, including donor details and expenditure patterns. This would enhance public scrutiny and hold parties accountable for their funding sources.
- **Exploring Alternative Funding Mechanisms:** Exploring alternatives, such as government matching of small individual donations, tax benefits for individual contributions, and stricter regulations on corporate donations can enhance public participation and transparency, and mitigate undue influence in political financing.
- **Electoral Reforms:** Enhancing campaign finance regulations and fostering internal party democracy can ensure responsible financial practices and promote transparency in political processes.
- Former Chief Election Commissioner of India, **TS Krishnamoorthy** proposed the establishment of a “**National Election Fund**” as an alternative. He emphasized that such a fund, with 100% tax exemption for both corporate and individual donors, would help break the nexus, enabling public funding of elections.

1.2. VERDICT OF ECI ON NCP DISPUTE

Context

The Election Commission of India (ECI) has officially recognized the faction of the Nationalist Congress Party (NCP) led by Ajit Pawar as the legitimate or “real” NCP. Thus, giving it control over the party’s original name and ‘clock’ symbol.

MORE ON THE NEWS

- In a recent decision, the ECI settled a leadership dispute within the Nationalist Congress Party (NCP) and recognized Ajit Pawar as the real NCP.
- The ECI had relied on the test of majority in the party’s legislative wing to decide the dispute.
 - ✓ The order of ECI stated that out of the total 81 (including, MLAs, and MLCs) of the NCP, 57 supported Ajit Pawar, 28 supported Sharad Pawar, and 6 members supported both sides.
 - ✓ Thus, the Ajit Pawar’s faction had a majority even after excluding those 6 members.
- The ECI rejected the test of majority in the party’s organizational wing, citing a lack of foundational basis in the internal elections.
 - ✓ The ECI held that the names of the working committee members were announced by Sharad Pawar.
- However, the Sharad Pawar group argued that the test of majority in the Assembly could not be the sole determinative factor as nine MLAs were facing disqualification.
- As an interim measure, the ECI has allotted the official name “Nationalist Congress Party - Sharadchandra Pawar” to the faction led by Sharad Pawar for the upcoming Rajya Sabha elections.
- Since the Rajya Sabha elections do not require a party symbol, just the party’s name, the Sharad Pawar faction will need to apply afresh to the ECI to either continue this name or for another name and symbol for his faction.

WHAT DOES THE LAW SAY?

- The **Election Symbols (Reservation and Allotment) Order, 1968** empowers the EC to recognize political parties and allot symbols.

- Under **Paragraph 15 of the Order**, it can decide disputes among rival groups or sections of a recognized political party staking claim to its name and symbol. The **decision of ECI is binding on all the rival sections or groups** involved.
 - ✓ The Supreme Court upheld the validity of Paragraph 15 in the **Sadiq Ali and another vs. ECI** in 1971.
- This mechanism applies to disputes in recognized national and state parties. For splits in registered but unrecognized parties, the EC usually advises the warring factions to resolve their differences internally or to approach the court.

Mechanism before 1968

- Before 1968, the EC issued notifications and executive orders under the Conduct of Election Rules, 1961
- A noteworthy case exemplifying this pre-1968 process was the split in the **Communist Party of India (CPI) in 1964**.
- The ECI recognised the faction as CPI(M) after it found that the votes secured by the MPs and MLAs supporting the breakaway group added up to more than 4% in the 3 states.

HOW DOES ECI DECIDE WHO GETS THE SYMBOL?

Facts considered by ECI

- The ECI has devised a “**three tests principle**” to resolve disputes under Paragraph 15 which has been upheld in the **Sadiq Ali and another vs. ECI** in 1971.
- To assess organizational backing, the ECI thoroughly examines the party’s Constitution and the list of office-bearers submitted when the party was united.

Three Tests Principle

1 Test of the Party Constitution

Analysing if the affairs of the party were being conducted as per its constitution and reflected inner-party democracy.

2 Test of Aims and Objectives of the Party Constitution

Assessing which of the two rival groups adheres to the aims and objectives of the party constitution

3 Test of Majority

Evaluating which of the two rival groups enjoyed a majority in both

- ✓ It identifies the apex committee(s) in the organization and finds out how many office-bearers, members or delegates support the rival claimants.
- For legislative backing, the ECI evaluates the number of Members of Parliament (MPs) and Members of Legislative Assemblies (MLAs) aligned with each rival claimant.
- In cases where a faction holds the support of a majority within both the organizational and legislative wings, the ECI is likely to grant that faction the entitlement to the name and symbol of the recognized party.
- When the ECI is unable to establish with certainty which group has the majority support, it might opt to freeze the party's symbol.
- In such situations, the ECI may allow the groups to register themselves with new party names or add prefixes or suffixes to the party's existing names.

ISSUES WITH THE ORDER OF ECI

- The ECI **relied solely on the test of majority in the party's legislative wing and rejected the test of majority in the party's organizational wing to decide the dispute.**
- The ECI held that the test of majority in the organizational wing of the party cannot be used as an indicator that organizational elections were not held democratically.
- However, the decision of ECI has come under criticism as the 'three test principle' has been reduced to a unidimensional test i.e., the numerical strength of the legislative wing.
- Also, the order of ECI doesn't take into account the disqualification petitions against several MLAs pending before the speaker.

BROADER CHALLENGES WITH THE FUNCTIONING OF POLITICAL PARTIES IN INDIA

- **Lack of intra-party democracy:** The decision-making process in most political parties is often centralized which stifles dissent within the party and limits opportunities for new voices and ideas to emerge.

- **Dynastic politics:** In most political parties, the leadership positions are often inherited rather than earned based on merit or democratic principles. This trend undermines the spirit of democracy and leads to a lack of accountability within the party structure.
- **Rampant defections:** The introduction of the Anti-Defection Law (ADL) has failed to check the prevalence of defections, often leading to political instability.
- **Criminalisation of politics:** Political parties have often resorted to giving tickets to candidates with criminal backgrounds who can attract crowds and raise funds as highlighted by ADR report.
- **Parties not under the ambit of RTI:** Even though the CIC had ruled in 2013 that political parties are "public authorities" under Section 2(h) of the RTI Act, none of the national parties have complied with the order.

WAY FORWARD

- **Need for regular elections:** The political parties need to hold regular organizational elections in line with the party constitution and voluntarily disclose the same to the ECI.
- **NCRWC Report:** It called for comprehensive legislation regulating the registration and functioning of political parties in India.
- **170th report of the Law Commission of India:** It emphasized the necessity of providing laws relating to internal democracy within parties.
- Need for strengthening the ADL to check rampant defections & protect of electoral mandate.

CONCLUSION

- While there is a need for ensuring intra-party democracy in the functioning of political parties in India, the ECI also needs to be more rational in interpreting the laws and conventions on such matters to maintain its hard-won reputation of being a fair and independent institution.

1.3. DEBATE ON PREAMBLE

Context

Recently, the Supreme Court heard a petition seeking to delete the words 'socialist' and 'secular' from the Preamble of the Indian Constitution.

MORE ABOUT THE NEWS

- The Supreme Court asked if the Preamble of the Constitution could have been amended without changing the date of its adoption on November 26, 1949.
- A bench of justices Sanjiv Khanna and Dipankar Datta clarified that
 - ✓ The court did not mean to say that the Preamble cannot be amended at all, but

- ✓ The question arose if it could have been tweaked when the date of adoption of the Constitution was a part of the Preamble too.

AMENDMENTS TO THE PREAMBLE

- To date, the Preamble **has been amended only once, i.e., through the 42nd Amendment Act of 1976.**
- This amendment introduced the terms 'Socialist', 'Secular', and 'Integrity' into the Preamble.

- ✓ 'Socialist' and 'Secular' were inserted between 'Sovereign' and 'Democratic'.
- ✓ Additionally, the phrase 'Unity of the Nation' was revised to 'Unity and Integrity of the Nation'.
- Following the **Kesavananda Bharati case of 1973**, which established the Preamble as part of the Constitution, the 42nd Amendment Act, 1976, reaffirmed the Preamble's status.
- Under **Article 368 of the Constitution**, amendments to the Preamble are permissible, but the **Basic Structure of the Constitution cannot be altered**.

THE CONSTITUTION OF INDIA

PREAMBLE



सत्यमेव जयते

WE, THE PEOPLE OF INDIA, having solemnly resolved to constitute India into a **SOVEREIGN SOCIALIST SECULAR DEMOCRATIC REPUBLIC** and to secure to all its citizens:

JUSTICE, social, economic and political;

LIBERTY of thought, expression, belief, faith and worship;

EQUALITY of status and of opportunity;

and to promote among them all

FRATERNITY assuring the dignity of the individual and the unity and integrity of the Nation;

IN OUR CONSTITUENT ASSEMBLY this twenty-ninth day of November, 1949, do **HEREBY ADOPT, ENACT AND GIVE TO OURSELVES THIS CONSTITUTION.**

ARGUMENTS AGAINST CHANGES MADE IN THE PREAMBLE

- These changes in the Preamble occurred during the infamous "Emergency" under Indira Gandhi's rule. It does not represent the consensus of the people.
- Dr B.R. Ambedkar had argued that these terms were unnecessary because the concepts of secularism and socialism were already contained in provisions of Fundamental Rights, and Directive Principles of State Policy.

ARGUMENTS IN FAVOUR

- The word 'secularism' affirms the state's commitment to treating all religions equally and upholding religious freedom and non-discrimination principles.
- Adding "secular" to the Preamble would boost the morale of minorities. It sends a strong message of inclusivity and tolerance, promoting a sense of belonging and security among minority communities.

- The inclusion of "socialist" in the Preamble emphasizes the state's responsibility to ensure social and economic equality, providing marginalized groups with opportunities for socio-economic advancement and a decent standard of living.

Status of the Preamble in the Indian Constitution



सत्यमेव जयते

The status of the Preamble as a part of the Indian Constitution has been subject to legal debate.

1950

AK Gopalan Case:

In the AK Gopalan case, the Supreme Court ruled that the **Preamble was not enforceable** as it wasn't considered part of the Constitution.

1960

Berubari Union Case:

The Supreme Court, in the Berubari Union case, acknowledged the significance of the Preamble in understanding the Constitution's intent but **did not categorize it as a part of the Constitution**.

1973

Kesavananda Bharati Case:

In the landmark Kesavananda Bharati case, the Supreme Court reversed its previous stance and declared that the **Preamble is an integral part of the Constitution**. It further emphasized that the Constitution and the Preamble should be interpreted in harmony.

1995

LIC of India Case:

Subsequently, in the LIC of India case, the Supreme Court **reaffirmed** that the Preamble is **an integral part of the Constitution**.

AMENABILITY OF THE PREAMBLE

- **Berubari Union Case (1960)**: Initially, in the Berubari Union case, the Supreme Court held that the Preamble, despite its importance, is not a part of the Constitution and, therefore, cannot be amended.
- **Kesavananda Bharati Case (1973)**: However, in the Kesavananda Bharati case, the Supreme Court held that the Preamble was part of the Constitution, and thus it was subject to the amending power of the Parliament, provided that the basic structure was not disturbed.
- Thus, in conclusion, the Preamble is a fundamental component because it reflects the philosophy and spirit of the Constitution. The Preamble was declared an integral part of the constitution in the Kesavanada Bharti Case, and could not modified without affecting the basic structure of the constitution.

1.4. PANCHAYAT FINANCES

Context

Recently, the Reserve Bank of India (RBI) released its report on the “Finances of Panchayati Raj Institutions for 2022-23”. The Report highlighted that the Panchayats earned only 1% of their total revenue while the rest of the revenue was raised as grants from the State and the Central Government.

KEY FINDINGS OF THE REPORT

Revenue Composition

- Panchayats earned only **1% of their revenue through their own sources and the rest came from State grants (15%) and Union Government grants (80%)**.
- In 2022-23, per panchayat revenue generation constituted ₹21,000 as tax revenue and ₹73,000 as non-tax revenue.
- In contrast, each panchayat earned about ₹17 lakhs as grants from the Central government and more than ₹3.25 lakh as grants from the State governments.
- Thus, in essence, just 1% of panchayats’ revenue comes from their own tax revenue.

State-wise Performances

- There exists a wide variation among States in terms of average revenue earned per panchayat in 2022-23.
- While in Kerala each panchayat averaged a revenue of over ₹60 lakh, the average revenue per panchayat in Andhra Pradesh, Haryana, Mizoram, Punjab and Uttarakhand was below ₹6 lakh.
- West Bengal closely followed Kerala with an average revenue of ₹57 lakh per panchayat.
- Assam, Bihar, Karnataka, Odisha, Sikkim, and Tamil Nadu recorded revenue of over ₹30 lakh per panchayat.

SHARE IN STATE’S REVENUE

- Due to meagre revenue raising potential, the panchayats’ share in their respective State’s own revenue was poor.
- While in Uttar Pradesh, the revenue of panchayats formed 2.5% of the State’s own revenue, it formed just 0.1% of the State’s own revenue in Andhra Pradesh.

REASONS FOR LOW REVENUE OF PANCHAYATS

- Limited devolution of Financial Power by the State Government, such as authorising them to levy, collect, and appropriate taxes.
- Also, States are reluctant to devolve any significant financial amount to panchayats due to fear of a reduction in the state’s own revenue
- Panchayats are reluctant to collect property taxes due to fear of the public backlash in elections.
- Poor infrastructure for revenue collection, such as lack of functionaries, Panchayat Bhawans (as per data provided by

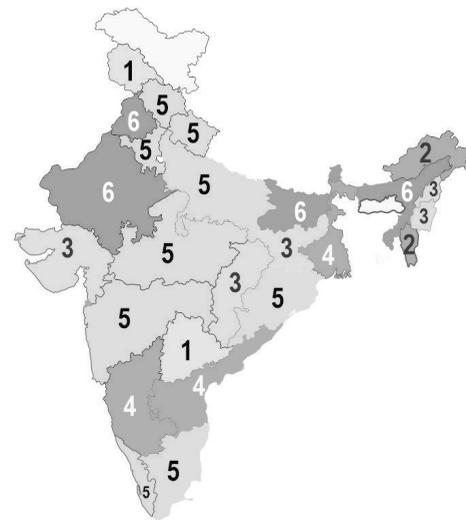
the Ministry of Panchayati Raj in the Parliament, still 18% of Gram Panchayats do not have Panchayat Bhawan).

- Limited training and awareness of panchayat functionaries about finance and revenue generation often results in low revenue collection.

OTHER ISSUES WITH PANCHAYAT FINANCES

- **State Finance Commissions (SFC):** Commissions are not established according to Constitutional requirements (Every five years).
✓ For example, till 2019, J&K constituted only one state Finance Commission.
- **Data Reliability Issues:** SFCs encounter difficulties due to a lack of reliable data, unlike the Union Finance Commission. Local governments’ inadequate budgetary systems make it challenging for SFCs to collect data and assess the financial condition effectively.
- **Heavy reliance on Government Grants:** 80% of the total revenue of Panchayats is from the Central Government and over 15% from the respective State government.

Number of SFCs Constituted by the States so far



Note: Telangana was formed in 2014. Chhattisgarh, Jharkhand, and Uttarakhand gained Statehood in 2000. Mizoram, Nagaland and Meghalaya have been exempted from constituting SFCs. However, Nagaland and Mizoram have constituted SFCs.

Source: XV Central Finance Commission Report.

- **Tied Nature of Funds:** A major portion of grants is scheme-related, making it inflexible towards local needs.
- **Excessive control of Bureaucracy:** In some states, Gram Panchayats are Subordinate to Bureaucracy, resulting in excessive delays in the release of funds
- **Transparency:** Lack of regular financial audits contributes to misuse and ineffective utilization of funds.
- **Decentralization of Corruption:** The Mani Shankar Aiyar Committee (2013) raised the issue of corruption in local bodies and went on to say that local bodies have led to the decentralisation of corruption.

SOURCES OF FUNDS FOR PANCHAYATS

- **Central Government:** Grants are provided by the Central Government based on the recommendations of the Central Finance Commission (Article 280).
 - ✓ Target-specific assistance under Centrally Sponsored Schemes and Additional Central Assistance by Central Government.

Government Measures to Improve Finances of Panchayats

Rashtriya Gram Swaraj Abhiyan (RGSA): It is a Centrally Sponsored scheme with the objective of developing governance capabilities of Panchayati Raj Institutions (PRIs) to deliver on Sustainable Development Goals.

Panchayat Sashaktikaran Abhiyan (CB-PSA): It aims to strengthen the PRIs across the country. It will enable them to perform their functions, including planning and implementation of development programmes, effectively and efficiently.

73rd Constitutional Amendment Act 1993: It gives constitutional status to the Panchayats and mandates compulsory devolution of funds by the government.

Gram Panchayat Development Plan (GPDP): Under Article 243-G, Panchayats have been mandated to prepare a GPDP for economic development and social justice.

Local Government Sources of Revenue

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graph TD
    GOI[Government of India] --> SG[State Government]
    GOI --> LG[Local Government]
    SG --> LG
    OES[Other External Sources] --> LG
    IOS[Internal/Own Sources] --> LG
    
```

- **State Government:** Devolution of funds by the State Government based on the recommendations of the State Finance Commission (Article 243-I).
 - ✓ Loans and grants are also provided by the State Government.
- **Internal Resource Generation:** Tax and non-tax by the Panchayats on subjects mentioned in the 11th Schedule of the Constitution.

Importance of Panchayat Finance



- **Decentralized Development:** Panchayats are closest to the masses making them especially aware and adaptable to local needs.
- **Good Governance:** Panchayats are readily accessible to the people, thus resulting in increased **accountability and transparency**, leading to good governance.
- **Democratic Development:** The presence of a local taxation system ensures people's participation in the development process, resulting in democratisation of development.
- **Empowered Panchayati Raj Institutions (PRIs):** Financially and functionally empowered PRIs can strongly contribute to **climate change resilience** due to their **proximity** to communities and possession of valuable **local knowledge** about the environment.

WAY FORWARD

- The RBI report suggests improving tax and fee rates, enhancing collection efficiency, and diversifying financing mechanisms for revenue stability.
- Implementing the 6th report of the **2nd Administrative Reform Commission (ARC) for a clear division of government functions and finances at each level.**
- The NCRWC recommended empowering the Comptroller and Auditor-General of India to lay down accounting standards for Panchayats.
 - ✓ It also recommended allowing the local authorities to borrow from the State Government and financial institutions.
- Kerala's model of increased devolution to the panchayats can be adopted by other states.

1.5. DEMAND FOR STATEHOOD FOR LADAKH

Context

Recently, there have been protests in Leh and Kargil demanding full statehood for the Union Territory of Ladakh and its inclusion in the Sixth Schedule of the Constitution.

BACKGROUND

- In August 2019, the Indian Parliament revoked the special status of the former State of Jammu & Kashmir (J&K) under Article 370, leading to its bifurcation into two Union Territories – J&K (with legislature) and Ladakh (without legislature).
- The residents of Ladakh (consisting of two districts – **Leh** and **Kargil**) have raised concerns regarding land protection, loss of distinct identity, and political representation.
- In response to these concerns, new political entities emerged in 2020 representing the interests of the Muslim-majority Kargil and the Buddhist-majority Leh districts:
 - ✓ Leh's political and religious bodies formed the Leh Apex Body (LAB)
- In the Kargil district, existing political parties and Shia Muslim-affiliated seminaries joined hands to form the **Kargil Democratic Alliance (KDA)**.

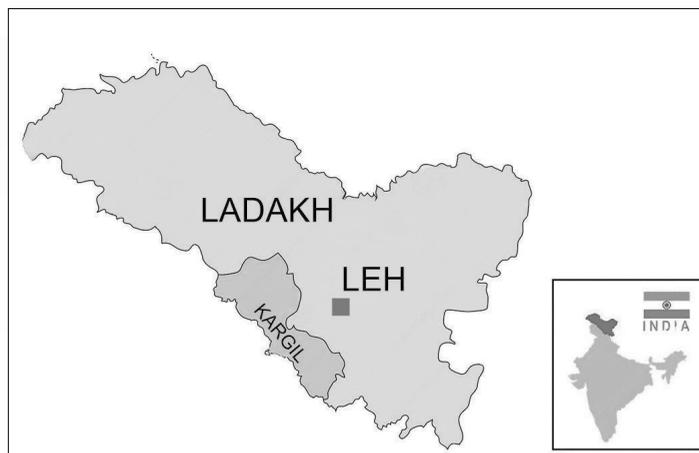
KEY DEMANDS

- The Kargil Democratic Alliance (KDA) and the Ladakh Buddhist Association (LBA) have jointly presented a four-point demand to the Union government –
 1. **Granting statehood to Ladakh.**
 2. **Constitutional safeguards under the Sixth Schedule** to protect the region's land, culture, language and environment.
 3. Creation of **two distinct parliamentary constituencies, one each for Kargil and Leh.**
 4. **Establishing a Public Service Commission and reserving jobs for the youth of Ladakh.**
 - ✓ Notably, since Ladakh became a UT, there have been no gazetted job openings in the region, while two batches have already been commissioned in J&K.

GOVERNMENT'S RESPONSE

- The Ministry of Home Affairs (MHA) has established a high-powered committee chaired by the Minister of State for Home to engage with representatives advocating for the demands from Ladakh.
- The Government has claimed that the UT administration was already taking care of overall socio-economic development, and sufficient funds have been provided for the region's overall development.

REASONS FOR THE DEMANDS



Constitutional Provisions Regarding Formation of States

Article 3 of the Indian Constitution empowers the Parliament to enact legislation to –

- Form a new State by separation of territory from any existing State, by uniting two or more States or parts of States, or by uniting any territory to a part of any State.
- Alter the areas, boundaries, or names of the existing States.

About Sixth Schedule

- It is outlined under Article 244(2) of the Indian Constitution.
- The Schedule protects tribal populations and provides autonomy to the communities through establishing autonomous district councils (ADCs) and autonomous regional councils.
- The councils are empowered to exercise legislative and executive powers on issues of land, forests, village administration, inheritance of property, public health, marriage and divorce, etc.
- Presently, the 6th Schedule applies to Assam, Meghalaya, Mizoram, and Tripura.

- **Development Concerns:** Statehood is seen as crucial for maximising developmental potential, ensuring adequate resources, and greater autonomy in development planning and implementation.
- **Security and Border Management:** Given Ladakh's strategic location, Statehood could strengthen local governance mechanisms for better border security management.
- **Residential and Land Rights:** Regulation of residential rights (As earlier provided under Article 35A), land ownership and use to prevent exploitation and ensure sustainable development, safeguarding the fragile environment.
- **Autonomy in Governance:** Empowerment of the local population through self-governance in administering land,

ARTICLE 35 A

Article 35A of the Indian Constitution, which was revoked on August 5, 2019, empowered the J&K legislature to define the State's "permanent residents" and grant them special rights and privileges.

Privileges for Permanent Residents:

- Only permanent residents were allowed to own property in Jammu and Kashmir.
- They were eligible for state government jobs.
- They could enrol in educational institutions run by the state of Jammu and Kashmir.

Restrictions for Non-Permanent Residents:

- Non-permanent residents were barred from owning property, obtaining state government jobs, and joining educational institutions run by the state of Jammu and Kashmir.

forest, and water management laws as provided under the sixth schedule.

✓ Before the abrogation of Article 370, Ladakh was represented by four members in the J&K Assembly and two in the Legislative Council. However, it is now administered by the Lieutenant Governor, who is seen as an outsider.

- **Cultural Preservation:** Preservation of Ladakh's distinct cultural heritage through autonomy and legislative powers provided by the 6th Schedule.

✓ The National Commission for Scheduled Tribes has recommended the inclusion of Ladakh under the Sixth Schedule by highlighting that more than 97% of Ladakh's total population was predominantly tribal.

REASONS BEHIND GRANTING OF UT STATUS FOR LADAKH

- **Historical Neglect:** Ladakh's Buddhist majority often felt marginalized by the Muslim-majority population of the former state of J&K and argued for greater autonomy based on their distinct cultural and religious identity.
- ✓ Since the 1930s, residents of Ladakh have demanded

separate statehood or UT status due to perceived neglect by the Kashmir government.

- **Administrative Efficiency:** The Government viewed UT status for Ladakh as a way to address longstanding grievances, enhance administrative efficiency and promote regional development.
 - ✓ With its own Union Territory status, Ladakh can have more autonomy in decision-making regarding its development priorities.
- **Strategic Importance:** Ladakh shares borders with both Pakistan and China, making it a sensitive region from a security perspective. The Indian government believed that UT status would allow for more direct control and improved security measures. Top of Form
- **Preservation of Cultural Identity:** Ladakh has a unique cultural and demographic composition, distinct from the rest of J&K. Thus, granting it a UT status can help preserve and promote its distinct cultural identity and traditions.

WAY FORWARD

- The Union government needs to take confidence-building measures to reduce the trust deficit among the local population. Some of the measures include –
 - ✓ Providing for a legislature with UT status on lines of J&K and Delhi.
 - ✓ Currently, the UT has two Hill councils in Leh and Kargil, but neither is under the Sixth Schedule. Thus, the government can provide similar safeguards along the lines of the 6th Schedule to protect the land, employment, and cultural identity of the local population.
 - ✓ Presently, more than 90% of the funds are at the dispensation of the LG (a non-elected person). Thus, there is a need to devolve more powers and funds to the Hill Councils.

1.6. REPORT ON JUDICIAL PROCESS AND REFORMS**Context**

Recently, the Parliamentary Standing Committee on Personnel, Grievances, Law, and Justice has submitted its report on "Judicial Process and their Reforms"

SOME KEY RECOMMENDATIONS OF THE STANDING COMMITTEE

- **Regional Benches of the Supreme Court**
 - ✓ The Committee highlighted a challenge where the Supreme Court, centred in Delhi, creates difficulties for litigants from distant parts of the country.
 - ✓ It recommended the **establishment of regional Supreme Court benches** in four or five locations to ensure better access to justice, citing Article 130 of the Constitution.

Note: As per **Article 130 of the Indian constitution**, The Supreme Court shall sit in Delhi or such other place or places, as the Chief Justice of India may, with the approval of the President, from time to time, appoint.

- **Social Diversity in Appointments of Judges**
 - ✓ The Committee noted a lack of diversity in the higher judiciary, with underrepresentation of Scheduled Castes, Scheduled Tribes, Other Backward Classes, Women, and Minorities.
 - ✓ The existing gender disparity, with only 15% of registered advocates being women.
 - ✓ It suggested that the Supreme Court and High Court Collegiums recommend more candidates from

marginalized communities and proposed the collection of data on the social background of serving judges.

- **Retirement Age for Judges**
 - ✓ The Committee suggested increasing the retirement age for Supreme Court and High Court judges to align with medical advances and increased life expectancy.
 - ✓ It recommended introducing a system for performance appraisal and health evaluation by the Supreme Court Collegium before extending a judge's tenure.
- **Mandatory Declaration of Assets**
 - ✓ Noting the absence of a requirement for judges to disclose their assets, the Committee recommended a new law mandating higher judiciary judges to submit annual property returns to the appropriate authority.
 - ✓ Emphasize that this disclosure is crucial for building trust and credibility in the judiciary.
- **Vacations in the Supreme Court and High Courts**
 - ✓ The Committee addressed the issue of simultaneous vacations leading to the closure of the higher judiciary for several months.
 - ✓ It proposed individual judges take leave at different times throughout the year to address case pendency and ease the inconvenience faced by litigants.
- **Annual Reports of High Courts**
 - ✓ Emphasizing the importance of annual reports for assessing institutional performance, the Committee recommended that all High Courts publish their annual reports.

OTHER ISSUES IN THE INDIAN JUDICIARY

Issues in the Indian Judiciary	Description
Inadequate Physical and Digital Infrastructure	<ul style="list-style-type: none"> • Shortage of courtrooms, basic facilities, and parking spaces causing overcrowding and delays in legal procedures. • Need for digital infrastructure for virtual hearings, especially highlighted during the Covid-19 pandemic. • Limited live streaming of court proceedings, excluding specific case categories.
Limited Use of Alternative Dispute Resolution (ADR)	<ul style="list-style-type: none"> • Not fully utilizing alternative dispute resolution mechanisms such as mediation and arbitration, adds to the workload of the courts.
Recruitment Delays	<ul style="list-style-type: none"> • The slow process of filling judicial vacancies leads to an insufficient judge-to-population ratio. • High courts have nearly 400 vacancies, and around 35% of the vacancies are in the lower judiciary.

IMPROVEMENTS REQUIRED

Improvements required	Description
Strengthen E-Court System	Implement a strong e-court system for digital records, online filing, e-summons, and video conferencing during hearings.
Transform Appointment System	Ensure timely filling of judicial vacancies, set clear appointment timelines, and explore the possibility of implementing All India Judicial Services (AIJS).
Case Management Software	Develop software to track the progress of cases, automate tasks, and enhance coordination among different stakeholders involved in the legal process.
Data Analytics and Case Prediction	Utilize data analytics and artificial intelligence to predict case outcomes, assisting judges in making well-informed decisions.
Public Awareness	Launch awareness programs to educate citizens about legal matters, empowering them with knowledge and potentially reducing unnecessary litigation.
Citizen Feedback Mechanism	Establish a system for collecting feedback from citizens to identify areas for improvement in the judicial process and enhance public satisfaction.

WAY FORWARD

- By addressing structural deficiencies, embracing technology, and promoting diversity, judicial reform not only upholds the rule of law but also safeguards citizens' rights, fostering a just society.
- Thus, judicial reform is paramount for a fair, efficient, and accessible legal system. It ensures transparency, timely justice, and public trust.

1.7. DEPUTY CHIEF MINISTER

Context

Recently, the Supreme Court (SC) dismissed a petition challenging the appointment of Deputy Chief Ministers in States.

KEY HIGHLIGHTS

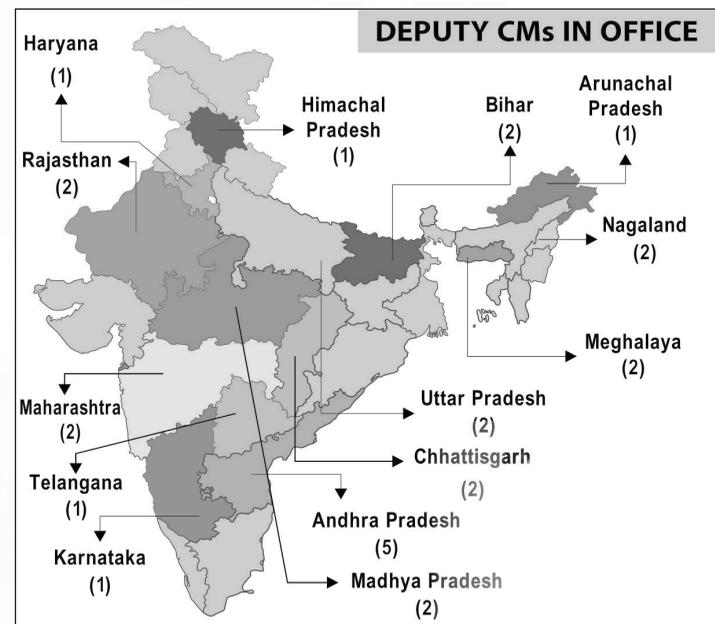
- Chief Justice D.Y. Chandrachud, leading a three-judge Bench, explained that Deputy Chief Ministers are essentially ministers in the State government.
- It observed that there is no harm in the appointment of Deputy Chief Ministers because they were after all members of the Legislative Assembly of the States and ministers of the governments.
- Deputy Chief Minister (CM) persons did not draw higher salaries than any other Ministers in the state government and may just be more senior than the others.

PETITION

- It argued that the appointment of deputy CM was **motivated by sectarian, religious, or political considerations**.
- Such appointments were against Article 14 and Article 15 (the state ought not to discriminate on the grounds of race, religion, caste, sex, or place of birth).
- However, the SC dismissed the petition because it lacked substance.

SIGNIFICANCE OF DEPUTY CMS

- ✓ **Political Stability:** Deputy CMs contribute to coalition government stability by bridging gaps between ruling parties and allies, reducing incidents of anti-defection.
- ✓ **Representation and Trust:** Their presence ensures better representation of communities, fostering public trust in governance.
- ✓ **Succession and Accountability:** Deputy CMs serve as potential successors to the Chief Minister, promoting transparency and accountability in government.



About Deputy Chief Minister (DyCM)

01	Article 163 (1) of the Indian Constitution states that 'there shall be a Council of Ministers with the Chief Minister at the head to aid and advise the Governor in the exercise of his functions'.
02	Article 164 (1) states that the Chief Minister shall be appointed by the Governor, and the other Ministers shall be appointed by the Governor on the advice of the Chief Minister.
03	Neither Article 163 nor Article 164 mentions a deputy Chief minister (CM).
04	The post of deputy CM is equivalent in rank to that of Cabinet Minister in the state .
05	Portfolio Allocation: They are entrusted with portfolios, although typically smaller in scale compared to the Chief Minister.
06	Financial Powers: Deputy CMs hold no specific financial authority, requiring approval from the Chief Minister for expenditures exceeding allocated budgets.
07	Administrative Role: They facilitate governance and administration, acting as a bridge between the ruling party and its allies.
08	Presently, among the 28 states, 14 of them have deputy Chief Ministers, with Andhra Pradesh taking the lead by appointing five deputy Cms.

CONCERNS AND SUGGESTIONS

- **Lack of Constitutional Backing:** Raises concerns about role ambiguity and potential exploitation by Chief Ministers.
- **Multiplicity of Appointments:** No limit on the number of Deputy CMs can lead to appeasement and governance complexities.
- **Complexity in Governance:** Overlapping roles with cabinet ministers may complicate governance and administration.

FUTURE PERSPECTIVES

- **Clarity and Limitations:** Need for a defined role and limitations for Deputy CMs to simplify governance structures.
- **Political Literacy:** Enhancing awareness among citizens about the role and function of Deputy CMs is essential for informed governance.

1.8. CBI AND ITS FUNCTIONING

Context

According to the annual report of the Department of Personnel and Training (DoPT) (2022-23), the Central Bureau of Investigation (CBI) is facing a significant shortage of manpower, amounting to 23% of its sanctioned strength.

KEY HIGHLIGHTS

- The shortage is highlighted in the context of a **backlog of cases**, with a total of 1,025 cases (943 registered cases and 82 preliminary enquiries) were pending as of December 31, 2022.
- The **total sanctioned strength** of the CBI, as of December 31, 2022, was 7,295 positions. However, only 5,600 officers were in position, leaving 1,695 posts vacant.
- The vacancies span various ranks, **including critical positions** such as one Special/Additional Director, two Joint Directors, 11 DIGs, 9 SSPs, and several other roles across different hierarchical levels, including technical officers.
- Out of 943 registered cases, 447 were pending under investigation for over a year. Similarly, of the 82 pending enquiries, 60 were pending enquiries for over three months. Also, 23 Lokpal references were pending.
- In 2022, the courts delivered judgments in 557 court cases of CBI. Of these, 364 cases resulted in conviction, 111 in acquittal, 13 in discharge and 69 cases were disposed of for other reasons. The conviction rate was 74.59%. Around 10,732 court cases were pending under trial in various courts.

Composition of CBI

- The composition of CBI is made up of directly recruited personnel and state police personnel on deputation while all higher posts are occupied entirely by officers on deputation.

FUNCTIONING OF CBI IN INDIA

Prior Permission

- Under **Section 6A of the DSPE Act**, the CBI must seek prior approval from the Central Government before initiating an inquiry or investigation into offences committed by officers of the **rank of joint secretary and above** in the Central Government and its authorities.
- In 2014, the Supreme Court in the **Subramanian Swamy vs Union of India Case** declared **Section 6A as invalid**.
 - ✓ The Constitution Bench found Section 6A violative of Article 14 by extending its protection only to a class of public servants and not everyone.
- However, the Prevention of Corruption Act was amended in 2018 to insert **Section 17A** which again introduced the government's previous approval as a mandatory requirement before any probe can be begun into decisions or recommendations made by a public servant.
 - ✓ However, unlike Section 6A, Section 17A provides for the

protection of public servants without any classification based on category, class, or level.

About Central Bureau of Investigation



- The CBI is the premier investigating police agency in India, focusing on preventing corruption, and maintaining administrative integrity. It also assists the Central Vigilance Commission and Lokpal.
- It functions under DoPT, Ministry of Personnel, Pension & Public Grievances.
- The **CBI is not a statutory body** but **derives its power to investigate** from the **Delhi Special Police Establishment (DSPE) Act of 1946**.
- It is also the nodal police agency in India, which coordinates investigations on behalf of Interpol Member countries. The CBI is designated as the National Central Bureau of India for ICPO-INTERPOL.

Appointment of CBI Director

- The **Lokpal and Lokayuktas Act (2013)** amended the Delhi Special Police Establishment Act (1946) and made the following changes:
 - ✓ It provides that the Central Govt. will appoint the CBI Director on the recommendations of a committee consisting of the Prime Minister as Chairperson, the Leader of Opposition in the Lok Sabha or leader of the single largest opposition party in the Lok Sabha, and the Chief Justice of India or a Supreme Court Judge nominated by him.
 - ✓ The Central Government appoints SP and above rank officers in the CBI based on recommendations from a committee comprising the Central Vigilance Commissioner as Chairperson, the Vigilance Commissioners, the Secretary of the Home Ministry, and the Secretary of the DoPT.
- Under the CVC Act, 2003, the Director of CBI has been provided security of two-year tenure.
- However, the **Delhi Special Police Establishment (Amendment) Act, 2021** provides for the extension of the Director's tenure from the **original two years to a maximum of five years** (maximum of three annual extensions of up to one year at a time).

SPECIFIC CONSENT AND GENERAL CONSENT

- **General Consent** is a broader authorization **granted by**

a state government, allowing the CBI to investigate any case within its jurisdiction without the need for specific permissions for each investigation.

- ✓ Several states, including **West Bengal, Rajasthan, Kerala, and Tamil Nadu**, have withdrawn their general consent.
- **Specific Consent** is required when general consent is withdrawn and CBI needs to seek case-wise consent for investigation from the concerned state government.

Supreme Court Judgements:

- **Advance Insurance Co. Ltd case, 1970** – The definition of “State”, as contained in The General Clauses Act, includes Union Territories (UTs)

as well and hence the CBI, being a force constituted for UTs as recognised under the DSPE Act of 1946, can investigate the territories of the States only with their consent.

- **Kazi Lhendup Dorji v. CBI, 1994** – The withdrawal of general consent does not affect pending investigations or the cases registered in another State about which investigation leads into the territory of the State which has withdrawn general consent. Also, the withdrawal doesn't circumscribe the power of the jurisdictional High Court to order a CBI investigation.



the CBI's ability to invest in technology, training, and infrastructure.

- ✓ **Shortage of personnel:** The agency is understaffed, leading to a large backlog of cases and delayed justice for victims.
- **Misuse of Power:** Lack of clear guidelines on case selection and investigation procedures leaves room for subjective interpretation and potential misuse.
- **Restricted Access:** The prior approval of the Union Government to conduct an inquiry or investigation against public servants acts as a big obstacle in the smooth functioning of CBI.
- ✓ There has been a decline of over 40% in registration of cases by the CBI between 2017 and 2019.

WAY FORWARD

- **Vineet Narain & Others vs. Union of India, 1997:** To enhance CBI's independence, the Court directed its supervision by the Central Vigilance Commission (CVC), a government agency independent of executive control.
- **The Parliamentary Standing Committee on Personnel, Public Grievances, Law and Justice:** It recommended enacting a new law to clearly define its status, functions, and powers, due to limitations in the existing DSPE Act governing the CBI.
- ✓ The committee advocated public accessibility to case details and proposed a centralized case management system for enhanced accountability and efficiency.
- **2nd ARC (2007)** also recommended for a new law to govern the working of the CBI.

CONCLUSION

- By addressing these key issues and implementing the suggested recommendations, the CBI can improve its effectiveness, transparency, and public trust, enabling it to better fulfil its mandate of upholding the law and combating corruption in India.

ISSUES WITH FUNCTIONING OF CBI IN INDIA

- **Political Interference:** The CBI has been accused of being influenced by the ruling party at the Centre, leading to selective investigations and targeting of political opponents.
- ✓ In 2013, the Supreme Court described the CBI as “a caged parrot speaking in its master's voice”.
- **Lack of transparency:** Limited access to information about internal processes and decision-making raises concerns about accountability.
- **Limited Resources:**
 - ✓ **Budget constraints:** Inadequate funding restricts

1.9. REPORT ON SMART CITIES MISSION (SCM)

Context

Recently, a Standing Committee on Housing and Urban Affairs report titled “Smart Cities Mission: An Evaluation” was presented in the Lok Sabha.

KEY HIGHLIGHTS OF THE REPORT

- The report stressed the need to launch the next phase of the Smart Cities Mission with a thrust on tier-2 cities located within 100 km of State capitals.
- The Report also cautioned that digital infrastructure created under the Mission could be misused. Hence, there

was a need to ensure the right to privacy and secure digital platforms from cyber-attacks.

- The committee also highlighted that in the execution of projects via the funds from national/state missions/schemes, there was a lack of a robust mechanism to ensure coordination and smooth and harmonized monitoring.

- Except for six cities namely, Bhopal, Hubballi-Dharwad, Kochi, Visakhapatnam, Chandigarh, and Srinagar, none of the cities could generate funds through loans for the smart cities projects. Out of the proposed ₹9,844 crore, cities managed ₹5,298 crore (54% of proposed funds) through loans.
- **Overall Progress:**
 - ✓ **Total Projects undertaken:** 7,970 projects with a total investment of ₹1,70,400 crore.
 - ✓ **Completed Projects:** 6,419 projects amounting to ₹1,25,105 crore.
 - ✓ **Projects at the work order stage:** 1,551 projects worth ₹45,295 crore.
- **City-wise Progress:**
 - ✓ Madurai is the only city to complete 100% of its projects.
 - ✓ 56 cities have completed over 80% of their projects.
 - ✓ However, 14 cities have shown slower progress, with completion rates below 50%.
 - ✓ These lagging cities are primarily located in the northeast, Union Territories, and hilly areas. Examples include Gangtok, Atal Nagar, Shillong, Silvassa, Itanagar, Puducherry, Saharanpur, and Port Blair.

SMART CITY MISSION OVERVIEW

- **Launch and Objective:**
 - ✓ It aims to promote cities that provide core infrastructure, clean and sustainable environment and give their citizens a decent quality of life through the application of 'smart solutions'.
 - ✓ 100 cities were chosen through a competitive process and these cities were given a five-year time frame from the date of their selection to finish their proposed projects.
 - ✓ Originally, the mission was supposed to be completed by 2023, but an extension was given till June 2024 to complete the pending projects.
- **Implementing Agency:** The Union Ministry of Housing & Urban Affairs in collaboration with state governments.
- **Financing:**
 - ✓ ₹48,000 crore allocated over five years to support the development of 100 smart cities.
 - ✓ 13 states from the Himalayan and northeastern regions received 90% of funding from the Union government, with the remaining 10% contributed by state and ULBs.
 - ✓ Additional resources raised through convergence include ULBs' funds, grants from the Finance Commission, innovative finance mechanisms like Municipal Bonds, funds from other government programs, and borrowings.

SMART CITY MISSION STRATEGY

- **Area-Based Development:**

- ✓ Components include city improvement (retrofitting), city renewal (redevelopment), city extension (greenfield development), and pan-city initiatives.
- ✓ Greenfield projects focus on developing new urban areas to accommodate the growing urban population.
- ✓ Pan-city development involves applying smart solutions to existing city-wide infrastructure.
- **Administrative Structure:**
 - ✓ **National Level:** An Apex Committee, headed by the Secretary of the Ministry of Urban Development to approve proposals, monitor progress, and release funds.
 - ✓ **State Level:** A High-Powered Steering Committee (HPSC), led by the State's Chief Secretary, oversees the Smart City Mission.
 - ✓ **City Level:** A Smart City Advisory Forum, including the District Collector, CEO of Special Purpose Vehicle (SPV), elected representatives, technical experts, and local stakeholders, facilitates collaboration and monitors project implementation.

CHALLENGES ASSOCIATED WITH SMART CITIES MISSION

- **Mission Deadline Extension:**
 - ✓ Initially slated for completion by June 2023, the mission deadline was extended to June 2024 to complete pending projects.
- **Funding Challenges:**
 - ✓ Unequal disbursement of central funds, with regions like Lakshadweep, Daman and Diu, Puducherry, and Port Blair receiving less than 50% of pledged funds.
- **Failure in Fund Raising Mechanisms:**
 - ✓ Limited success in utilising funding mechanisms like Public-Private Partnerships (PPPs), with only 6% of projects funded through PPPs instead of the recommended 21%.
- **Execution Challenges:**
 - ✓ Lack of robust coordination and monitoring mechanisms, leading to delays in project execution.
 - ✓ Frequent transfers of Chief Executive Officers (CEOs) and lack of clear guidelines contribute to project delays.
- **Ineffective Advisory Forum Meetings:**
 - ✓ Irregular state-level advisory forum meetings, hindering collaboration and decision-making.
 - ✓ In some cities like Amravati and Imphal, no meetings took place, impacting project oversight.
- **Absence of Master Plans:**
 - ✓ As reported by NITI Ayog, essential master plans for urban development are lacking in most of the recognised urban areas.
 - ✓ Absence of master plans in 65% of urban areas hampers effective land and infrastructure planning.

RECOMMENDATIONS OF THE REPORT

- **Phase 2 Launch:** Launch the next phase of the Smart Cities Mission, prioritising tier-2 cities near state capitals. Utilise the expertise gained by Special Purpose Vehicles (SPVs) for effective urban development.
- **Expanding role of ICCCs:** The Committee recommended expanding the role of the Integrated Command and Control Centres (ICCCs) to provide a variety of services in the fields of health, internal security, waste management, traffic management, disaster management, e-governance etc.
- **Government Programs Utilization:** Leverage existing government initiatives like NMSH, AMRUT, SBM-U, Deendayal Antyodaya Yojana-NULM, and PMAY-U for

comprehensive and sustainable urban development.

- **Tailored Plans for Smaller Cities:** Develop customised plans to meet the unique needs of smaller cities, particularly in regions like the northeast, ensuring equitable distribution of benefits from the Smart Cities Mission.
- **IT Security Measures:** Implement robust IT strategies and privacy safeguards to protect digital platforms from cyber threats and ensure the security of sensitive data generated by ICCC applications.
- **International Collaboration:** Collaborate on global projects, such as the Gelephu Smart City Project in Bhutan, to promote sustainable urban development worldwide.

1.10. THE PUBLIC EXAMINATIONS (PREVENTION OF UNFAIR MEANS) BILL, 2024

Context

Recently, the Lok Sabha has passed the Public Examinations (Prevention of Unfair Means) Bill, 2024, aimed at curbing malpractices and organized cheating in government recruitment exams.

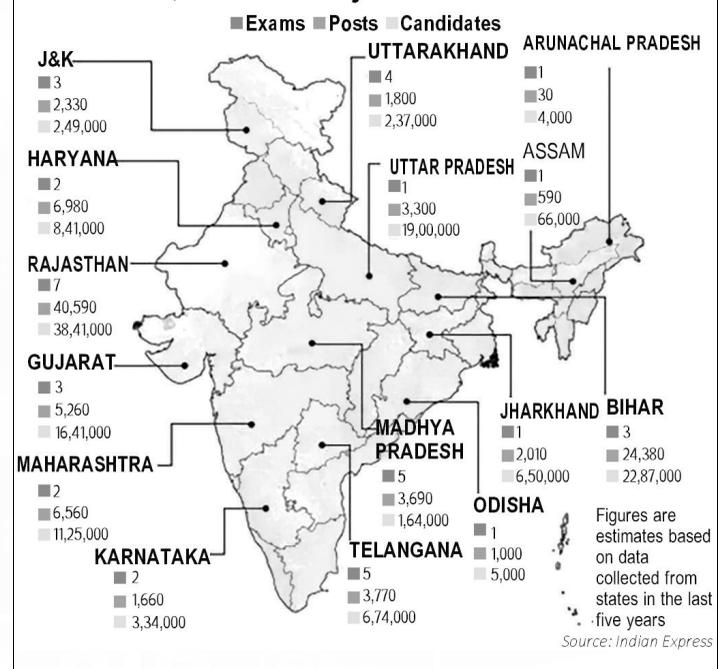
BACKGROUND OF THE BILL

- The bill was introduced in response to the frequent leakage of exam papers and subsequent cancellation of competitive tests, such as:
 - ✓ Teacher Recruitment Exam in Rajasthan;
 - ✓ Common Eligibility Test (CET) for Group-D posts in Haryana;
 - ✓ Recruitment Exam for junior clerks in Gujarat and
 - ✓ Constable recruitment examination in Bihar following question paper leaks.
- **Data on Paper Leak:**
 - ✓ In the past years, it is **approximated that over 15 million students** have faced the repercussions of **numerous instances of question paper leaks occurring in different states.**
 - ✓ There **have been over 70 occurrences of question paper leaks** across the country during the past years, significantly impacting the prospects of hundreds of thousands of students.
- **No specific law:** Currently, there is no specific substantive law addressing unfair means or offences related to the conduct of public examinations by the central government and its agencies.

KEY FEATURES OF THE BILL

- The Bill seeks to **prevent the use of unfair means in public examinations.**
- Public examinations refer to **examinations conducted by authorities specified under the Schedule to the Bill or notified by the central government.** These include:

15 states, leaks in 41 job-recruitment exams



- ✓ Union Public Service Commission;
- ✓ Staff Selection Commission;
- ✓ Railway Recruitment Board;
- ✓ National Testing Agency;
- ✓ Institute of Banking Personnel Selection, and
- ✓ Departments of the central government and their attached offices for recruitment.
- It **prohibits collusion or conspiracy to facilitate indulgence in any unfair means.** It specifies unfair means to include:

- ✓ unauthorised access or leakage of question paper or answer key,
- ✓ assisting a candidate during a public examination,
- ✓ tampering with computer networks or resources
- ✓ tampering with documents for shortlisting or finalising of merit list or rank, and
- ✓ conducting fake examinations, issuing fake admit cards or offering letters to cheat, for monetary gain.
- **It also prohibits:**
 - ✓ disclosing exam-related confidential information before time, and
 - ✓ unauthorised people from entering exam centres to create disruptions.
- Above offences will be **punishable with imprisonment between three and five years, and a fine up to Rs 10 lakh.**

Responsibilities of service providers

- In the event of a violation of provisions of the Bill, **service providers must report to the police and the concerned examination authority.** Failure to report such incidents will be an offence.
- In case, **the service providers themselves commit an offence, the examination authority must report it to the police.** The Bill **prohibits service providers from shifting the exam centre without permission from the examination authority.**
- An **offence by a service provider will be punishable with a fine of up to one crore rupees.** The proportionate cost of examination will also be recovered from such a service

provider. Further, they will also be barred from conducting public examinations for four years.

- ✓ If it is established that **offences involving service providers were committed with the consent or connivance** of any Director, senior management, or persons in charge of the service providers, **such persons will be held personally liable.**
- ✓ They will be **punished with imprisonment between three years and 10 years, and a fine of one crore rupees.**

Organised crimes

- The Bill specifies a higher punishment for organised crimes.
- Persons committing **an organised crime will be punished with imprisonment between five years and 10 years, and a fine of at least one crore rupees.**
- If an institution is held guilty of committing an organised crime, **its property will be attached and forfeited,** and a proportionate cost of the examination will also be recovered from it.

Inquiry and investigation

- All offences under the Bill will be **cognisable, non-bailable, and non-compoundable.**
- No action will count as an offence if it is proved that the accused had exercised due diligence.
- An officer **not below the rank of Deputy Superintendent or Assistant Commissioner of Police** will investigate the offences under the Act.
- The **central government may transfer the investigation to any central investigating agency.**

1.11. CORRUPTION PERCEPTIONS INDEX 2023

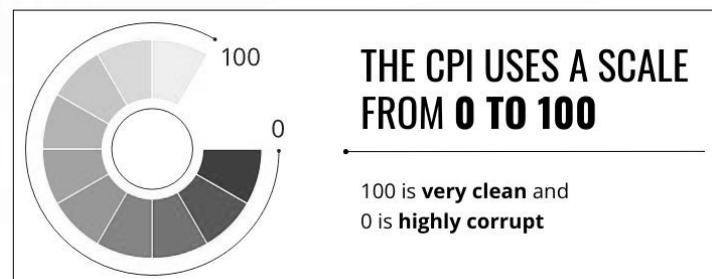
Context

Recently, the Corruption Perception Index was released by Transparency International for the year 2023.

KEY FEATURES OF THE CPI

- **Ranking and Scores**
 - ✓ It ranks 180 countries based on their perceived corruption levels.
- **India's Ranking and Score 2023**
 - ✓ India, along with Kazakhstan, Lesotho and Maldives, has been ranked 93 out of 180 countries in the Corruption Perceptions Index 2023.
 - ✓ The overall score is 39, a slight decrease from 40 in 2022.
 - ✓ In 2022, India was ranked 85, indicating a slight increase in corruption in 2023.
- **Stability in India's Corruption Perception**
 - ✓ India's score fluctuations are minor, making it difficult to draw firm conclusions about significant changes.
 - ✓ The report highlights concern about the narrowing civic space in India, especially with the passage of a

telecommunication bill that poses a potential threat to fundamental rights.



GLOBAL STATUS IN CPI

- **Top Performers in Corruption Index**
 - ✓ New Zealand (3) and Singapore (5) maintain top positions globally in corruption control.

- ✓ Other countries with strong corruption control mechanisms include Australia (14), Hong Kong (14), Japan (16), Bhutan (26), Taiwan (28), and South Korea (32).
- **Bottom of the Index**
 - ✓ Fragile states with authoritarian regimes, including North Korea (172) and Myanmar (162), are at the bottom of the index.
 - ✓ Afghanistan (162) faces one of the worst humanitarian crises in history.
- **South Asian Countries**
 - ✓ Pakistan ranks 133, and Sri Lanka ranks 115 in the Corruption Perceptions Index 2023.
 - ✓ Both nations grapple with debt burdens and political

instability, but strong judicial oversight helps keep the government in check.

- **Bangladesh's Situation**

- ✓ Bangladesh, ranked 149th, stands out as the least developed country. Economic growth reduced poverty, but the crackdowns on the media disrupted public information.

- **Asia Pacific Region's Stagnation**

- ✓ The Asia Pacific region, facing a significant 2024 election year, shows little progress in curbing corruption.
- ✓ The average Corruption Perceptions Index (CPI) score for the region stagnates at 45 for five consecutive years.

1.12. SMART GRAM PANCHAYAT PROGRAM

Context

The Union Minister of Rural Development and Panchayati Raj is to inaugurate a pilot project titled 'Smart Gram Panchayat' in Begusarai district, Bihar.

KEY HIGHLIGHTS

- The government has initiated a pilot program to **digitize Gram Panchayats in the Begusarai district (Bihar) which extends the PM-WANI (Prime Minister's Wi-Fi Access Network Interface) services in these rural areas.**
- **Begusarai will pioneer as the first district where all Gram Panchayats will be outfitted with Wi-Fi services under the PM-WANI Scheme.**
- **It aims to extend the PM-WANI service to 455 Gram Panchayats across 37 Blocks in the Begusarai and Rohtas districts of Bihar for the Financial Year 2023–24.**
- **The Department of Panchayati Raj, Bihar (under collaboration with BSNL) will ensure the efficient implementation & operation of the project, and also conduct regular reviews to monitor progress and performance.**

ABOUT SMART GRAM PANCHAYAT PROGRAM-TOWARDS DIGITALIZATION OF GRAM PANCHAYAT

- This initiative is **financed under the revamped Rashtriya Gram Swaraj Abhiyan (RGSA), under the Ministry of Panchayati Raj.**
- **Purpose**
 - ✓ It will help to **bridge the rural-urban digital divide and foster accountability and efficiency in local self-governance.**
 - ✓ To achieve the vision of an inclusive and **empowered Grameen Bharat.**
 - ✓ Promoting accountability and efficiency in local self-governance.

Realising the Dream of Digital India

PM-WANI

Easing Lives,

Generating Employment



PDOs will provide infrastructure for installation of Wi-Fi Access Points (Hotspots)



Registration not required for PDOs



Free of cost registration for PDOA & App Providers with DoT through an online portal & registration to be granted within 7 days



Availability and use of Broadband will enhance incomes of small & medium entrepreneurs, employment, quality of life & ease of doing business

PM-WANI: Prime Minister Wi-Fi Access Network Interface

- It is under the Ministry of Communications & Information Technology.
- **Aim:** To enhance the proliferation of public WiFi hotspots and also create robust digital communications infrastructure in the country, especially in rural areas.

1.13. INNOVATION (SWATI) PORTAL

Context

On the occasion of International Women and Girls in Science Day, the Principal Scientific Advisor recently unveiled the "Science for Women-A Technology & Innovation (SWATI)" Portal.

ABOUT SWATI PORTAL

- Consolidated online platform for Indian women and girls in Science, Technology, Engineering, Mathematics, and Medicine (STEMM) fields.
- Developed by the National Institute of Plant Genome Research (NIPGR).

AIM

- Provide a unified digital space for women's contributions in academia and industry.
- Foster equality, diversity, and inclusivity in STEMM.

KEY FEATURES

- Includes women's contributions across all stages of their careers.
- Supports long-term research initiatives advocating for women's participation in decision-making roles in the scientific community.

- Emphasizes data-driven insights for policy-making and addressing gender disparities in STEMM.
- Features an interactive database covering various categories such as icons, faculty members, research fellows, students, entrepreneurs, and professionals in alternate careers.

IMPACT

- Wants to inspire the next generation of female scientists and entrepreneurs.
- Promotes visibility and recognition of women in STEMM.
- Advances science and innovation in India and beyond.

WAY FORWARD

- In essence, SWATI Portal serves as a significant step towards harnessing the potential of women in science, leveraging their contributions for societal betterment, and addressing gender gap challenges in STEMM.

1.14. GHAR PORTAL

Context

Recently, the GHAR Portal was developed and launched by the National Commission of the Protection of Child Rights (NCPCR).

SALIENT FEATURES OF GHAR PORTAL

- Aims to monitor and facilitate the restoration and repatriation of children under the Juvenile Justice (Care and Protection of Children) Act, 2015.
- Digital tracking and monitoring of children in the Juvenile Justice system for repatriation.
- Provides a mechanism to request translators/interpreters/experts when needed.
- Allows Child Welfare Committees and District Child Protection Officers to digitally monitor and ensure proper restoration and rehabilitation of children.
- Includes a checklist format to identify challenging cases and issues related to compensation or other benefits.
- Offers a list of government-implemented schemes for linking children with support systems during the restoration process.
- As per NCPCR records, a total of 5175 children have been registered on the GHAR Portal for repatriation.

JUVENILE JUSTICE (CARE AND PROTECTION OF CHILDREN) ACT, 2015 IN BRIEF

- **Definition of Juvenile:** A juvenile is a person who has not completed eighteen years of age.

- **Differentiation of Offenses:** Distinguishes between a "child in conflict with law" (a juvenile who has committed an offence) and a "child in need of care and protection" (a juvenile who needs care and protection due to being orphaned, abandoned, or subjected to abuse or exploitation).
- **Special Juvenile Police Unit:** Mandates the establishment of Special Juvenile Police Units to handle cases involving juveniles in conflict with law.
- **Juvenile Justice Boards:** Establishes Juvenile Justice Boards at the district level to handle cases involving juveniles in conflict with law.
- **Child Welfare Committees:** Sets up Child Welfare Committees at the district level to deal with cases of children in need of care and protection.
- **Procedures and Safeguards:** Introduces specific procedures and safeguards to ensure fair treatment and protection of juveniles.
- **Monitoring and Review:** Provides for the monitoring and review of the implementation of the Act through the National Commission for the Protection of Child Rights (NCPCR) and State Commissions for the Protection of Child Rights (SCPCR).

INTERNATIONAL RELATION

2.1. INDIA-BANGLADESH RELATIONS

Context

Recently, External Affairs Minister S Jaishankar met Bangladesh Prime Minister Sheikh Hasina and appreciated her guidance in taking the 'India-Bangladesh Maitri' forward.

MORE ON THE NEWS

- This was Mr Jaishankar's first meeting with PM Hasina after she returned for a record fifth term in January.
- The two leaders were meeting on the sidelines of the prestigious Munich Security Conference, which is the world's leading forum for debate on international security.

AREAS OF COOPERATION

Historical Background

- India played a pivotal role in supporting Bangladesh's struggle for independence during the Liberation War in 1971.
- India was the first nation to recognise Bangladesh as an independent state.
- The bond between India and Bangladesh is celebrated annually on December 16th as Bangladesh Liberation Day, also known as "Vijay Diwas" in India.

ECONOMIC TIES

- Bangladesh is India's largest trade partner in South Asia, and India is Bangladesh's second-largest trade partner in Asia.
- The total bilateral trade between them for the fiscal year 2022-23 stood at \$15.9 billion.
- Both are members of various regional trade agreements, including the Asia Pacific Trade Agreement (APTA), the SAARC Preferential Trade Agreement (SAPTA) and the Agreement on South Asian Free Trade Area (SAFTA), which govern the tariff regimes for trade.
- Both have approved 10 **border haats** (markets) on the border to boost local businesses and livelihoods along the India-Bangladesh border.
- The **India-Bangladesh CEO's Forum** was started to enhance cooperation in bilateral trade.

DEFENCE AND SECURITY COOPERATION

- Both engage in joint exercises, such as Exercise Sampriti for the Army and Exercise Milan for the Navy.
- In 2018, an annual defence dialogue was established.
 - ✓ The 5th Annual Defence Dialogue and 4th Tri-Services Talks occurred on August 2023 in Dhaka, aiming to review ongoing defence cooperation.

BORDER MANAGEMENT

- India and Bangladesh share a 4096.7 km border, spanning across the states of **Assam, Tripura, Mizoram, Meghalaya, and West Bengal**. It is the longest land border that India shares with its neighbours.



- The **India-Bangladesh Land Boundary Agreement (LBA) (exchange of enclaves) (2015) (100th Constitutional Amendment Act)** have been signed.
- The **Coordinated Border Management Plan (CBMP)** was signed to enhance collaboration between border guarding forces in combating cross-border illegal activities.
- The longstanding maritime boundary dispute between them was resolved through arbitration in 2014, facilitating cooperation in the maritime sector.

WATER COOPERATION

- A bilateral Joint Rivers Commission (JRC) was established

INTERNATIONAL RELATIONS

to maintain liaison between the two countries to maximise benefits from common river systems.

- The Ganga Waters Treaty facilitates the sharing of river Ganga's waters between the two nations during the lean season from January 1 to May 31.
- The Kushiyara Pact was signed to benefit Southern Assam and the Sylhet region of Bangladesh.

CONNECTIVITY

- Overland movement of goods are facilitated through various Land Customs Stations (LCSs) and Integrated Check Posts (ICPs) at Agartala and Petrapole.
 - ✓ Petrapole-Benapole ICP handles approximately 37% of India's trade with Bangladesh.
- A **Protocol on Inland Waterways Trade and Transit (PIWTT)** has been permitting the movement of goods via river systems.
- The **Coastal Shipping Agreement** signed which enables direct sea cargo movement between the two countries.
- **Four broad-gauge inter-country rail links** are operational and a new **rail link between Agartala and Akhaura** has recently been inaugurated.

ENERGY COOPERATION



- The **India-Bangladesh Friendship Pipeline**, linking Siliguri in West Bengal to Parbatipur in Dinajpur district, will facilitate the transportation of one million Metric Tonnes Per Annum (MMTPA) of High-Speed Diesel to Bangladesh.
- Numaligarh Refinery Limited has been supplying petroleum products to Bangladesh.
- The **Rooppur Nuclear Power Plant** in Bangladesh is being constructed through collaboration between India and Russia.

DEVELOPMENT AND CAPACITY BUILDING

- **Lines of Credit (LOCs):** India has provided three Lines of Credit (LOC) to Bangladesh totalling US\$ 8 billion.
- **High Impact Community Development Projects (HICDPs):**

India has funded 68 projects, including student hostels, academic buildings, skill development institutes etc.

- **Capacity Building and Human Resource Development:**

- ✓ India has been training 1800 Bangladesh Civil Service officials in Mussoorie.

CULTURAL TIES

- Rabindranath Tagore composed Amar Sonar Bangla during the partition of Bengal in 1905, which Bangladesh later adopted as its National Anthem.
- About 10,000 strong Indian community is estimated to be living in Bangladesh. Around 3000 Indian students are pursuing courses in different Universities in Bangladesh.
- The High Commission of India has been publishing a highly popular Bengali literary monthly magazine 'Bharat Bichitra'.

STRATEGIC IMPORTANCE OF BANGLADESH

- **Alternative to Siliguri Corridor:** India aims to diversify connectivity routes to its northeastern states through Bangladesh, reducing reliance on the vulnerable Siliguri Corridor
- **Neighbourhood First Policy:** India prioritises strengthening ties with neighbouring countries, including Bangladesh, to foster regional stability and prosperity.
- **Gateway to Act East Policy:** Bangladesh is a vital gateway for India's Act East policy, facilitating economic and strategic engagement with Southeast Asia.

CURRENT ISSUES BETWEEN INDIA AND BANGLADESH

- **Transboundary River Waters:** Negotiations on the Teesta and Feni rivers are still long-pending issues for diversification of waters.
- **Farraka Barrage:** The diversion of water from the Ganges to the Hooghly River through the Farakka Barrage has been a longstanding concern.
- **Rohingya Refugee Crisis:** Bangladesh hosts a large number of Rohingya refugees, straining resources and creating tensions with India's cautious approach.
- **Border Security:** Porous borders have turned into an easy transit point and secure hideout for terror outfits like **Jamaat-ul-Mujahideen Bangladesh (JMB)**
- **Growing Chinese Influence:** China's extensive financing of energy projects and Bangladesh's participation in China's Belt and Road Initiative (BRI) pose security concerns for India.

MEASURES TO IMPROVE INDO-BANGLADESH RELATIONS

- **Resolving the Teesta Dispute:** Establishing consensus on demarcating Teesta River water sharing and reaching a time-bound mutual agreement.

- **Address Farraka Barrage Concerns:** Engage in dialogue to alleviate Bangladesh's concerns regarding water diversion.
- **Strengthen Border Security:** Enhance cooperation to combat cross-border terrorism and improve surveillance technology.
- **CEPA Negotiations:** Focus on advancing CEPA (Comprehensive Economic Partnership Agreement) negotiations to bolster economic ties between India and Bangladesh.
- **Countering Chinese Influence:** Providing critical technologies and financial assistance to Bangladesh to counterbalance China's influence and strengthen bilateral relations.
- **Collaborative on Refugee Crisis:** Work together to address the humanitarian needs of Rohingya refugees hosted by Bangladesh while also addressing security concerns. Explore diplomatic solutions to support their safe return to Myanmar.

2.2. INDIA-UAE RELATIONS

Context

Recently, the Prime Minister of India and the UAE President met in Abu Dhabi, UAE.

KEY HIGHLIGHTS OF THE VISIT

- PM Modi inaugurated the BAPS Temple, the **first Hindu Temple in Abu Dhabi**.
- PM Modi addressed members of the **Indian community** at a special event called **"Ahlan Modi"**.
- The visit also led to the exchange of several agreements –
 - ✓ **Memorandum of Understanding (MoU) on cooperation in energy security and trade:** It covers aspects such as energy security and trade, creating opportunities for both countries and also working together in advancing their energy goals.
 - ✓ **An Intergovernmental Framework Agreement between India and the UAE** on the **India-Middle East Economic Corridor:** This would strengthen cooperation, promote regional connectivity and advance shared efforts in enhancing economic ties.
 - ✓ **MoU on cooperation in Digital Infrastructure Projects:** This will create a framework for wide-ranging cooperation, including investment cooperation and also facilitate the sharing of technical knowledge, skills and expertise.
 - ✓ **MoU for cooperation in the field of heritage and museums:** This would foster engagement between the two countries which aimed at supporting the Maritime Heritage Complex at Lothal, Gujarat.
 - ✓ **Agreement on interlinking of UPI (India) and AANI (UAE):** This will facilitate **smooth cross-border transactions** between the two nations which followed the MoU signed on interlinking payment systems during the PM's visit to UAE (2023).
 - ✓ **Agreement on inter-linking domestic debit/credit cards - RuPay (India) and JAYWAN (UAE):** It aims to boost the universal acceptance of RuPay in the UAE, thus emphasizing a closer integration of the payment systems between India and the UAE.

AREAS OF BILATERAL COOPERATION

Political	<ul style="list-style-type: none"> • Diplomatic relations between India and the UAE were established in 1972. The UAE inaugurated its Embassy in India in 1972, while India reciprocated by opening its Embassy in the UAE in 1973. • PM Narendra Modi's 2015 visit marked the initiation of a new Comprehensive and Strategic partnership, breaking a 34-year gap. • Plurilateral/Multilateral Cooperation: <ul style="list-style-type: none"> ✓ They share active participation in several multi-lateral platforms like BRICS, I2U2 (India-Israel-UAE-USA), and UFI (UAE-France-India) Trilateral. ✓ UAE was invited as a Guest Country during the G20 Summit held under India's Presidency.
Economic & Commercial	<ul style="list-style-type: none"> • Currently, India-UAE trade was valued at \$85 billion in 2022-23, making the UAE India's third-largest trading partner. • In 2023, the UAE was also the fourth-largest investor in India and the seventh-largest source of Foreign Direct Investment (FDI) overall. • The UAE ranks as India's 4th largest source of crude oil and 2nd largest for LNG and LPG. • In 2023, the Reserve Bank of India and the Central Bank of the UAE signed a MoU for establishing a Local Currency Settlement System (LCSS) to promote the use of rupee and dirham bilaterally. • India has signed both a Bilateral Investment Treaty and a Comprehensive Economic Partnership Agreement (CEPA) with the UAE. <ul style="list-style-type: none"> ✓ CEPA is expected to increase the total bilateral trade in goods to over \$100 billion and trade in services to over \$ 15 billion within five years.

Defence	<ul style="list-style-type: none"> ✓ Indian Air Force (IAF) engaged in a significant multinational air combat exercise called "Desert Flag" hosted in the UAE. ✓ Recently, the first edition of the India-UAE military exercise "Desert Cyclone" ✓ The UAE was among the earliest Gulf countries to express interest in acquiring BrahMos and the indigenous Akaash Missile.
Cultural Relations	<ul style="list-style-type: none"> • A Joint Commemorative Stamp was issued in 2022 to mark significant milestones: 75 years of India's Independence, 50 years of the UAE's formation, and 50 years of India-UAE diplomatic relations. • In 2022, an MoU was signed during the 14th Joint Commission Meeting, establishing the India-UAE Cultural Council Forum.
Education	<ul style="list-style-type: none"> • The UAE hosts over 100 International Indian schools following CBSE and Kerala Board curricula, serving the children of Indian expatriates. • A tripartite MoU signed in 2023, between the Ministry of Education of India, IIT Delhi, and the Abu Dhabi Department of Education & Knowledge (ADEK) paves the way for establishing an overseas campus of IIT Delhi in Abu Dhabi.
Indian Diaspora	<ul style="list-style-type: none"> • The Indian expatriate community of approximately 3.5 million is the largest ethnic community in the UAE, comprising about 35% of the UAE's population. • 17 eminent Indians and one Indian Community Association from the UAE have been honoured with the Pravasi Bharatiya Samman Award. • The Community Affairs Wing of the Embassy, along with the Pravasi Bhartiya Sahayata Kendra (PBSK) based in Dubai, operates to assist the Indian diaspora through 24x7 helplines and a PBSK Mobile App.

REASONS FOR UAE'S INTEREST IN INDIA

- India is a vast and growing market with a population of over 1.4 billion people. This presents **significant opportunities for UAE's businesses** to export goods and services, invest in infrastructure, and tap into a large consumer base.
- Both the UAE and India have concerns about **China's growing influence in the Indian Ocean region** and Gulf region. Closer ties with India could help the UAE to **counterbalance** this influence.
- Both countries share concerns about **terrorism and extremism**, and closer cooperation could help to combat these threats.
- India relies on the Middle East for a significant portion of its

oil imports, while the UAE seeks new markets for its energy exports. This creates a mutually beneficial relationship.

- The **India-Middle East-Europe Economic Corridor (IMEC)** project could **provide an alternative route for trade**, bypassing the Strait of Hormuz.
- The Indian Ocean Region is one of the major key trading routes in the world which makes interest for UAE's economic growth.

REASONS FOR INDIA'S INTEREST IN UAE

- The **UAE's sovereign wealth funds** offer opportunities for infrastructure development and economic growth in India.
- The UAE provides a **gateway to the Middle East** for trade and energy imports.
 - ✓ The **India-Middle East-Europe Economic Corridor (IMEC)** aims to connect India to Europe via the Middle East, including the UAE.
- Collaboration with the UAE strengthens **India's security posture** in the region.
- Both **India and the UAE are major players in the Global South**, and closer ties can strengthen their voice on the global stage.

CHALLENGES IN INDIA-UAE RELATIONS

- Issues of **low wages, poor living conditions, and limited access** to justice for Indian migrant workers in the UAE, especially in construction and services.
- The **security situation in the Middle East** (eg. Israel-Palestine conflict), including tensions with Iran and conflicts in neighbouring countries like Yemen and Syria, pose significant challenges for both India and the UAE.
- **Piracy in the Red Sea and the Gulf of Aden** threatens maritime trade between India and the UAE.
- Both countries face the **threat of terrorism**, requiring close cooperation on intelligence sharing and counter-terrorism measures.
- While bilateral trade between India and the UAE has grown significantly, but there **remains a trade deficit with the UAE** (India importing more from the UAE than it exports).

WAY FORWARD

- **Shared Prosperity:** There is a need to focus on diversification beyond oil by emphasizing tourism, technology, and finance for mutual economic stability.
- **Collaborative Solutions:** Joint efforts are needed to address labour rights, skill gaps, and security concerns fostering open communication and stakeholder engagement.
- **Deepened Partnerships:** Strengthen economic ties, and enhance security cooperation, including defence trade and medical tourism, while promoting people-to-people exchanges.

- **Strategic Balance:** Maintain multifaceted relations with various actors, navigating regional complexities with diplomacy and cooperation.

CONCLUSION

- By focusing on these key areas, India and the UAE can forge an even stronger, mutually beneficial partnership that contributes to regional prosperity and stability.

2.3. INDIA AND GREECE

Context

The Greece Prime Minister's visit to New Delhi on February 21-22 marks a significant step in the ongoing process of building a strategic relationship between India and Greece.

MORE ON THE NEWS

- Greece PM Mitsotakis, speaking at the **annual Raisina Dialogue**, stressed that despite the challenges in the Middle East, the logic behind the **India-Middle East Economic Corridor (IMEC) remains strong**, and efforts should not waver.
- He positioned Greece as **India's natural gateway to Europe** a close strategic relationship with India offers Greece a gateway to Asia.
- India and Greece agreed to **bolster cooperation in areas ranging from defence manufacturing and trade to connectivity and to speedily finalise a migration and mobility pact**.
- He emphasized the importance of the **"peace project"**.
- He discussed various aspects of strengthening **bilateral ties, including doubling trade, and collaborating on co-production and co-development** of military hardware.
- India PM mentioned that Greece has decided to join **India's Indo-Pacific Oceans initiative**.

About Raisina Dialogue

- It, launched in 2016, has become India's leading forum for discussions on geopolitics and geo-economics.
- The Observer Research Foundation (ORF) hosts an annual event in New Delhi, India, in **collaboration with the Ministry of External Affairs**.
- It is named after Raisina Hill, a prominent location in New Delhi that houses both the Indian Government and Rashtrapati Bhavan.
- The conference is designed in line with Singapore's renowned Shangri-La Dialogue.

India-Middle East-Europe Corridor (IMEC)



INDIA-GREECE BILATERAL RELATIONS

Historical

- **During the ancient period, Alexander the Great's expedition** engaged in battles with Raja Puru, the King of Pauravaa, situated Trade ties between Mauryan kings and Greece evidenced **by coins and writings**.
- Greek ambassador **Megasthenes recorded in Chandragupta's court**.
- **Gandhara art reflects** a fusion of Indian and Greek influences.

Political

- Diplomatic relations **were established in 1950**, with Greece opening its embassy in Delhi in 1950, and India reciprocating by **opening its embassy in Athens in 1978**.
- **Greece supports India's stand** on nuclear disarmament and internal matters like the Citizenship Amendment Act (CAA)/ National Register of Citizenship (NRC), J&K reorganization, and the Ram Janmbhoomi verdict.
- Both countries **pledge support for UNSC seats**, and **Greece consistently backs India** in organizations including the Nuclear Suppliers Group (in 2008), MTCR (in 2016), Wassenaar Arrangements, Australia Group, and others.
- In 2021, during the visit of the External Affairs Minister's visit to Greece, both countries signed the Framework Agreement on the International Solar Alliance.
- After the visit of the Greek Foreign Minister to India in 2022, Memorandums of Understanding (MoUs) were signed on the **Cultural and Educational Exchange Programme for the Years 2022-2026** and the Declaration of **Intent on Migration and Mobility**.
- The Indo-Greek relations were elevated to **"strategic partnership"** in 2023.

Economical

- India-Greece bilateral trade in **2022-23 was about \$2 billion**, with India's exports at **\$785.72 million** and imports at **\$1.16 billion**.
- **India mainly exports** aluminium, organic chemicals, fish and crustaceans and iron and steel to Greece.
- **Greece's top exports to India** are minerals fuels, mineral oils and products, sulphur and aluminium foil.

- India played a significant role as the **‘Honoured Country’ in the 84th Thessaloniki International Fair (TIF) in 2019**, the largest annual commercial exposition in Greece and Southeast Europe.
- India and Greece plan to double their **bilateral trade by 2030**.

Defence

- Formal cooperation was initiated in **1998 with an MoU signing**.
- Expand collaboration in areas like defence manufacturing and policy exchange like Blue Flag.
- Indian Air Force participated in the **INIOCHOS-23 multinational** air exercise in Greece in 2023, and INS Chennai naval ship visited **Souda Bay in 2023**, conducting a Passage Exercise with the **Hellenic Naval Ship Nikiforos Fokas** in the Aegean Sea.

Science and Technology

- Agreement on S&T signed in 2007, promoting collaboration in various areas.
- **Key areas of focus:** Information and Communication Technology (ICT), nanotech, life sciences, seismology, agriculture, environment, renewable energy.
- **The Committee on Space Research (COSPAR) meeting in 2022** in Athens explored potential space cooperation.

Cultural Exchange and Indian Diaspora

- In India, Prof. Bharat Gupt has done comprehensive work in Greek theatre, and is the author of **“Dramatic Concepts – Greek and Indian”**.
- **Dr. Vassilis Vitsaxis** was elected Honorary Fellow of Sahitya Academy.
- **According to the 2011 Greek census**, the Indian community in Greece numbered 11,333. Current estimates suggest that the community has grown and reached around 14,000 persons.
- The latest discussion **of the mobility pact** will be a key step towards strengthening cooperation on legal migration, fighting human trafficking and offering new opportunities for young Indians.

CHALLENGES IN BILATERAL RELATION

- Despite growing trade ties, the volume remains low compared to India’s other partnerships. Despite ambitions to double trade by 2030, bilateral trade remains relatively low.
- Rising China in the Gulf and Middle East region face logistical

and infrastructure hurdles for connecting the Indian Ocean and the Mediterranean through IMEC.

- Trade relations can be hampered by existing regulations and partnerships within the EU and UK, potentially hindering direct trade routes.
- Greece’s NATO membership and India’s strategic autonomy might pose challenges in aligning strategic interests.

Greece’s Importance for India	India’s Importance for Greece
<ul style="list-style-type: none"> • Greece is strategically important for India due to its location as a gateway to Europe and the Gulf countries. • Greece has also emerged as a key player in India’s Mediterranean outreach, with India seeking a presence at Greek ports and a broader defence partnership. • Indian companies are interested in investing in Greek ports, and Greece is being invited to explore commercial opportunities in shipping under the Make in India program. • The India-Middle East-Europe Economic Corridor (IMEC) aims to connect South and West Asia to Europe through Haifa in Israel and Piraeus in Greece. • Indo-Greek partnership aims to achieve an annual export target of Rs. 35,000 crore. 	<ul style="list-style-type: none"> • Strategic partnership with India provides Greece with a key gateway to access opportunities and connectivity in the Asian region. • Greece faces tensions with Turkey in the Eastern Mediterranean. India can offer a counterbalancing presence in the region, promoting stability. • India’s vast and growing economy presents immense opportunities for Greek businesses in sectors like infrastructure, tourism, shipping, and renewable energy.

WAY FORWARD

- **Deepen strategic ties:** Strengthen defence cooperation, enhance connectivity, and facilitate human mobility for mutual benefit and global security.
- **Focus on IMEC:** Prioritize the India-Middle East-Europe Economic Corridor for enhanced connectivity and trade opportunities.
- **Expand collaboration:** Embrace the **“three seas, three continents” vision**, support Indo-Pacific initiatives, and explore economic, technological, and cultural partnerships.
- **Focus on shared interests:** Promote regional stability, counter common threats, and build a robust bridge between Asia and Europe, fostering peace and prosperity.

2.4. MYANMAR'S CIVIL WAR AFFECTING INDIA'S INTEREST

Context

The Civil War in Myanmar has recently entered its third year of conflict.

BACKGROUND

- In February 2021, when the Myanmar military (also known as the **military Junta**) seized power from the elected government of **Aung San Suu Kyi**, they expected the resistance to subside quickly. However, opposition to military rule has only grown stronger over the past three years.
- **Ethnic Armed Organizations (EAOs)** and the **People's Defence Forces** (organised by the National League of Democracy of Aung San Su Kyi) now control many towns across Myanmar, indicating widespread opposition to the military junta.
- However, the recent capture of **Paletwa town in the Chin State** by the **Arakan Army** has impacted the inter-ethnic solidarity among the EAOs, thus impacting their fight against the military.
- Paletwa, situated along Myanmar's western borders with **India and Bangladesh**, is a commercial town on the Kaladan River through which the Indian government's **Kaladan Multimodal Transit Transport Project (KMTTP)** passes.



EFFECTS ON INDIA

- **Effects on Connectivity**
 - ✓ There is a perception in India that the **Arakan Army** is not favourable to the **Kaladan Multimodal Transit Transport Project (KMTTP)**.
 - ✓ Thus, the capture of Paletwa by the Arakan Army will directly affect India's KMTTP in Myanmar, which aims to provide **North East India** with an alternative route via sea.
 - The Kaladan project was conceived as a strategic alternative route to ensure connectivity and reduce dependence on the vulnerable Siliguri corridor, especially in the context of potential conflict with China.
 - ✓ The construction of the **Sittwe Port and Inland Water Terminal** at Paletwa has been completed, but the

connecting road faces obstacles due to the prevailing security situation in Myanmar.

• Effects on Security

- ✓ Increased insurgency of armed groups such as the United National Liberation Front (UNLF), the United Liberation Front of Assam (ULFA), and the National Socialist Council of Nagaland-Khaplang (NSCN-K), operating secretly from the **Chin and Sagaing** regions of Myanmar.
- ✓ The proximity of the North-East with the 'golden triangle' (Myanmar, Thailand, Laos) has made the Indo-Myanmar border highly vulnerable to drug trafficking and related cross-border insurgency.

• Refugee movement into India

- ✓ There are issues of Refugees entering India. For example, the alleged movement of **Kuki-Chin** people into Manipur has created a volatile ethnic situation in Manipur.
 - This led to the Home Minister's decision to fence the entire border with Myanmar and suspend the **Free Movement Regime (FMR)** between India and Myanmar.
- ✓ Similarly, the influx of **Rohingya refugees** into North Eastern states such as Assam has led to demands of the National Population Register (NPR).

Free Movement Regime (FMR)

<p>About FMR</p>	<ul style="list-style-type: none"> • It is a mutually agreed agreement between India and Myanmar that allows tribes living along the border on either side to travel up to 16 km inside the other country without a visa. • Enacted in 2018 as part of India's Act East policy amid rising Chinese influence in Myanmar. • A border resident needs to have a border pass, valid for a year, to stay in the other country for about two weeks per visit.
<p>Rationale Behind FMR</p>	<ul style="list-style-type: none"> • The current alignment of the boundary between India and Myanmar was established by the Treaty of Yandaboo in 1826, which divided the people of the same ethnicity and culture without their consent. • Thus, FMR was envisaged to promote cross-border ethnic ties, improving relations with Myanmar government in view of increasing Chinese influence in Myanmar. • The FMR also envisaged the promotion of localised border trade through customs stations and designated markets. • It also helps the people of Myanmar access better education and healthcare facilities on the Indian side of the border.

STRATEGIC IMPORTANCE OF MYANMAR FOR INDIA

- **Crucial Neighbour:** India and Myanmar share a **1,643 km long land border**, as well as a maritime boundary in the Bay of Bengal. Myanmar's borders directly touch **four Indian states: Arunachal Pradesh, Nagaland, Manipur, and Mizoram** making it a crucial neighbour for India's North Eastern region.
- **Cultural Ties:** India and Myanmar share ethnic and cultural ties dating back to ancient times. Buddhism, which originated in India, is a major religion in Myanmar.
- **Strategic location:** Myanmar serves as India's **gateway to Southeast Asia**, facilitating the implementation of **India's Act East and Neighbourhood First Policy**.
- **Regional Connectivity:** India, Myanmar, and Thailand are constructing the **IMT Trilateral Highway**, linking India to **ASEAN**. This road will enhance trade in the ASEAN-India Free Trade Area, promoting regional commerce.
- **Countering Chinese Influence:** As part of **India's SAGAR Vision**, India has developed the Sittwe port in Myanmar's Rakhine state to counter the Chinese-developed Kyaukpyu port.

BROADER CHALLENGES FOR INDIA

China's Influence

- China plans to construct a railway line connecting its **Yunnan province with Kyaukpyu via Mandalay** in Myanmar as part of the **China-Myanmar Economic Corridor (CMEC)**. It will provide China with direct access to an Indian Ocean port.
- China has operationalized oil and natural gas pipelines from the **Shwe gas fields** near Kyaukpyu in the Rakhine State to Yunan province in China.
- India's approach has been primarily focused on building relations with the **Myanmar military junta**. In contrast, China's **multifaceted engagement strategy** showed flexibility in engaging with both the military junta ruling Myanmar and insurgent groups operating in the region.
 - ✓ There are reports which suggest that China is using armed groups like the Arakan Army to slow down India's connectivity projects in Myanmar.
- Many state and non-state actors seeking international

support tend to show greater accommodation towards China's concerns due to its status as a permanent member of the **United Nations Security Council**, unlike India.

Low Economic Engagement

- Despite geographical proximity, bilateral trade between India and Myanmar has not met expectations. (It has remained static at around \$1.8 billion in the past 5 years)
- Over time, a trust deficit has widened between India and Myanmar, primarily attributed to India's reputation for delaying the implementation of projects.

WAY FORWARD

- **Delicate Balancing on Rohingya Issue:** India needs to adopt a delicate balance with both Myanmar and Bangladesh while handling the Rohingya issue.
- **Non-Interference in Internal Politics:** India's policy towards Myanmar is of non-interference in its internal politics. This approach allows India to engage with Myanmar's military while supporting democratisation efforts taken from within the country.
- **Consensus building:** ASEAN's five-point consensus programme can be implemented to establish peace in Myanmar.
- **Focus on Economic Cooperation:** Enhancing trade and investment corridors, such as the trilateral highway and the Kaladan project, could promote deeper economic ties in the region. It can also be used to counter China's Influence.
- **Approach to Insurgent Groups:** India should move beyond intelligence-centered methods and emphasise dialogue and cooperation to address insurgency issues.

CONCLUSION

- Myanmar's strategic location, trade potential, regional connectivity, and cultural affinity, make it a crucial partner for India in advancing its interests in the Indo-Pacific region.
- Thus, strengthening ties with Myanmar aligns with India's broader strategic objectives of fostering regional stability, economic growth, and connectivity in Asia.

2.5. GROWING MILITARIZATION OF THE INDIAN OCEAN REGION (IOR)

Context

A growing concern about the militarization of the Indian Ocean region was raised during the recent Indian Ocean Conference in Perth, Australia.

INDIAN OCEAN CONFERENCE (IOC)

- **Objective:** It is an annual forum discussing the geopolitical, economic, and strategic importance of the Indian Ocean region.
- **Participants:** Policymakers, scholars, business leaders, and

civil society representatives gather to address security, trade, and cooperation in the region.

- **Inception:** First held in Singapore in 2016, IOC has since become an annual event.
- **Organizers:** Led by the **India Foundation** in partnership

February, 2024

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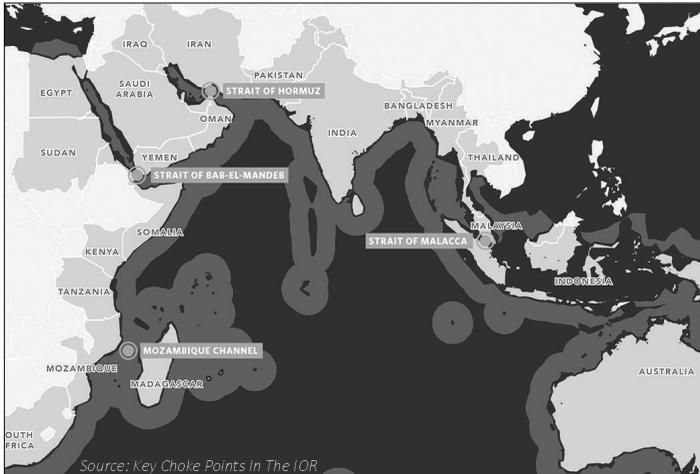
KGS IAS

with regional organisations, IOC facilitates dialogue and collaboration on Indian Ocean affairs.

Key Sea Lines of Communication (SLOCs) Chokepoints in the Indian Ocean Region

Important choke-points:

- **Bab al-Mandab Strait:** Connects the Red Sea to the Indian Ocean.
- **Strait of Hormuz:** Links the Persian Gulf to the Indian Ocean.
- **Straits of Malacca:** Connects the Indian and Pacific Ocean.



ABOUT THE INDIAN OCEAN REGION

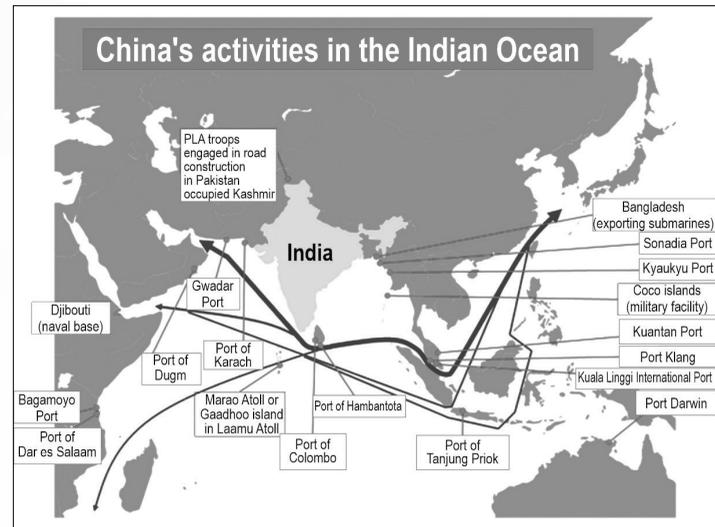
- It encompasses from the western coast of Africa to the eastern coast of Australia and from the northern Arabian Peninsula and Persian Gulf to the southern coasts of Sri Lanka and Australia.
- As the **world's third-largest ocean**, the Indian Ocean covers approximately 70.6 million square kilometres.

SIGNIFICANCE OF THE INDIAN OCEAN REGION FOR INDIA

- **Geographical Centrality**
 - ✓ India's 7,500-kilometer coastline places it at the heart of the Indian Ocean.
- **Economic Vitality:**
 - ✓ **Trade Hub:** Over 95% of India's trade volume and 68% by value is through the Indian Ocean.
 - ✓ **Energy Lifeline:** Nearly 80% of India's required crude oil is imported through the Indian Ocean.
 - ✓ **Resource Dependency:** India heavily relies on Indian Ocean fisheries and aquaculture for exports.
 - ✓ **Mineral Exploration:** India allowed exclusive rights in the central Indian Ocean regions by the International Seabed Authority which opens new avenues for deep seabed mining.
 - ✓ **Counterterrorism:** The 2008 Mumbai attacks underscore India's maritime security concerns.
 - ✓ **Combatting Illicit Activities:** India faces challenges such as smuggling, illegal fishing, and human trafficking, necessitating strong maritime security measures.

INCREASING MILITARIZATION OF THE INDIAN OCEAN REGION

- China established ports like **Gwadar (Pakistan)** and **Hambantota (Sri Lanka)**. Speculation surrounds the potential dual-use nature of these ports for military reconnaissance and surveillance activities, raising concerns among regional actors.



- China's deployment of naval assets for **anti-piracy missions in the Gulf of Aden**, including submarines, demonstrates its growing maritime capabilities in the Indian Ocean.
- The opening of **China's first overseas military facility** in Djibouti in 2017 signifies its increasing military footprint in the Indian Ocean, particularly in the Horn of Africa.
- The US maintains a significant naval presence through commands like INDOPACOM, CENTCOM, and AFRICOM, with naval bases strategically positioned in Diego Garcia, Djibouti, UAE, and Bahrain.

CONCERNS ABOUT INCREASED MILITARIZATION IN THE INDIAN OCEAN

- Deployment of naval assets and monitoring systems may lead to disruptions in commerce routes, elevating insurance costs and transit times, thereby hindering economic activities.
- Increased military presence raises security concerns and instability, deterring investors and impeding economic growth.
- Increased militarisation escalates competition for strategic dominance, leading to disputes over ownership and control of offshore deposits.
- Militarization activities, such as naval exercises and deployments, can adversely affect the marine environment. Increased vessel traffic, underwater noise pollution, and potential oil spills from military operations threaten marine ecosystems and biodiversity.

INDIA'S INITIATIVES IN THE INDIAN OCEAN REGION

1. Regional Engagement and Cooperation:

- ✓ **Indian Ocean Rim Association (IORA) and Indian Ocean Naval Symposium (IONS):** India's participation in these forums promote collaboration and dialogue among Indian Ocean littoral states, promoting regional stability and security.

2. Maritime Security Initiatives:

- ✓ **Security and Growth for All in the Region (SAGAR):** It aims to enhance maritime security and promote economic growth in the Indian Ocean region, emphasizing cooperation and inclusivity.
- ✓ **Coordinated Patrols (CORPAT) and Naval Exercises:** India's participation in bilateral/multilateral naval exercises and CORPAT with regional partners like Indonesia, Thailand, Myanmar, and Bangladesh enhances maritime security and interoperability.

3. Capacity Building and Assistance

- ✓ **Naval Asset Supply:** India's provision of naval assets to countries like Mauritius, Myanmar, Sri Lanka, Maldives, and Seychelles enhances their maritime security capabilities and promotes regional stability.

4. Strategic Alliances

- ✓ **Quadrilateral Security Dialogue (QUAD):** It aims to counterbalance China's growing influence by bolstering security cooperation and promoting a rules-based order in the IOR.
- ✓ **Chabahar Port Development Project:** It serves strategic interests by providing an alternative to China's Gwadar port in Pakistan.

5. Capacity Enhancement

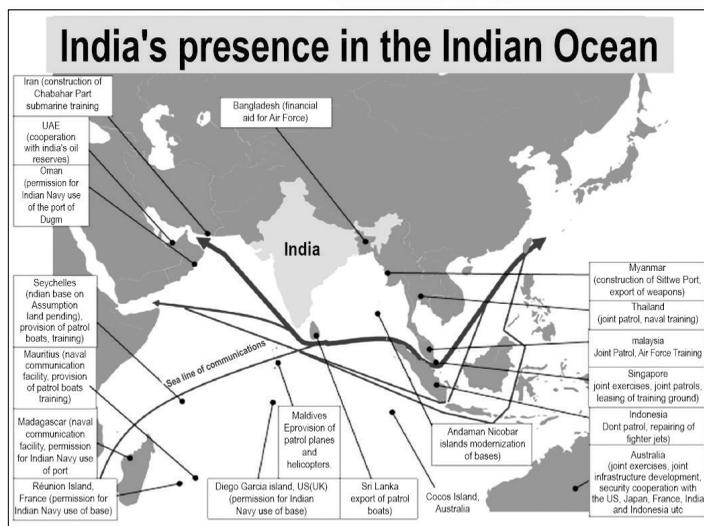
- ✓ The Indian Navy is pursuing a **Maritime Capability Perspective Plan** to achieve a 200-ship fleet by 2027. This plan safeguards the nation's interests and assets in surrounding waters.

CHALLENGES FOR INDIA IN THE IOR

- Financial Limitations:** Robust financial backing is essential to translate intentions into reality, especially in achieving the status of a **net security provider**.
- Civil-Military Relationship:** Disagreements between various ministries and civil-military leadership have resulted in missed strategic opportunities, hindering effective decision-making and implementation.
- Non-Alignment with major superpowers such as the USA, Russia etc.:** India's commitment to non-alignment with any superpower is integral to maintaining strategic autonomy. However, it may limit potential alliances or partnerships that could enhance security capabilities.
- Primacy of Land Operations:** India's historical focus on land operations, particularly along its borders with China and Pakistan, and involvement in proxy conflicts diverts attention and resources from maritime security priorities.

MEASURES FOR INDIA'S ENGAGEMENT IN THE IOR

- Consolidate IOR Vision:** Harmonize the **"Act East"** and **"Look West"** visions to ensure a cohesive approach towards both ends of IOR.
- Develop a Common Understanding and Comprehensive Strategy**
 - ✓ Engage with stakeholders to foster cooperation and develop a comprehensive strategy for regional prosperity.
 - ✓ Address the aspirations of smaller states in the region by providing economic and military support.
- Humanitarian Crisis Response:** Maintain prompt responses during humanitarian crises to generate goodwill while ensuring missions are perceived as humanitarian rather than geopolitical.
- Investment in Naval Capabilities**
 - ✓ Increase investments in the navy to counter growing Chinese influence in the IOR effectively.
 - ✓ Strengthening hard-power capabilities is essential for realising India's vision of a safe, free, and open IOR.
- Promote Multipolarity and Security**
 - ✓ Advocate for security, peace, and adherence to international law among countries in the region.
 - ✓ Recent agreements like INFRUS between the US, France IOR by transferring advanced military technology, such as nuclear-powered submarines, to India.
- Ensure Freedom of Navigation**
 - ✓ Safeguard vital trade routes and chokepoints for global commerce, such as the Straits of Malacca.
 - ✓ Strengthen efforts to uphold freedom of navigation to facilitate uninterrupted trade, crucial for India's foreign trade, which mainly relies on the Indian Ocean.



2.6. RISING TENSIONS IN THE KOREAN PENINSULA

Context

In recent times, the Korean peninsula has become a focal point of international concern, giving rise to serious apprehensions regarding the deterioration of the global security landscape and an escalation of major power rivalry.

MORE ABOUT THE NEWS

- There has been a notable uptick in provocative moves by North Korea and the subsequent rebuttals by South Korea and its allies.
- North Korea **has rescinded its national objective of Korean reunification** and has formally categorized South Korea as an adversarial state.
- North Korea has also ramped up the frequency and diversity of its missile tests, expanding its strategic capabilities.
- South Korea has responded to these actions through joint military drills with the U.S. and Japan.

CONTEMPORARY GEOPOLITICAL ISSUES IN THE KOREAN PENINSULA

- The issue of North Korea's denuclearization has been a persistent concern on the Korean peninsula.
- North Korea's nuclear aspirations were delayed briefly from 1994 to 2002 when the U.S. entered into an **"Agreed Framework"**, thus pausing its nuclear program in exchange for nuclear energy.
- However, the agreement failed and North Korea went ahead with its nuclear test in 2006 after withdrawing from the **Nuclear Non-proliferation Treaty (NPT)** in 2003.
- In 2003 itself, another initiative called **the six-party talks** involving the two Koreas, China, Japan, Russia, and the U.S. commenced for denuclearizing the Korean Peninsula.
- By 2009, the talks broke down completely and North Korea came out of it with a vow to never return.
- Ever since **Kim Jong Un** assumed leadership in North Korea, there has been an annual increase in missile tests, marking a consistent trend.
 - ✓ Over the last two decades, North Korea has conducted six nuclear weapons tests, and has also tested and deployed delivery systems, space launchers, and satellites.
 - ✓ North Korea is believed to possess the ability to even target the U.S. mainland with its nuclear arsenal, and has also emerged as a significant source of global cyber-attacks.
- **South Korea** on its part has strengthened its military alliance with the U.S., becoming an integral part of the broader alliance system. This includes hosting not only U.S. troops but also advanced missile defense systems.
 - ✓ In July 2016, American and South Korean military officials announced the deployment of the **Terminal High-Altitude Area Defense (THAAD) system** in the country following ballistic missile and nuclear tests by North Korea.

About Korean Peninsula

• Division and Ideological Differences

- ✓ Following World War II and the defeat of Japan, the Korean Peninsula was split in two.
- ✓ The northern half fell under the influence of the Soviet Union, while the southern half came under the control of the United States.
- ✓ This division led to the creation of two Koreas with contrasting ideologies, reflecting the opposing forces of the Cold War.

• The Korean Divide: Ideology and Geopolitics

- ✓ The **Korean War (1950-53)**, sparked by the North's invasion, served as the Cold War's first "hot war."
- ✓ After the end of the Cold War and cessation of active conflicts, even today, the **Korean peninsula remains split along ideological and geopolitical lines.**
- ✓ The North, under an authoritarian dynasty, aligns with China and Russia.
- ✓ In contrast, the South embraces a liberal democracy and partners with the US.

CAUSES FOR LATEST AGGRAVATIONS

- **New declaration of North Korea:** In his address to the Supreme People's Assembly, Kim Jong Un has scrapped the decades-old North Korean goal of reunifying with the South, and has rebranded South Korea as an enemy state.
 - ✓ Ordered the rewriting of the North Korean constitution to align with this new stance.
 - ✓ Closed offices associated with reunification and brought down a landmark monument in Pyongyang symbolizing the reunification ideal.
- **Development of Hypersonic Missile System:** North Korea also tested a **solid fuelled missile** carrying a hypersonic warhead in January 2024. This is significant because major military powers across the world (eg. U.S., Russia, China, India, and Iran) are in a race for developing, testing, and deploying hypersonic weapons.
 - ✓ These weapons can theoretically provide countries the capability to evade and even target the missile defence systems of their adversaries.

REGIONAL RESPONSES AFTER NORTH KOREA PROVOCATIONS

- **Joint exercise:** The U.S., South Korea, and Japan have conducted joint naval drills in response to North Korea's provocations, involving nine warships.

- ✓ The exercises are meant to enhance their joint effectiveness against North Korea's missile and underwater threats, as well as its illegal maritime shipment of arms.
- **North Korea's allegation and retaliation:** North Korea accused these drills of being offensive rehearsals, not defensive, and tested its "Haeil-5-23" nuclear-capable underwater drone in response to these joint naval drills.
- ✓ It also tested its strategic cruise missile, the "Pulhwasal-3-31", posing a potential threat to crucial American bases in Japan.
- **Trilateral cooperation:** The South Korean govt. has adopted a strategy to closely coordinate efforts with the U.S. and Japan to deter and counter North Korea's aggressive moves.
- ✓ In a historic meeting, the three countries met at Camp David in Washington D.C. in August 2023 to initiate a new era of trilateral cooperation.

INTERNATIONAL SECURITY CONCERNS

- **Rising tension in the Korean Peninsula:** Amid global conflicts like Russia-Ukraine, Israel-Palestine, and simmering

tensions in China-Taiwan and India-China, there's a surge in tension in the Korean Peninsula.

- ✓ This is a significant concern as key external stakeholders of the Korean peninsula (the U.S., China, and Russia) are engaged in these rivalries.
- **Deepening Alliances:** North Korea's deepening ties with China and Russia, and South Korea's increasing entrenchment in the U.S. alliance system, imply a significant linkage with ongoing conflicts.
- **Sino-Russian support for North Korea:** Russia has boosted its engagement with North Korea in the wake of the Russia-Ukraine war, with promises of enhancing North Korea's space capabilities in exchange for arms supplies.
- ✓ Despite heightened tensions, China, as North Korea's largest trading partner, reaffirms its unwavering support to North Korea.
- **Opening of a "third front":** At a time when the U.S. is preoccupied with Russia-Ukraine and the Israel-Hamas, North Korea has created a distraction for the U.S. by opening a "third front" on the Korean Peninsula.

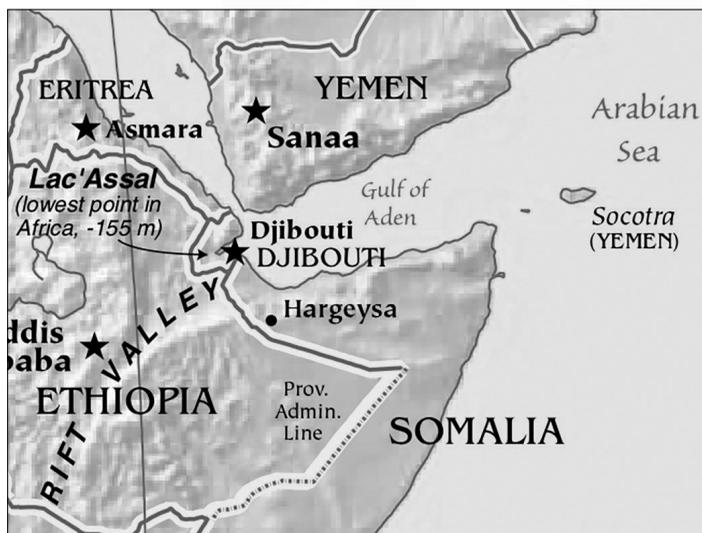
2.7. MARITIME PIRACY

Context

Recently, the Indian Navy prevented two piracy attempts near the Somali coast in the Gulf of Aden.

ABOUT PIRACY

- The **International Maritime Bureau** defines Piracy as the act of boarding any vessel with an intent to commit theft or any other crime and with an intention or capacity to use force in aid of that act.



REASONS FOR HIGH RATE OF PIRACY

- **Poor Policing and Weak Maritime Forces:** Poor policing and weak maritime forces, often due to limited enforcement

capabilities, contribute to challenges in preventing piracy.

- **High Shipping Traffic Concentration:** These regions serve as **choke points** with significant shipping traffic. The convergence of ships or their stationary presence provides opportunities for piracy.
- **Poor Governance and Social Issues:** Proximity to areas with poor governance and internal conflicts leads to **unemployment, poverty, and increased crime**. It contributes to the motivation for engaging in piracy.
- **Legal Complexities and Coordination Challenges:** These areas, including **international waters** and straits, fall under the jurisdiction of multiple countries. It leads to legal complexities and difficulties in coordination due to **overlapping maritime jurisdictions**.

MEASURES TO TACKLE PIRACY

- **National**
 - ✓ **Anti Maritime Piracy Act 2022:** The Act empowers Indian authorities to **combat piracy in international waters**, aligning with the UN Convention on the Law of the Sea (UNCLOS). It applies beyond India's Exclusive Economic Zone (EEZ), i.e. areas beyond **200 nautical miles** from the country's coastline.
 - ✓ **Proactive Anti-Piracy Patrol:** The Indian Navy has been actively engaged in the troubled areas off the **Horn**

of Africa and the Gulf of Aden since 2008. It conducts continuous anti-piracy patrols, playing a crucial role in addressing piracy threats in the region.

- ✓ **Rescue Operations:** The Indian Navy successfully coordinated with the **Sri Lankan and Seychelles** navies in rescuing the Sri Lankan fishing trawler, Lorenzo Putha in January. Additionally, the Offshore Patrol Vessel **INS Sumitra** swiftly rescued two Iranian-flagged boats within 36 hours.
- **International**
 - ✓ **The United Nations Convention on the Law of the Sea (UNCLOS):** Adopted in **1982**, it lays down a comprehensive regime of **law and order in the world's oceans and seas**, establishing rules governing all uses of the oceans and their resources. India has ratified UNCLOS.
 - ✓ **The International Convention for the Safety of Life at Sea, 1974 (SOLAS):** The SOLAS Convention is regarded as the most important of all international treaties

concerning the **safety and security of merchant ships**. India has ratified SOLAS.

WAY FORWARD

- **Strengthen Enforcement:** Invest in improving policing and maritime forces to prevent and respond effectively to piracy.
- **Enhance Navigation Security:** Implement strong security measures in high-traffic areas, collaborating internationally for effective enforcement.
- **Address Root Causes:** Tackle socio-economic issues like poor governance, conflicts, unemployment, and poverty to discourage piracy.
- **Improve International Cooperation:** Promote collaboration and establish clear legal frameworks to overcome coordination challenges in addressing piracy across maritime jurisdictions.

2.8. WEIMAR TRIANGLE

Context

The foreign ministers of the three countries (Poland, France, and Germany) recently met in Paris and discussed about the revival of the **Weimar Triangle**.

KEY HIGHLIGHTS

- The governments of Poland, France, and Germany have pledged to strengthen Europe's security and defence capabilities to support Ukraine.
- The Poland Prime Minister emphasized the need for Europe, especially the European Union (EU), to become a stronger military power, stating that there is no reason for the EU to be militarily weaker than Russia. He called for increased

production and closer cooperation as top priorities.

- Germany, Poland, and France would **unveil new cooperation to combat foreign disinformation operations, particularly those originating in Russia**

NORTH ATLANTIC TREATY ORGANIZATION (NATO)

- It is an **intergovernmental military alliance**. Its headquarters is in the Belgium.

1991: creation of the Weimar Triangle

What is the Weimar Triangle?

> A forum for dialogue and cooperation <
Between France, Germany, and Poland



Who? >



Heads of State and Government



Foreign and Europe Ministers



Other Ministers



Members of Parliament from the 3 countries

Why? > Initially, the aims were to:

- Support and prepare Poland's accession to NATO (1999) and the European Union (2004)
- Support German-Polish reconciliation, based on the French-German model

Since Poland's EU membership, political dialogue has aimed to:

- Develop converging positions on major topical subjects in Europe
- Contribute to European debate to build a more united and stronger European Union and stand together in the face of today's challenges, particularly the conflict in Ukraine
- Confer ahead of European meetings
- Deepen trilateral cooperation

- It was established by 12 countries from Europe and North America with the signing of the North Atlantic Treaty (also known as the Washington Treaty) in 1949 in Washington, USA.
- The objective was to provide collective security against the Soviet Union attack in the aftermath of World War II.
- According to Article 5 of the Washington Treaty, NATO works on the principle of collective defence, where an attack on any NATO member is considered an attack on all NATO members.
 - ✓ Article 5 has been invoked once, in response to the 9/11 terrorist attacks in the United States in 2001.
- **Members:** It comprises 32 member states viz. two North American countries (USA and Canada), 28 European countries, and one Eurasian country (Turkey).
- Recently, Sweden became the 32nd member in March 2024.
- **Functions of NATO**
 - ✓ **Politically:** It promotes democratic values and fosters member collaboration on defense and security issues to build trust and prevent conflict.
 - ✓ **Militarily:** NATO is committed to resolving disputes peacefully but it has the military power to undertake crisis-management operations under Article 5 of the Washington Treaty.

2.9. WORLD GOVERNMENT SUMMIT 2024

Context

Recently, the **Prime Minister of India** attended the **World Governments Summit** in Dubai as a **Guest of Honour**.

KEY HIGHLIGHTS

- **Theme** of the 2024 Summit: “**Shaping the Future Governments**”
 - **Agenda:** The summit will emphasize six main themes:
 1. Government Acceleration and Transformation
 2. Artificial Intelligence and The Next Frontiers
 3. Reimagining Development and Future Economies
 4. Future Societies and Education
 5. Sustainability and The New Global Shifts
 6. Urbanization and Global Health Priorities.
 - **Participation:** The Summit saw engagement from 20 world leaders, including 10 Presidents and 10 Prime Ministers. Delegates from over 120 countries were represented. Overall, 4,000 attendees were present.
 - **India, Turkey, and Qatar** have been **designated as the guests of honour** for 2024.
- Prime Minister of India’s Special Keynote address
- **Principle of Governance:** “Minimum government, maximum governance” mantra emphasized.
 - **Digital Transformation:** India’s utilization of digital technology for welfare, inclusivity, and sustainability discussed.
 - **Human-centric Approach:** Call for governance centred around human needs and well-being.
 - **Women-led Development:** Promoting women’s participation in achieving an inclusive society.
 - **Call for Global Governance Reform:** Emphasis on the need for reform in global governance institutions during the transformation of countries.
 - **Reform of Multilateral Institutions:** Push for reforming multilateral institutions to provide greater voice and representation for the Global South in decision-making processes.
 - **India’s Contribution to Global Progress:** India will continue to contribute to global progress based on its role as a “Vishwa Bandhu”(Friend of the World).
 - **Climate Change Action:** Call for joining **Mission LIFE (Lifestyle for Environment)** to create a sustainable world.
 - **Global Leadership:** India’s leadership role as the chair of G20 emphasized. Efforts to bring development concerns of the Global South to the forefront of global discourse are highlighted.

World Government Summit

- **Annual Event:** The World Government Summit is an annual event held in Dubai, UAE, bringing together government leaders, policymakers, experts, and innovators from around the globe.
- It is a global knowledge exchange platform for governments that was established in 2013 under the leadership of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai.
- **Mission:** To Inspire and Enable the Next Generation of Governments.
- **Vision:** To Become the Global Platform for Shaping Future Governments.
- **Purpose:** The summit serves as a platform for discussing and addressing global challenges and opportunities in **governance, innovation, technology, sustainability, and economic development.**
- **Significance:** The summit’s significance lies in its role as a catalyst for international cooperation, innovation, and progress, driving positive change and addressing shared global concerns.



3.1. INTERIM BUDGET 2024

Context

Recently, the Interim Budget was presented by the Finance Minister in the Parliament.

HIGHLIGHTS OF INTERIM BUDGET 2024

Viksit Bharat

- Embracing the principles of ‘Sabka Saath, Sabka Vikas, and Sabka Vishwas’ and the national approach of “Sabka Prayas,” the goal is to achieve a **Viksit Bharat (Developed India) by 2047**.
- **To facilitate milestone-linked reforms by State Governments for the vision of Developed India, a provision of Rs.75,000 crore as a fifty-year interest-free loan has been proposed.**
- As India moves closer to celebrating 100 years of independence, the period formerly known as ‘Amrit Kaal’ has been renamed ‘**Kartavya Kaal**’.

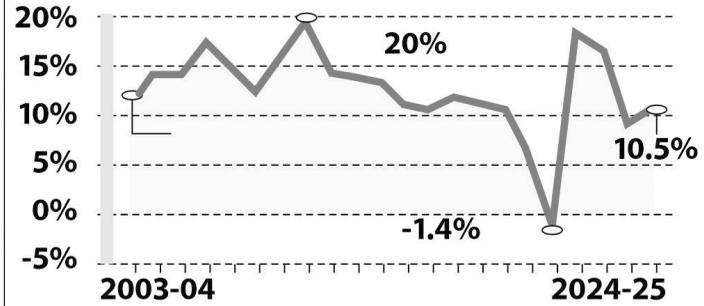
Receipts and Expenditure

- **The total receipts and Expenditures for the year 2024-25 are estimated to be Rs 47,657,68 lakh crore.**

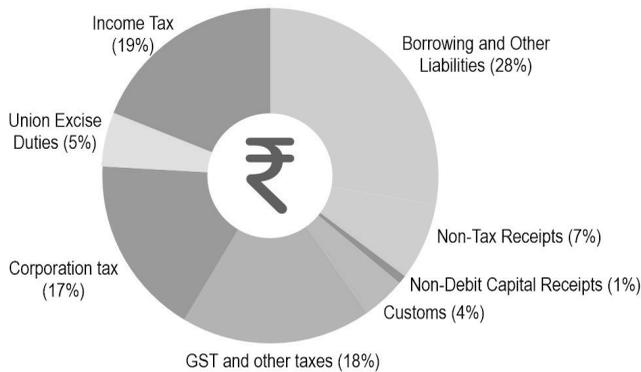
GDP Growth rate

- For 2024-25, the nominal GDP is estimated to grow by 10.5%.
- **The real GDP growth and the real GDP growth rate are derived from the nominal GDP data by removing the effect of inflation.**

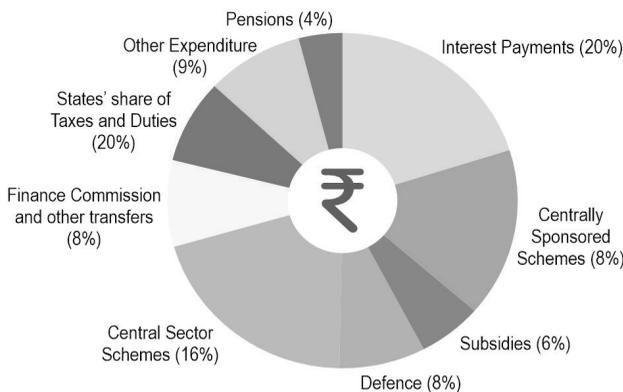
NOMINAL GDP GROWTH RATE



Rupee Comes From



Rupee Goes To



FISCAL MEASURES

- **Fiscal Deficit:** The revised fiscal deficit for the fiscal year 2023-24 stands at 5.8% of the GDP and is projected to be 5.1% for FY25. The objective is to bring it down below 4.5% in FY26.
- Notably, there are no alterations to the tax rates for both direct and indirect taxes.
- A notable step includes withdrawing outstanding direct tax demands, up to Rs 25,000 for FY 2009-10 and up to Rs 10,000 for FYs 2010-11 to 2014-15. It will benefit 1 crore taxpayers.

Social Sector Initiatives

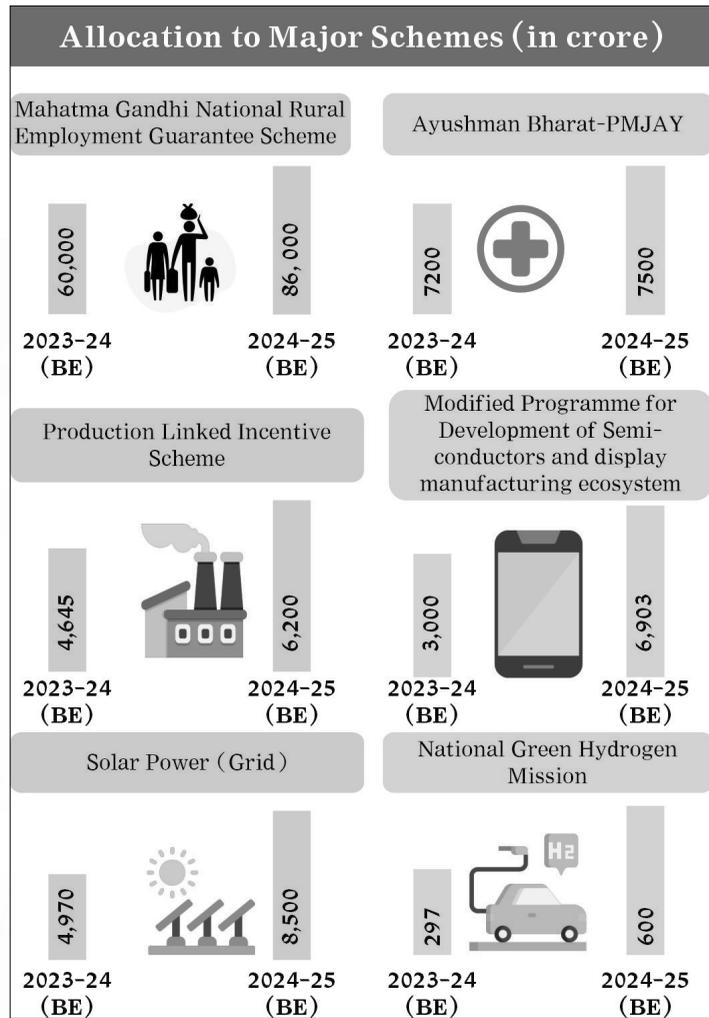
- **Focus Segments:** The Prime Minister is dedicated to uplifting four major segments: the ‘Garib’ (Poor), ‘Mahilayen’ (Women), ‘Yuva’ (Youth), and ‘Annadata’ (Farmer).

Government Welfare Initiatives	Description
Poverty Alleviation	With the 'Sabka Saath' approach, the government has aided 25 crore people in escaping multi-dimensional poverty over the past decade.
Direct Benefit Transfer (DBT)	Through PM-Jan Dhan accounts, the government has executed a DBT of ₹34 lakh crore, resulting in savings of ₹2.7 lakh crore for the government.
PM-SVANidhi Scheme	Provided credit assistance to 78 lakh street vendors, with 2.3 lakh vendors receiving credit for the third time.
PM-JANMAN Yojana	Targets particularly vulnerable tribal groups, previously excluded from development initiatives.
PM-Vishwakarma Yojana	Offers comprehensive support to artisans and craftspeople across 18 trades.
PM-KISAN SAMMAN Yojana	Offers direct financial assistance to 11.8 crore farmers annually, including marginal and small farmers.
PM Fasal Bima Yojana	Provides crop insurance to 4 crore farmers.
National Education Policy (NEP) 2020	NEP has brought transformational reforms; PM Schools for Rising India (PM SHRI) aims to deliver quality teaching and nurture holistic individuals.
Skill India Mission	Trained 1.4 crore youth, upskilled and reskilled 54 lakh youth, and established 3000 new ITIs.

- **PM Awas Yojana (Grameen):** It aims to achieve the target of three crore houses soon, with an additional two crore houses planned in the next five years.
- **New Housing scheme:** A new government scheme will be introduced to assist deserving sections of the middle class residing in rented houses, slums, chawls, or unauthorised colonies in purchasing or constructing their own homes.

WOMEN AND CHILD WELFARE INITIATIVES

- **Gender Budgeting:** It has experienced its largest-ever increase of 38.6%, with the Gender Budget Component now constituting 6.5% of the total budget.
- **Cervical Cancer Vaccination:** The government will promote vaccination for girls aged 9 to 14 to prevent cervical cancer.
- **Integration of Schemes:** Upgradation of Anganwadi centres under "Saksham Anganwadi and Poshan 2.0" will be sped up to enhance nutrition delivery and early childhood care and development.



- **U-WIN Platform:** The nationwide platform for managing immunisation under Mission Indradhanush.

Gender Budgeting

- Gender budgeting is a tool aimed at achieving gender mainstreaming, ensuring that development benefits reach women as much as men
- Started in year 2005-06, it is not a separate budget, but only a accounting exercise that integrates a gender perspective into policy and program formulation and implementation.

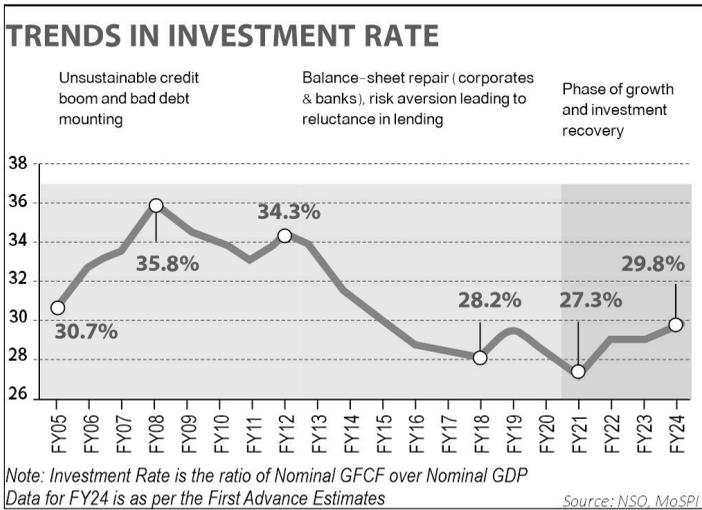
- **Inclusive Healthcare:** Inclusivity in healthcare coverage will be prioritised by extending the Ayushman Bharat scheme to include all ASHA workers, Anganwadi Workers and Helpers.
- **Lakshpati Didi Empowerment:** The goal for the Lakshpati Didi initiative has been revised from 2 crores to 3 crores crores crores, aiming to create financial empowerment among a larger segment of women.

INVESTMENT INITIATIVES

- The Foreign Direct Investment (FDI) inflow from 2014-23 amounted to **\$596 billion**, marking a **twofold increase compared to 2005-14**.

- To promote sustained foreign investment, negotiations will be undertaken on bilateral investment treaties with foreign partners, aligning with the spirit of 'First Develop India'.

- **Vande Bharat:** Conversion of 40,000 regular rail bogies to adhere to Vande Bharat standards.
- **Air Connectivity:** The significant expansion of air connectivity in India is evident, doubling airports to 149.



PM Gati Shakti - National Master Plan for Multi-modal Connectivity (2021)

- It is a strategic initiative aimed at providing multimodal connectivity infrastructure to various economic zones in India.
- It is a digital platform that brings together 16 ministries, including railways and roads ministries, to ensure integrated planning and coordinated implementation of infrastructure connectivity projects.
- It aims to develop self-reliance and help achieve the goal of 5 trillion economy by 2025.

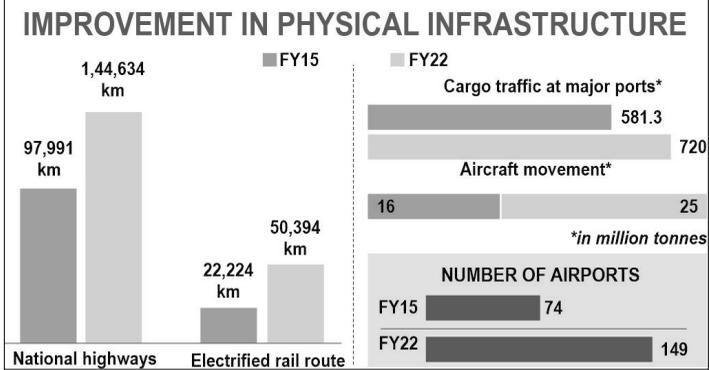
INFRASTRUCTURE INITIATIVES

- **Capital Expenditure:** Increasing the capital expenditure outlay for infrastructure development and employment generation by 11.1%, reaching Rs. 11,11,111 crore, equivalent to 3.4% of the GDP.
- **Railway Corridors:** Implementation of three major economic railway corridor programs under PM Gati Shakti, targeting improved logistics efficiency and cost reduction. These include
 - ✓ Energy, Mineral, and Cement Corridors
 - ✓ Port Connectivity Corridors
 - ✓ High-Traffic Density Corridors.

GREEN INITIATIVES

To fulfil the commitment to 'net zero' by 2070, the following steps will be undertaken:

- **Rooftop Solarisation Programme:** It will provide 300 units of free electricity every month to one crore households. It will result in annual savings of Rs. 15,000 to Rs. 18,000 per household.
- **Viability gap Funding:** It will support the harnessing of offshore wind energy potential. The aim is for an initial capacity of one gigawatt.
- **Coal Gasification:** By 2030, a coal gasification and liquefaction capacity of 100 MT will be established, contributing to the reduction of imports of natural gas, methanol, and ammonia.
- **Biogas Blending:** Phased mandatory blending of Compressed Biogas (CBG) in Compressed Natural Gas (CNG) for transportation and piped natural gas (PNG) for domestic purposes will be mandated.
- **Biomanufacturing:** Introducing a new bio-manufacturing and bio-foundry scheme, focusing on eco-friendly alternatives such as biodegradable polymers, bio-plastics and bio-agri-inputs.
- **Green Hydrogen:** Allocation of Rs 600 crore for the National Green Hydrogen Mission (NGHM).



Green Hydrogen

- **Definition:** Green hydrogen is produced by the electrolysis of water (splitting water into hydrogen and oxygen) using electricity generated from renewable sources.

National Green Hydrogen Mission (NGHM) (2023)

- It aims to boost the demand, production, utilisation, and export of green hydrogen, positioning India as a global leader in this field. It aims to generate 5MMT (Million metric tonnes) of green hydrogen by 2030.

NGHM comprises two sub-schemes

- **Strategic Interventions for Green Hydrogen Transition Programme (SIGHT):** It promotes domestic electrolyser manufacturing. It also provides incentives to accelerate the transition towards green energy.
- **Green Hydrogen Hubs:** Identifies and develops regions capable of supporting large-scale green hydrogen production or utilisation, establishing them as Green Hydrogen Hubs.

AGRICULTURE AND ALLIED SECTOR INITIATIVES

- **Nano DAP:** The application of Nano DAP (Diammonium Phosphate) fertiliser on various crops will be extended to cover all agro-climatic zones.
- **Atmanirbharta in Oilseeds:** A strategic plan will be formulated to achieve self-sufficiency ('Atmanirbharta') in oilseeds like mustard, groundnut, sesame, soybean, and sunflower.
- **Dairy Sector:** A comprehensive program will be designed to support dairy farmers, building upon successful existing schemes such as the Rashtriya Gokul Mission and National Livestock Mission.
- **The decline in Subsidy Bill:** The centre's subsidy bill on the 3Fs viz. food, fertilizer, and fuel fell to a five-year low of Rs. 3,81,175 crores in 2024-25.
- **Pradhan Mantri Matsya Sampada Yojana (PMMSY):** It will be stepped up to enhance aquaculture productivity, double exports, and generate more employment opportunities. Additionally, five integrated aquaparks will be established.
- **Blue Economy:** The launch of the Blue Economy 2.0 scheme will promote climate-resilient practices.

Blue Economy

- It encompasses the sustainable utilisation of ocean resources to promote economic growth, enhance livelihoods, and promote ocean ecosystem health. Initially introduced by Professor Gunter Pauli in 1994, it has become one of the global economic philosophies.

Key Components

- Involves harnessing ocean resources for renewable energy, fisheries, maritime transport, and tourism.
- To encourage activities and development along coastlines that can withstand and adapt to climate change.

Driving Factors of Blue Economy in India

- India's extensive coastline of 7,516.6 km is pivotal for maritime and economic activities.
- The presence of 12 major ports and 200 non-major ports facilitates significant maritime trade.
- India's Exclusive Economic Zones (EEZ) extend over 2.2 million square kilometers, offering vast areas for resource exploration.

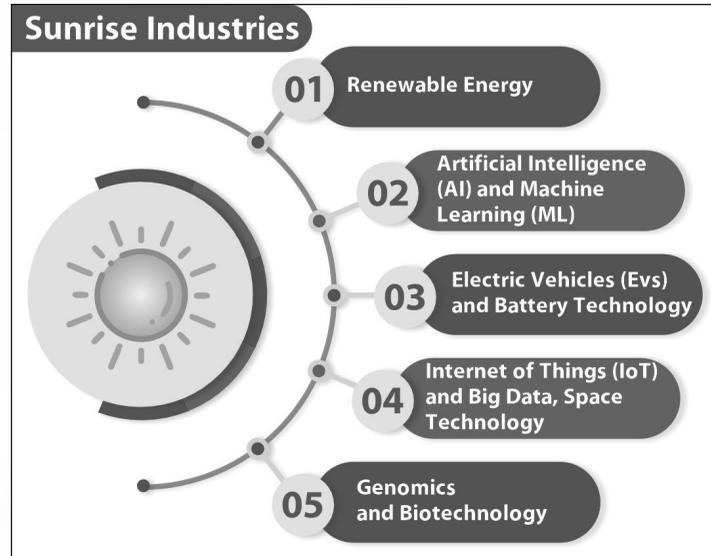
Initiatives Taken

- **Deep Ocean Mission:** Aims to mine minerals in the Indian Ocean.

- **PMMSY:** Targets sustainable development of the fisheries sector.
- **SAGARMALA Project:** Focuses on port modernisation and connectivity enhancement.
- **Draft Blue Economy Policy:** Provides a framework for sustainable ocean resource development.

RESEARCH AND INNOVATION INITIATIVES

Sunrise Technologies: A fund of Rs 1 Lakh Cr will be created through a fifty-year low or interest-free loan. This initiative aims to incentivise significant scaling up of research and innovation in Sunrise Technologies.



DEEP TECH

- A new program will be introduced to strengthen deep-tech technologies for defence purposes, expediting the path towards 'Atmanirbharta' (self-reliance).

TOURISM INITIATIVES

- **Interest-Free Loans:** States will receive Long-term interest-free loans to develop renowned tourist centres extensively, focusing on branding and global-scale marketing.
- **Rating Framework:** Establishment of a framework for rating tourist centres will be based on the quality of facilities and services provided.
- **Tourism Infrastructure:** Addressing the growing interest in domestic tourism, projects concerning port connectivity, tourism infrastructure, and amenities will be initiated on various islands, including Lakshadweep.

ABOUT BUDGET

- **Annual Financial Statement (Article 112)**
 - ✓ The Indian Constitution, under Article 112, mandates the presentation of an annual financial statement (Popularly known as 'Budget') by the Government of India detailing

its estimated receipts and expenditures for a specific financial year.

✓ It needs approval from the Parliament.

• **Interim Budget in Election Years**

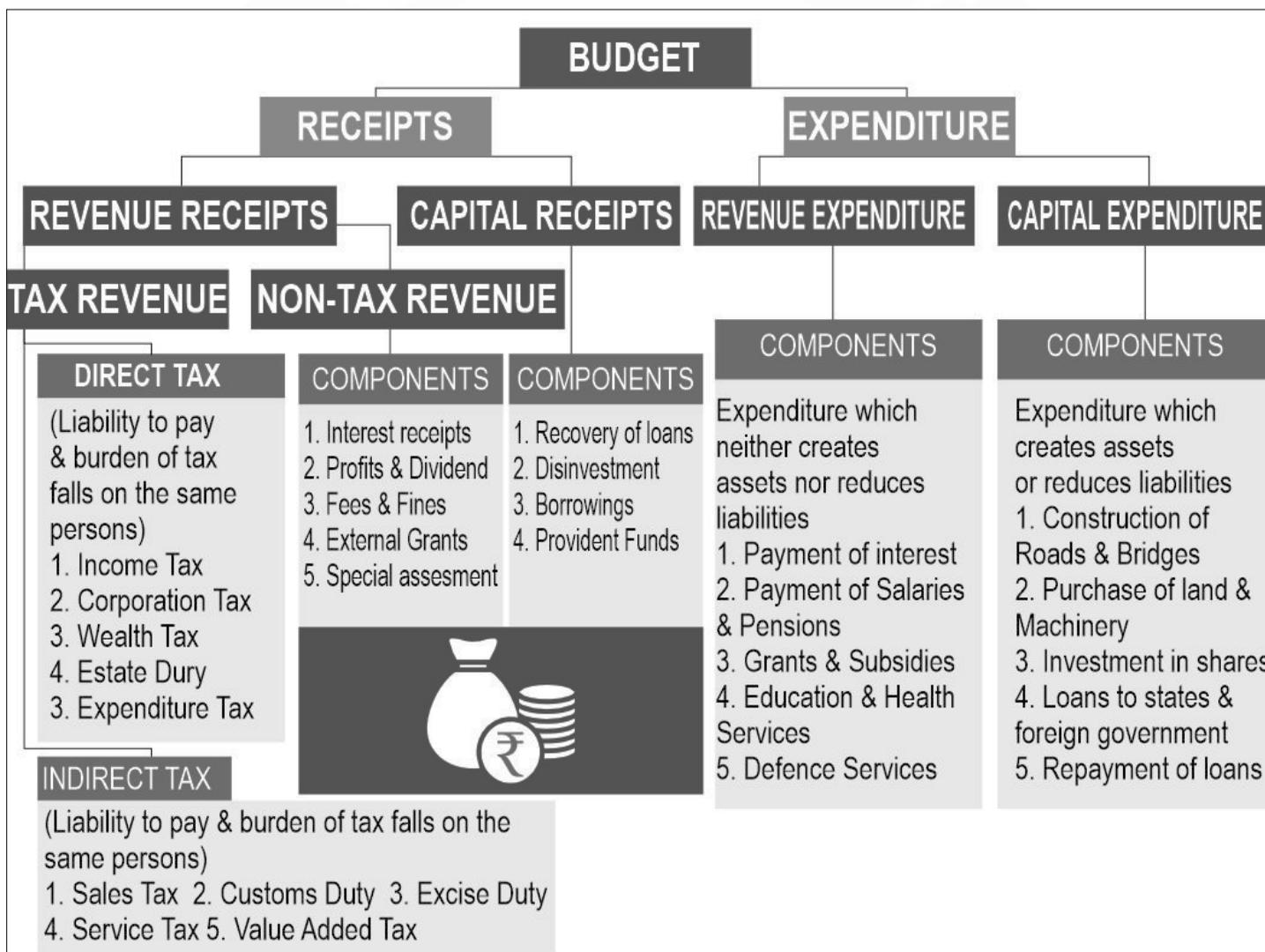
- ✓ In election years, the incumbent government cannot present a full budget due to the potential change in executive after the polls.
- ✓ Instead, an interim budget is presented, seeking approval for funds required for the transitional period until the new government presents a full budget.
- ✓ It includes both expenditures and receipts estimates for that year

✓ It can introduce changes to the tax policy.

✓ Interim Budget is not mentioned in the Constitution.

• **Vote on Account**

- ✓ Article 116 of the Constitution allows the Lower House to make grants in advance for the estimated expenditure for a part of any financial year through 'Vote on Account'.
- ✓ It only lists the estimates of the expenditure, not the receipts.
- ✓ It cannot introduce changes to the tax policy.
- ✓ It authorises the withdrawal of necessary funds from the Consolidated Fund of India.
- ✓ It is a simple process without debate and is valid for a limited period (two to four months).



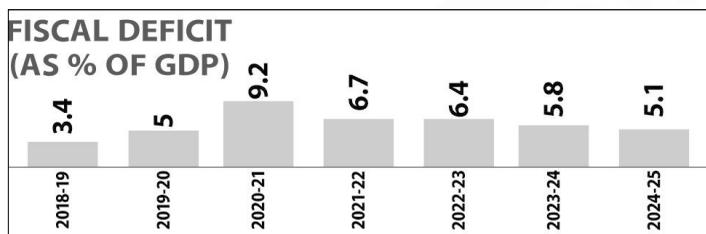
3.2. FISCAL CONSOLIDATION

Context

The Finance Minister of India, while presenting the Interim Budget for 2024-2025, announced that the Union Govt. would reduce its fiscal deficit to 5.1% of GDP in 2024-25.

KEY HIGHLIGHTS

- She outlined plans to further decrease the fiscal deficit below **4.5% of GDP by 2025-26**.
- The announced targets surprised most analysts who were anticipating a slightly higher fiscal deficit at about **5.3% or 5.4% of GDP**.
- The government's revised estimates also reflected a lowered fiscal deficit projection for 2023-24 to 5.8% of GDP.



WHAT IS FISCAL DEFICIT?

- Fiscal deficit represents the excess of government spending over revenues except for borrowings. Thus, it reflects the total borrowing requirements of the government.
- **Fiscal Deficit = (Total Expenditure) – (Revenue Receipts + Capital Receipts Excluding Borrowings)**

CAUSES BEHIND FISCAL DEFICIT

a. Due to high Expenditure

1. **High Subsidies:** India spends heavily on subsidies for food, fuel, fertilizers, etc.
 - ✓ In the Interim Budget 2024-25, the total expenditure on subsidies is estimated to be Rs 4,09,723 crore.
 - ✓ The recent extension of PMGKAY (Pradhan Mantri Garib Kalyan Anna Yojana) for another 5 years will cost the exchequer about 11.80 lakh crore.
 - ✓ **Fertiliser subsidy:** Expenditure on fertilizer subsidy is estimated at Rs 1,64,000 crore in 2024-25. Fertiliser subsidy was increased substantially in 2022-23 due to a sharp increase in the international prices of raw materials used in the manufacturing of fertilizers.
2. **High Debt Servicing Costs:** India has a considerable burden of interest payments on its debt which reduces the government's ability to allocate funds to other priority areas.
 - ✓ India recorded a general government debt-to-GDP ratio of 86.54% in the fiscal year 2022-23.

b. Due to low Revenue:

3. **Tax Receipts:** One significant reason is the inability of the government to generate sufficient revenue through taxes and other sources.
 - ✓ In 2024-25, the government's tax receipts are expected to be ₹26.02 lakh crore while its total revenue is estimated to be ₹30.8 lakh crore. The Union government's total expenditure, on the other hand, is estimated to be ₹47.66 lakh crore.

4. **Inefficient Tax Collection:** Leakages and evasion further reduce government income.
 - ✓ The National Institute of Public Finance and Policy (NIPFP) estimates that India loses around ₹9.6 trillion annually due to tax evasion and avoidance.
5. **Economic Slowdown:** During periods of economic slowdown, government revenues tend to decline while expenditures may increase due to countercyclical fiscal policies aimed at stimulating the economy.
 - ✓ During COVID-19, India's GDP contracted by 7.3% in 2020-21, impacting tax collection and widening the deficit.

IMPACT OF HIGH FISCAL DEFICIT IN INDIA

- **High Inflation:** Increased government spending financed by printing money can lead to inflation, eroding purchasing power and harming economic stability.
- **High Interest rate:** Higher inflation leads to higher interest rates in the economy which hinders credit take-off, leading to slower economic growth.
- **Low Credit Rating:** Large and persistent deficits can lead to credit rating downgrades, making it more expensive for the government to borrow and impacting investment.
- **Crowding Out of Investment:** When the government borrows heavily, it competes with private businesses for loanable funds, potentially driving up interest rates and hindering private investment.
- **Impact on Welfare measures:** The government might implement austerity measures like spending cuts or tax hikes to reduce the deficit, potentially impacting various sectors and social programs.

MEASURES TAKEN TO TACKLE FISCAL DEFICIT IN INDIA

- **The Fiscal Responsibility and Budget Management Act (FRBM Act), 2003:** It was enacted to establish financial discipline to reduce the fiscal deficit.
 - ✓ It mandated the total elimination of the revenue deficit and achieving a fiscal deficit of 3% by the end of March 2008.
 - ✓ It also allowed for deviations from fiscal deficit and revenue targets on grounds of national security, calamity, and other exceptional circumstances.
- **FRBM Review Committee 2017:** The N K Singh Committee recommended significant changes to the Act, citing the previous targets as too rigid. Some of its recommendations are –
 - ✓ **Debt-to-GDP ratio:** It recommended a general government debt-to-GDP ratio of 60% with a 40% limit for the Centre and a 20% limit for the States.
 - ✓ It proposed yearly targets to progressively reduce the fiscal and revenue deficits till 2023 with a fiscal deficit of 2.5% of GDP by 2022-23.
 - ✓ **Fiscal Council:** The Committee proposed to create an

autonomous Fiscal Council to prepare multi-year fiscal forecasts, recommend changes to the fiscal strategy, and advise the government if conditions exist to deviate from the fiscal target.

- ✓ **Escape Clause:** It allowed for deviation from the deficit target in case of unforeseen events like war, natural disasters, or sharp economic downturns. However, these deviations cannot be more than 0.5% of GDP in a year.
- ✓ **Buoyancy Clause:** If real GDP growth is significantly higher than expected (at least 3% points above average), the deficit needs to be lower than the target by 0.5%.

WHAT MORE NEEDS TO BE DONE?

- **Prudent Spending:** The government needs to prioritize the areas of investment, emphasizing crucial areas like infrastructure and social welfare while cutting down on unnecessary expenses.
- **Tax Rates and Revenue Collection**

- ✓ Encourage more individuals and businesses to pay taxes by formalizing the economy and widening the tax net.
- ✓ Use technology and stronger enforcement to catch tax evaders and enhance overall tax collection efficiency.

• Subsidy Management

- ✓ Ensure subsidies reach the intended beneficiaries directly by using direct benefit transfer systems.
- ✓ Gradually eliminate subsidies that distort markets or are ineffective, replacing them with more targeted and efficient mechanisms.

WAY FORWARD

- Moving forward, addressing India's fiscal imbalance requires a comprehensive strategy that includes emphasizing fiscal discipline, improving tax compliance, rationalizing subsidies, and implementing structural reforms to boost economic growth and revenue generation.

3.3. ANNUAL SURVEY OF INDUSTRIES REPORT

Context

Recently, the report on the Annual Survey of Industries (ASI) for 2020-21 and 2021-22 was released by the Ministry of Statistics and Programme Implementation (MoSPI).

KEY HIGHLIGHTS OF THE REPORT

• Growth in Gross Value Added (GVA)

- ✓ **For 2020-21:** It grew by 8.8% (in current prices) over 2019-20 mainly on account of a sharp fall in input (4.1%) that more than offset an output contraction (1.9%) in the sector in a year which was affected by COVID.
- ✓ **For 2021-22:** It has gone up significantly by 26.6% over 2020-21 riding on a high growth in the industrial output which grew by more than 35% in value terms during this period in current prices.
- ✓ The main drivers of this growth in 2021-22 were industries like the Manufacture of Basic metal, Coke & Refined Petroleum Products, Pharmaceutical Products, Motor vehicles, Food Products and Chemical and Chemical products.
- ✓ These industries contributed about 56% of the total GVA of the sector and showed a GVA growth of 34.4% and output growth of 37.5% in comparison to 2020-21.
- ✓ Among the major states (Rank-wise):
 - **For 2020-21:** Gujarat-Maharashtra-Tamil Nadu-Karnataka-Uttar Pradesh.
 - **For 2021-22:** Maharashtra-Gujarat-Tamil Nadu-Karnataka-Uttar Pradesh.
 - The **top five states**, taken together contributed about 53% of the total manufacturing GVA of the country in 2020-21 as well as in 2021-22.

- **Total Workers in Factories:** The number of workers employed in factories reduced from 1.31 crore in 2019-20 to 1.26 crore in 2020-21.
 - ✓ However, in 2021-22, they also recorded an increase to 1.36 crore, with a compound annual growth rate (CAGR) growth of 2.1% over these two years.
- **Total Employees in Factories:** The total number of employees decreased from 1.66 crore in 2019-20 to 1.60 crore in 2020-21.
 - ✓ However, in 2021-22, the number of total employees rose to 1.72 crore, thus indicating CAGR of 1.7% from the pre-pandemic year of 2019-20.
 - ✓ Top five states employing in this sector were Tamil Nadu, Gujarat, Maharashtra, Uttar Pradesh and Haryana. Taken together, these states contributed about 54% of total manufacturing employment in both years.
 - ✓ Gross Fixed Capital Formation (GFCF) (indicator for investment): It declined significantly in 2020-21 to ₹ 3.14 lakh crore from ₹ 4.17 lakh crore in the pre-pandemic year of 2019-20.
 - ✓ In 2021-22, the GFCF increased marginally to ₹ 3.30 lakh crore, thus showing an increase of 5% over the lockdown-affected year of 2020-21. However, it remains below 11% from the pre-pandemic year of 2019-20.

Workers: The worker is defined under the Factories Act and includes virtually everyone who enters the factory premises.

Employees: The employee is a general reference to anyone employed as provided in different acts and outside the act has no particular significance beyond that.

ANNUAL SURVEY OF INDUSTRIES 2020-21 & 2021-22				
	2019-20	2020-21	2021-22	CAGR For 2021-22
Number of Factories	2,46,504	2,50,454	2,49,987	07
Number Of Workers	1,30,58,156	1,25,94,563	1,36,09,931	2.1
Number Of Employees	1,65,68,526	1,60,25,118	1,71,51,172	1.7
FINANCIALS				
Wages To Workers	2,28,90,520	2,22,61,548	2,64,55,930	7.5
Total Emoluments	4,91,72,897	4,83,89,031	5,60,82,801	68
Net Fixed Capital Formation	1,43,61,795	32,25,819	30,42,540	-54.0
Gross Fixed Capital Formation	4,16,71,537	3,13,61,805	3,30,07,225	-11.0
Profits	4,69,47,269	6,14,05,752	9,50,71,368	42.3

Value figures in Rs lakh Source: MOSPI

INDIA'S MANUFACTURING SECTOR

- The manufacturing sector plays a crucial role in **driving India's economic growth and advancement**, serving as a fundamental pillar that contributes significantly to the country's progress.
- The manufacturing sector accounts for **17% of the nation's GDP** and it employs over **27.3 million workers**, thus playing a significant role in the Indian economy.
- The **National Manufacturing Policy 2011** aimed to increase the share of the manufacturing sector in the GDP to 25% and to create 100 million additional jobs by 2022.

CHALLENGES TO INDIA'S MANUFACTURING SECTOR

- **Lack of Infrastructure**
 - ✓ Limited power and transportation networks
 - ✓ Inefficient logistics and high turnaround times at ports
- **Lack of Skilled Labor**
 - ✓ Shortage of skilled workers in technical trades
 - ✓ Gap between skills provided and industry needs
- **Lack of Regulatory Environment**
 - ✓ Complex and bureaucratic approval processes
 - ✓ Labor regulations perceived as rigid and inflexible
 - ✓ High compliance costs hindering competitiveness
- **Demand-Side Constraints**
 - ✓ Low disposable income among a large segment of the population
 - ✓ Global competition and challenges in export markets
- **Lack of Innovation and R&D Investment**
 - ✓ In 2023, India's research and development (R&D) spending was **0.8% of GDP**, which remains significantly low as compared to the USA (2.8%), China (2.1%), Israel (4.3%), South Korea (4.6%)

- **Limited Access to Finance for Small and Medium-Sized Enterprises (SMEs)**
 - ✓ Financial constraints can impede the growth and productivity, hindering their contribution to the overall manufacturing landscape.
- **Fragmented Supply Chains and Insufficient Integration:**
 - ✓ Lack of seamless integration & coordination within supply chains can result in inefficiencies, higher costs, and difficulties in responding to market demands promptly.

INITIATIVES TAKEN TO PROMOTE THE GROWTH OF THE MANUFACTURING SECTOR

- **Make in India Initiative:** It seeks to encourage investment, drive innovation, develop world-class infrastructure, and position India as a central hub for manufacturing, design, and innovation.
- **Industrial Corridor Development Programme:** It aims to establish Greenfield Industrial regions, areas, and nodes by creating sustainable infrastructure.
- **Ease of Doing Business:** It is to improve Ease of Doing Business and Ease of Living by Simplifying, Rationalizing, Digitizing and Decriminalizing Government to Business and Citizen Interfaces across Ministries/States/UTs.
- **PM Gati Shakti National Master Plan (NMP):** This innovative approach is designed to enable data-driven decision-making for integrated planning of multimodal infrastructure, ultimately aiming to decrease logistics costs.
- **National Logistics Policy (NLP):** It aims to lower the cost of logistics and lead it to par with other developed countries. The overarching goal is to enhance economic growth, generate employment opportunities, and elevate the competitiveness of Indian products in the global market.
- **Production Linked Incentive (PLI) Schemes:** It aims to boost India's manufacturing prowess, elevate exports, and generate substantial employment, fostering high production and economic growth over the next five years and beyond.
- **National Infrastructure Pipeline (NIP):** is a group of social and economic infrastructure projects with a proposed investment of around ₹111 lakh crore during FY20-25 to provide high-quality infrastructure across the country.
- **National Monetisation Pipeline (NMP):** It aims to tap private sector investment for new infrastructure creation by transferring the revenue rights of brownfield (idle) projects to private players. It has an aggregate monetisation potential of ₹6.0 lakh crores through leasing of core assets of the Central Government, over four years, from FY 2022 to FY 2025.

WAY FORWARD

- **Learning from China:** While India's service sector has seen impressive growth, it hasn't created enough jobs

as compared to China's focus on manufacturing. India needs to prioritize infrastructure development (logistics, connectivity) and skill development (vocational training, industry-aligned skills) to attract investors and create employment opportunities.

- **Holistic Approach:** Robust implementation of comprehensive policies like Make in India with a data-driven approach like China's National Master Plan.
- **Innovation & Financing:** Encourage R&D and innovation through tax breaks and partnerships. Ensure access to

finance for SMEs, crucial for their growth and contribution to the sector.

- **Technology adoption:** Encourage the adoption of advanced technologies such as automation, robotics, artificial intelligence, and digital manufacturing to improve efficiency and competitiveness.
- **Supply Chain Integration:** Address fragmented supply chains by building efficient, integrated networks to increase competitiveness and respond effectively to market demands.

3.4. FARMERS PROTEST 2.0

Context

After nearly two years, the farmers from Punjab, Haryana, and Uttar Pradesh are again leading massive protests around Delhi. The protesting farmers, also known as Farmer Protest 2.0, have given the call of 'Delhi Chalo'.

KEY DEMANDS OF FARMERS

- The protests are spearheaded by the Samyukta Kisan Morcha (non-political), and Kisan Mazdoor Morcha (KMM).
- Farmers have accused the government of failing to meet its commitments, such as doubling their incomes, guaranteeing the minimum support price, etc.
- The main demand of the farmers is for a law to guarantee **minimum support price (MSP) for all crops, and the determination of crop prices based on the Swaminathan Commission's report.**
- **The other demands of the farmers include –**
 - ✓ Full debt waiver for farmers and labourers
 - ✓ a minimum pension of ₹5,000 for farmers and agriculture labourers
 - ✓ Withdrawal of India from the World Trade Organization (WTO) and freezing of all free trade agreements,
 - ✓ Implementation of the Land Acquisition Act of 2013, with provisions for written consent from farmers before acquisition, and compensation at four times the collectorate rate, and
 - ✓ 200 days' employment under MGNREGA per year (instead of 100 days)

ABOUT MINIMUM SUPPORT PRICE (MSP)

- MSP is a form of **market intervention strategy employed by the Government to protect agricultural producers from sharp declines in farm prices.**
- Presently, **MSPs for 23 Crops are declared by the Cabinet Committee on Economic Affairs (CCEA)** at the commencement of the sowing season, based on the recommendations of the **Commission for Agricultural Costs and Prices (CACPC).**
- The Government announces MSP for a total of **22 mandated crops, along with a Fair and Remunerative Price (FRP) for Sugarcane. The list of crops covered includes:**

- ✓ **Cereals (7)** – paddy, wheat, barley, jowar (sorghum), bajra, maize and ragi (finger-millet).
- ✓ **Pulses (5)** – gram, arhar/tur, moong, urad and Masur (lentil)
- ✓ **Oilseeds (8)** – groundnut, rapeseed/mustard, copra, soyabean, sesamum, sunflower, safflower and nigerseed
- ✓ Other Crops include **Raw Cotton and Raw Jute**
- In addition, MSPs of toria, and De-husked Coconut are fixed based on the MSPs of rapeseed/mustard and copra respectively.
- In formulating the recommendations for minimum support prices, the CACP takes into account various factors such as - cost of production (A2+FL method), demand and supply conditions, inter-crop price parity, effect on general price level, domestic and international prices, etc.

Commission for Agricultural Costs and Prices (CACPC)

- It is an attached office of the Ministry of Agriculture and Farmers Welfare, Government of India.
- Currently, the Commission comprises a Chairman, a Member Secretary, one Member (Official) and two Members (Non-Official).
- It is to recommend MSPs to incentivize the cultivators to adopt modern technology and raise productivity and overall grain production in line with the emerging demand patterns in the country.

FEASIBILITY OF MAKING MSP A LEGAL INSTRUMENT IN INDIA

Arguments against	Arguments in Favour
<ul style="list-style-type: none"> • Wastage of foodgrains: Procurement of all crops at MSP may lead to overproduction, causing wastage of resources and storage problems. 	<ul style="list-style-type: none"> • Ineffectiveness: The current MSP system has not guaranteed farmers the MSP for many crops, leading to distress selling and low remuneration.

<ul style="list-style-type: none"> • Cropping Pattern: It may also lead to distortion of cropping patterns as farmers might prioritise crops with MSP over others, affecting biodiversity and soil health. 	<ul style="list-style-type: none"> • Farmer protection: MSP can provide a safety net for farmers, especially during periods of low market prices.
<ul style="list-style-type: none"> • Fiscal burden: Procuring large quantities of crops above market price can be expensive for the government, potentially placing an extra burden on the government exchequer. 	<ul style="list-style-type: none"> • Stability and predictability: Knowing the minimum price can help farmers plan their production and investments better.
<ul style="list-style-type: none"> • Schemes like Price Deficiency Payments (PDP) can be vulnerable to manipulation by traders, leading to increased costs for the government and potential benefits for traders, not farmers. 	<ul style="list-style-type: none"> • Incentive for production: MSP can encourage farmers to produce more, potentially contributing to food security.

SWAMINATHAN COMMISSION ON MSP

- The committee proposed that MSPs should be set at a minimum of 50% above the cost of production.
 - ✓ This is known as the **C2+ 50% formula**.
- **The committee outlined three methods for calculating the cost of production:**
 - ✓ **A2:** Costs incurred by the farmer in the production of a particular crop. It includes several inputs such as expenditure on seeds, fertilisers, pesticides, leased-in

land, hired labour, machinery and fuel

- ✓ **A2+FL:** Costs incurred by the farmer and the value of family labour
- ✓ **C2:** A comprehensive cost, which is A2+FL cost plus imputed rental value of owned land plus interest on fixed capital, rent paid for leased-in land
- Currently, the CACP utilizes the A2+FL method for determining the cost of production.

WAY FORWARD

- **In-depth Economic Analysis:** It is imperative to conduct a thorough economic assessment of the Swaminathan Commission's recommendations and consider viable alternatives.
- **Implementation of Feasible Alternatives:** Exploring and implementing practical alternatives, including enhanced financial support, improved market access, and effective risk mitigation measures, can offer valuable benefits to farmers.
- **Holistic Agricultural Development:** Beyond MSP, focus on broader agricultural development initiatives such as infrastructure improvement, sustainable practices promotion, and diversification of agricultural production to enhance overall farmer well-being.
- It's crucial to consider the long-term implications of any policy decision and ensure it benefits both farmers and consumers while maintaining economic stability.

3.5. GLOBAL PULSES CONFERENCE 2024

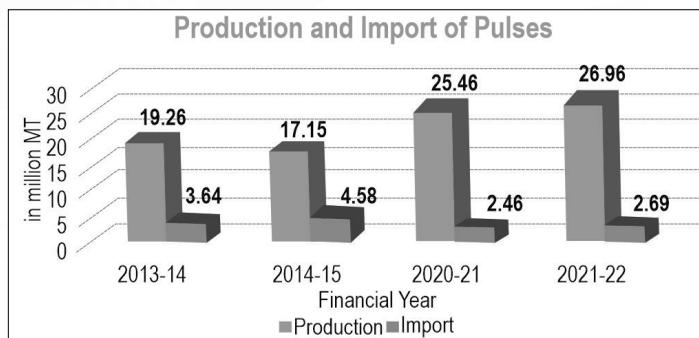
Context

Recently, the Global Pulses Conference was held in New Delhi from 14th to 17th February.

KEY HIGHLIGHTS OF THE CONFERENCE

- The Conference was held in India after a gap of 18 years. The 2023 convention was held in Sydney, Australia.
- **Theme (2024):** Nourishing Soil and People (Crops role in Environmental Sustainability and nutrition).
- The conference was jointly organised by the National Agricultural Cooperative Marketing Federation of India Ltd. (NAFED) and the Global Pulse Confederation (GPC).
- The Government highlighted that it had taken adequate measures to improve pulse cultivation in the country by increasing the minimum support price (MSP) regularly.
- There has been significant decadal growth in pulses production, with a remarkable increase of 60% from 171 lakh tonnes in 2014 to 270 lakh tonnes in 2024.
- India is further aiming to achieve self-sufficiency in pulses production by 2027.
 - ✓ It has already attained self-reliance in chickpeas (chana)

and several other pulse crops. However, a slight deficiency remains in pigeon peas (tur) and black gram.



- **Bharat Brand:** Bharat Chana Dal has captured around 25% of India's market for gram pulses. (Bharat brand is labelled to provide foodgrains and other essential items at subsidized prices).

- The government has taken measures such as augmenting the supply of new varieties of seeds and also focusing on expanding the cultivation of tur and black gram.

About Global Pulses Conference

- It is an annual meeting of pulses producers, processors and traders from more than 50 countries.
- It is organised by the Global Pulse Confederation (GPC) which represents all segments of the pulse industry value chain.

World Pulses Day

- It is a designated United Nations global event to recognize the importance of pulses as a global food.
- It is celebrated on 10th February of each year since 2019.

OVERVIEW OF PULSES PRODUCTION IN INDIA

- India is the largest producer (25% of global production), consumer (27% of global consumption), as well as importer (14%) of pulses globally.
- Pulses account for around 20% of the area under food grains and contribute around 7-10% of the total food grains production in the country
- While pulses are cultivated in both the Kharif and Rabi seasons, the Rabi pulses contribute more than 60% of the total production.
- Among all pulses, Gram (Chickpea) is the major pulse and ranks first in terms of area, production and productivity at the national level.
 - ✓ Gram has a dominant share of around 40% in the total pulses production followed by Tur/Arhar at 15-20% and Urad (Black Gram) and Moong (Green Gram) at around 8-10% each.
 - ✓ India alone accounts for 65% of global Chickpea/Gram production.
- Note: Urad (black gram) and Moong (green gram) are grown in both Kharif and Rabi seasons.

MAJOR PULSES IN INDIA

Rabi Pulses	Kharif Pulses
<ul style="list-style-type: none"> • Gram (chickpea/Bengal gram), Lentil (Masur), Field pea (matar), Urad (black gram), Mung (green gram), Rajmash etc. 	<ul style="list-style-type: none"> • Arhar (tur), Urad (black gram), Mung (green gram), Moth, Horse gram (kulthi), etc.
<ul style="list-style-type: none"> • Gram/Chickpea is first in terms of area sown followed by Lentil/Masur and Field pea. 	<ul style="list-style-type: none"> • Tur/Arhar is first in terms of area sown followed by Urad/Black gram and Mung/Green gram
<ul style="list-style-type: none"> • Major Rabi Pulses producing States are Madhya Pradesh (32.3%), Uttar Pradesh (12.5%), and Rajasthan (10.9%) 	<ul style="list-style-type: none"> • Major Kharif Pulses producing States are Maharashtra (25%), Rajasthan (15%), and Karnataka (11.2%)

BENEFITS OF PULSES PRODUCTION

- **Nutritional Value:** Pulses are nutrient-dense foods rich in protein, dietary fibre, vitamins, and minerals. Integrating pulses into diets can enhance nutrition and bolster overall health, particularly in regions with limited access to animal protein.
- **Soil Health Improvement:** Pulses can fix atmospheric nitrogen, enhancing soil fertility through symbiotic relationships with nitrogen-fixing bacteria in their root nodules. This reduces reliance on synthetic nitrogen fertilisers, promoting sustainable agricultural practices.
- **Income Generation:** Pulses offer additional income opportunities for farmers, especially smallholders, due to their relatively high market value compared to staple crops.
- **Resilience to Climate Change:** Pulses aid in climate change mitigation by sequestering carbon in the soil and reducing greenhouse gas emissions associated with synthetic fertiliser use. Their low water requirement makes them more resilient to drought conditions.

FACTORS BEHIND LOW PRODUCTION IN INDIA

- **Low Productivity:** Historically, pulses have suffered from unstable yields, contributing to their neglected status as a crop.
- **Climate Variability:** Pulse cultivation predominantly occurs in rainfed areas. It makes them vulnerable to climate fluctuations such as erratic rainfall and droughts, leading to yield inconsistencies.
- **Open Procurement Policy** for certain crops such as wheat, rice etc. can lead to alternative options for farmers for production. This leads to a decline in pulse production.
- **Post-Harvest Losses:** Storage-related losses, including excess moisture and pest infestation, particularly by the pulse beetle, contribute to post-harvest losses.
- **Impact of Green Revolution:** The emphasis on rice and wheat relegated pulses to marginal lands, resulting in productivity declines and land degradation.
- **Low Adoption of High-Yielding Varieties (HYV) Seeds:** Despite their potential, the penetration and adoption of high-yielding varieties of pulse seeds remain low, further hindering production.

GOVERNMENT MEASURES TO AUGMENT PULSE PRODUCTION

- **National Food Security Mission (NFSM)-Pulses:** The Department of Agriculture & Farmers Welfare oversees to increase the production of pulses through area expansion and productivity enhancement in all districts.
- **PM-AASHA:** It comprises the Price Support Scheme (PSS), Price Deficiency Payment Scheme (PDPS), and Private Procurement Stockist Scheme (PPSS).

- ✓ Only PSS have to ensure MSP to farmers for their produce of notified pulses and copra.
- **Integrated Scheme of Oilseeds, Pulses, Oil Palm and Maize (ISOPOM):** To provide financial assistance to farmers for the purchase of breeder seed, production of foundation seed, production and distribution of certified seed, etc.
- **MSP for farmers:** Currently, the government provides MSP for only five pulse crops viz. Gram, Masur, Tur/Arhar, Moong and Urad.
- **Research Initiatives by ICAR**
 - ✓ The Indian Council of Agricultural Research (ICAR) conducts basic and strategic research to develop location-specific high-yielding varieties and match production packages to local conditions.
 - ✓ Around 343 high-yielding varieties/hybrids of pulses have been notified for commercial cultivation in the country.

WAY FORWARD

- **Promoting Sustainable Practices:** Emphasise adopting

sustainable farming techniques that enhance soil health, conserve water, and minimise environmental impact.

- **Government Support:** Strengthen policy frameworks and provide financial incentives to encourage pulse cultivation, including subsidies for inputs, access to credit, and insurance coverage against crop losses.
- **Extension Services:** Expand extension services to disseminate knowledge on best practices in pulse cultivation, pest management, and post-harvest handling, reaching out especially to smallholder farmers.
- **Infrastructure Development:** Improve rural infrastructure such as irrigation, storage, and market linkages to reduce post-harvest losses and enhance market access for pulse farmers.
- **Capacity Building:** Offer training programs and workshops to equip farmers with the skills and knowledge necessary for successful pulse cultivation.
- **Public Awareness Campaigns:** Highlight the nutritional benefits of pulses and promote their consumption, thereby increasing demand and market opportunities.

3.6. INDIA'S FINTECH SECTOR

Context

Recently, the Parliamentary Standing Committee on Communications and Information Technology has raised concerns over the FinTech sector in India.

KEY FINDINGS OF THE REPORT

- The committee emphasized that regulating Indian fintech apps would be more feasible for bodies like RBI and NPCI than foreign entities with multiple jurisdictions.
- The committee observed that **the Walmart-owned PhonePe and Google Pay collectively hold 83.3% of the UPI market in India.**
- PhonePe accounted for **46.91% of UPI transactions by volume, while Google Pay accounted for 36.39%, and PayTM stood at 12.32%.**
 - ✓ Other Indian players like Cred, Amazon Pay, BHIM, and WhatsApp Pay had smaller market shares.
- Despite UPI transactions constituting 73.5% of all digital payments by volume in FY23, their value proportion was 6.668%, steadily increasing from FY19.
- The committee observed that the **fraud vs. sales ratio via UPI remained relatively static at 0.0016% between FY22 and FY24 (until September 2023)**, though the **absolute number of UPI frauds has been increasing in both value and number.**
- **Increase in money laundering in the fintech sector:** The committee observed that scamsters have been using various fintech sector apps to launder their money.
 - ✓ Examples such as an ex-Abu Dhabi-based app called Pyopl, operated by Chinese investment scamsters used money laundering in India.

ABOUT FINTECH

- “Fintech” is derived from “financial technology” and signifies the integration of new technologies to improve and automate the delivery and utilization of financial services.
- **Scope:** Encompasses a broad range of services leveraging digital innovations.
- **Services:** Includes digital payments, peer-to-peer lending, robo-advisors, blockchain, etc.
- **Objectives:** Aim to enhance efficiency, accessibility, and innovation in financial services.
- **Beyond Tradition:** Fintech solutions go beyond traditional financial systems, offering new solutions to consumers and businesses.
- **Key Components of Fintech:** It encompasses a wide array of products and services, including:
 - ✓ **Digital Public Infrastructure (DPI):** Facilitates essential functions like collaboration, commerce, and governance, crucial for public and private service delivery.
 - ✓ **Digital Public Goods (DPGs):** Encompasses open-source software, open data, and open AI models adhering to privacy and best practices.

CURRENT STATE OF THE FINTECH SECTOR IN INDIA

- **Rapid Growth:** The Indian fintech market is one of the fastest-growing globally, with a 50-60 billion USD valuation in FY20, projected to reach 150 billion USD by 2025.

- **Increasing Number of Companies:** There are 6,636 FinTech companies in India.
- **Diverse Sub-Segments:** Fintech in India encompasses various sub-segments such as payments, lending, WealthTech, personal finance management, InsurTech, and RegTech.
- **The shift in Investment Focus:** While payments and alternative finance initially dominated investment inflows, there is now a more equitable distribution across segments like InsurTech and RegTech.
- **Leadership in Digital Payment Adoption:** India leads globally in real-time online transactions, surpassing the combined numbers of the USA, UK, and China.

ASSOCIATED CHALLENGES

- **Cyber-Attacks:** Rising incidents of cyber-attacks targeting financial institutions and consumers.
- **Data Privacy Concerns:** Growing concerns regarding data privacy and cybersecurity risks.
- **Regulatory Difficulties:** Regulatory challenges, particularly in emerging areas like cryptocurrencies.

GOVERNMENT MEASURES

- **Jan Dhan Yojana:** Facilitated financial inclusion for over 450 million beneficiaries, providing a fertile ground for fintech innovation.
- **India Stack:** A collection of APIs empowering governments, businesses, and startups to address challenges through digital solutions.
- **Unified Payments Interface (UPI):** A mobile app-based payment system facilitating seamless fund transfers between bank accounts.
- **Digital Rupee:** India's Central Bank Digital Currency (CBDC)

is expected to accelerate fintech market growth.

- **Introduction of UPI123Pay and UPI Lite:** Allows access to UPI to 400+ Mn feature phone subscribers and facilitates low-value transactions in offline mode through the on-device wallet.
- **RBI Payments Vision 2025:** The RBI plans to achieve certain outcomes such as a 3x increase in several digital payment transactions, an increase of the registered customer base for mobile-based transactions by 50% CAGR, an increase in PPI transactions by 150%, an increase of card acceptance infrastructure to 25 Mn by 2025.

KEY RECOMMENDATIONS OF THE REPORT

- **Effective regulation of Digital Payment Apps:** The committee recommended effective regulation of Digital Payment Apps to make valuable usage of various apps.
- **Cap on transactions:** The committee recommended that the total number of transactions by any third-party app (individually) should not exceed 30% of the overall transactions made using the interfaces.
- **Increase the penetration of the Digital Payment Market:** The committee recommended that new players and existing payers (banks as well as non-banks) must increase penetration for the growth of UPI payments via various platforms.

CONCLUSION

- India's fintech sector presents vast opportunities for innovation and financial inclusion. While certain players dominate the UPI market, regulatory bodies must ensure fair competition and consumer protection.

3.7. PAYTM PAYMENTS BANK

Context

Recently, the Reserve Bank of India (RBI) has directed Paytm Payments Bank Ltd to cease accepting new deposits starting from March 2024.

KEY DIRECTIVES FROM THE RBI

- The Reserve Bank of India, under Section 35A of the Banking Regulation Act, 1949, had put certain business restrictions on Paytm Payments Bank Ltd
- **Prohibition of deposits and top-ups:** Paytm is barred from accepting deposits or top-ups in any customer account, prepaid instruments, wallets, FASTags, National Common Mobility Card (NCMC), etc., after February 29.
- **Account termination:** The nodal accounts of the parent company, One97 Communications, and Paytm Payments Services must be terminated by no later than February 29.
- The RBI has instructed National Payments Corporation of

India (NPCI) to consider One97 Communication Ltd's request to become a **Third-Party Application Provider (TPAP)** for UPI on the Paytm app, subject to certain conditions.

- ✓ If approved, NPCI must ensure a seamless migration of '@paytm' handles from Paytm Payments Bank to new banks to prevent disruptions.
- ✓ The TPAP cannot add new users until all existing users are successfully migrated.
- **Settlement of transactions:** Settlement of all pipeline transactions and nodal accounts related to transactions initiated on or before February 29 must be completed by March 15, with no transactions permitted thereafter.

- **Customer access to funds:** Customers are allowed to freely withdraw or use the funds in their Paytm accounts, including savings and current accounts, prepaid instruments, FASTags, NCMC, etc., as long as they do not exceed their available balance.
- The RBI has instructed Paytm Payments Bank to halt the acceptance of money in any customer account, including wallets and other prepaid instruments, such as FASTags, starting from March 1.

VARIOUS REASONS BEHIND RBI'S ACTION

- Paytm Payments Bank has been under RBI scrutiny since 2018, and the specific reasons for the recent regulatory action were not disclosed.
- Experts speculate that it may be related to concerns regarding KYC compliance and IT-related issues.
- The RBI aims to prevent any institution from exposing depositors' money to risks, and investigations revealed that Paytm Payments Bank and its parent company lacked adequate safeguards to protect information within the group.
- Additionally, concerns were raised about data access by China-based entities with indirect ownership stakes in the parent company.

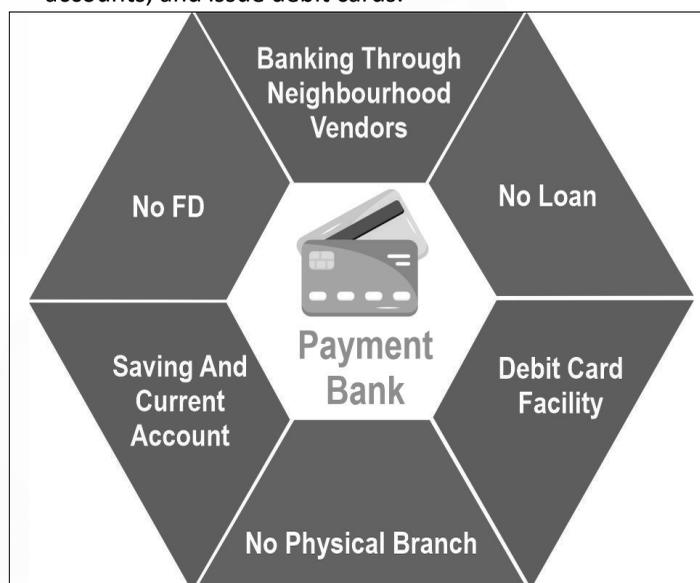
ABOUT PAYMENTS BANK

- The concept of the Payments Bank was established by the RBI in 2014, based on the recommendations of the Nachiket Mor Committee.
- It is designed to operate on a smaller scale with minimal credit risk.
- It aims to promote financial inclusion by providing banking and financial services to unbanked and under-banked areas.
- In India, there are currently six payment banks, including

Airtel Payment Bank, India Post Payment Bank, Fino, Paytm Payment Bank, NSDL Payment Bank, and Jio Payment Bank.

SOME FEATURES OF PAYMENTS BANK

- Payment banks are differentiated from universal banks and operate on a smaller scale.
- They are required to have a minimum paid-up capital of Rs. 100 crore with the promoter contributing at least 40% of the paid-up equity capital for the first five years.
- These banks cannot accept deposits exceeding ₹2 lakh per account and are not permitted to lend directly.
- However, they can sell loan products and promote third-party loan offerings.
- Payments Banks are authorized to facilitate personal payments, receive cross-border remittances in current accounts, and issue debit cards.



3.8. GOVT. BRINGS NON-UREA FERTILIZERS UNDER PRICE CONTROL

Context

Recently, the Union Government has brought all the non-urea fertilizers under "reasonable pricing" controls.

MORE ABOUT THE DECISION TAKEN BY THE GOVERNMENT

- The Union Government has brought di-ammonium phosphate (DAP), muriate of potash (MOP), and all other non-urea fertilizers that receive **nutrient-based subsidy (NBS) support** under "reasonable pricing" controls
 - ✓ Urea is already under the price control mechanism with its Maximum Retail Prices (MRP) fixed by the government.
- Till now the non-urea fertilizers were decontrolled under the NBS Scheme.
- But now the Department of Fertilizers (DoF) has

issued comprehensive guidelines for assessing the "reasonableness" of MRPs for all non-urea fertilizers covered under the NBS Scheme.

- These guidelines, effective retrospectively from April 1, 2023, specify maximum allowable profit margins for fertilizer companies:
 - ✓ 8% for importers,
 - ✓ 10% for manufacturers, and
 - ✓ 12% for integrated manufacturers (those producing finished fertilizers as well as intermediates such as phosphoric acid and ammonia).

- Companies that earn “unreasonable profit”, exceeding the stipulated percentages in a specific financial year (April-March), are required to refund the excess amount to the DoF by October 10 of the following fiscal year.
- If the refund is not made within the specified time limit, “an interest at 12% per annum on a pro-rata basis” will be charged on the refund amount from the next day of the end of the financial year.
 - ✓ E.g.- in case of FY 2023-24, the interest would be charged from April 1, 2024
 - ✓ The unreasonable profits will also be adjusted against subsequent fertilizer subsidy payments by the government.
 - ✓ Thus, the new guidelines impose indirect MRP controls on non-urea fertilizers by capping the profits that companies can earn from their sales.

About NBS Scheme

- Under the NBS scheme, introduced in April 2010, the MRPs of non-urea fertilizers are supposed to be determined by the market and set by individual companies selling them.
- The government merely pays a fixed per-tonne subsidy on each of these fertilizers, linked to their nutrient content or a specific percentage of nitrogen (N), phosphorous (P), potassium (K), and sulphur (S).
- Unlike the earlier product-specific subsidy regime, the subsidy system based on nutrient content aims to encourage balanced fertilization by discouraging farmers from using too much Urea (46% N), DAP (46% P plus 18% N), and MOP (60% K), which have high concentrations of a single nutrient.
- NBS was designed to stimulate product innovation and promote the use of complex fertilizers (having lower concentrations of N, P, K, and S in different proportions) and SSP (containing only 16% P but also 11% S).

MECHANISM FOR ASSESSMENT OF COMPANIES’ “UNREASONABLE PROFIT”

- ✓ The guidelines require fertilizer companies to conduct a “self-assessment” of unreasonable profits, utilizing the cost auditor’s report and audited cost data approved by their board of directors.
- ✓ This report and data must be submitted to the Department of Fertilizers (DoF) by October 10 of the subsequent fiscal year.
- ✓ The DoF will then scrutinize the “reasonability of MRPs”, as presented by the companies, “by 28th February for each completed previous financial year.”
- ✓ Subsequently, the DoF will prepare a report on any unreasonable profits identified, specifying the amount to be recovered from the companies.

SIGNIFICANCE OF NEW GUIDELINES

- The recent guidelines indirectly regulate the MRP of non-urea fertilizers by limiting the profits companies can derive from their sales.
 - ✓ This limitation will be determined by their “total cost of sales”, which would cover the cost of production/import, administrative overheads, selling and distribution overheads, as well as net interest and financing charges.
 - ✓ Deduction for the dealer’s margin will be permitted up to 2% of the MRP for DAP and MOP, and 4% for all other fertilizers covered under the NBS scheme.
- Thus, the new guidelines expand the system of detailed cost monitoring and price control, currently applicable to Urea, to encompass other fertilizers.

3.9. IBBI’S EXPERT PANEL RECOMMENDS VOLUNTARY MEDIATION UNDER IBC

Context

An expert committee appointed by IBBI (Insolvency and Bankruptcy Board of India) has recommended voluntary mediation under the Insolvency and Bankruptcy Code (IBC).

ABOUT THE COMMITTEE

- The committee, led by former legal affairs secretary TK Viswanathan, has suggested that mediation at the pre-default stage could facilitate resolutions “without resorting to insolvency”.

KEY RECOMMENDATIONS OF THE TK VISWANATHAN COMMITTEE

- **Voluntary Mediation Framework:**
 - ✓ Currently, IBC doesn’t have a legislative mandate for mediation. Mediation involves a neutral third party

helping resolve disputes between parties.

- ✓ The committee suggests a voluntary mediation framework under IBC, aligning with the Mediation Act, of 2023.
- ✓ Parties must jointly approach and inform the National Company Law Tribunal (NCLT), appellate tribunal, or court about their intention to mediate.
- ✓ Strict adherence to timelines outlined in the Insolvency and Bankruptcy Code (IBC) is crucial, even during mediation.
- ✓ No provision for stay or extension of statutory timelines should be allowed during mediation, ensuring parties take the process seriously.

✓ Mediation should run parallel to the corporate insolvency resolution process (CIRP) before the NCLT to prevent delays and adverse impacts on asset value and public interest.

• **Balancing Objectives**

- ✓ **The committee aims to balance IBC’s objectives of “time-bound reorganization” and “maximization of value.”**
- ✓ **Encourages autonomy for parties to choose ‘out-of-court’ mediation voluntarily.**

• **Stage-Based Introduction**

- ✓ Recommends a phased introduction of voluntary mediation, preserving existing insolvency resolution process timelines.
- ✓ Ensures independence and flexibility in the framework for quick implementation learning.

• **Independence and Flexibility**

- ✓ Emphasizes ‘independence and flexibility’ for efficient mediation implementation.

• **Blueprint for Code**

- ✓ Independent infrastructure to meet Code objectives without compromising timelines and public rights.

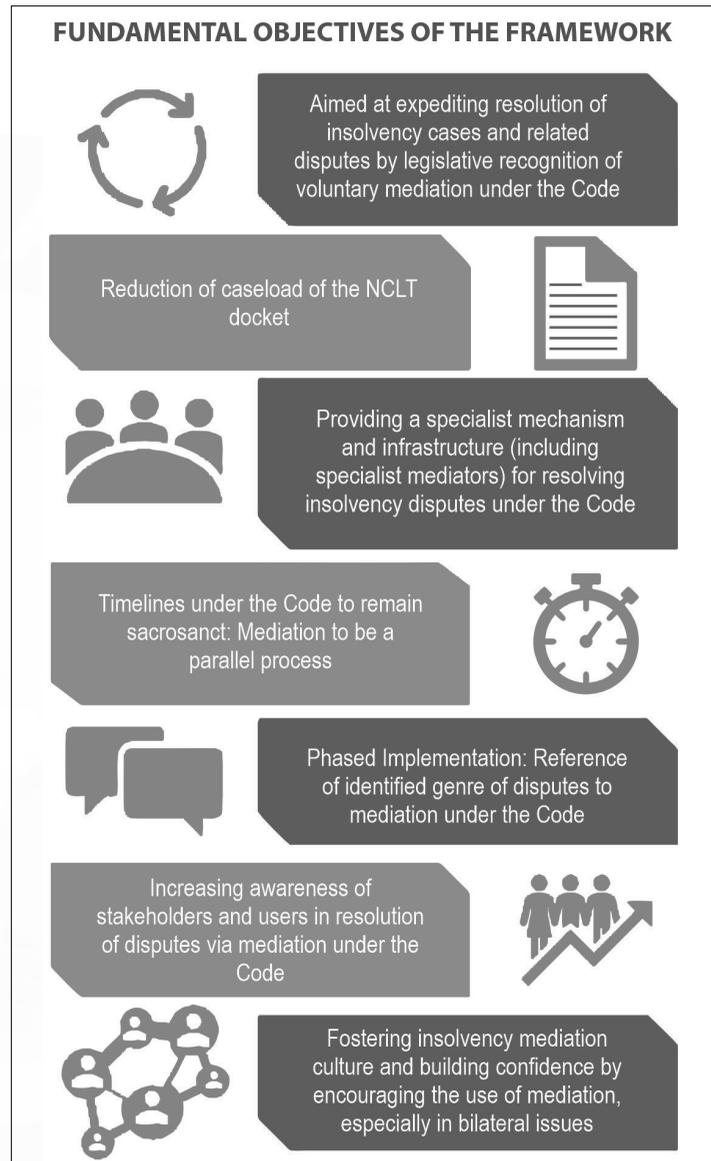
About Insolvency and Bankruptcy Code (IBC)

- In 2016, at a time when India’s Non-Performing Assets and debt defaults were piling up, the **Insolvency and Bankruptcy Code (IBC) code was introduced.**
- It aims to promote entrepreneurship, protect the interests of creditors, and ensure timely resolution of distressed assets.
- One of IBC’s core principles is the time-bound resolution process to avoid delays and maximize asset value.
 - ✓ Under the Insolvency and Bankruptcy Code (IBC), companies must complete the entire insolvency process within 180 days, with the option for an extension if creditors don’t object.
 - ✓ Smaller companies, including startups with an annual turnover of Rs 1 crore, have a shorter timeframe of 90 days for completing the insolvency exercise.

IMPORTANCE OF VOLUNTARY MEDIATION UNDER IBC

- **Enhanced Efficiency:** Voluntary mediation provides an additional avenue for resolving disputes outside which will lead to quicker resolutions, reducing the burden on the formal legal proceedings.
- **Autonomy to Parties:** Offers parties autonomy in choosing ‘out-of-court’ mediation. It recognizes the importance of empowering stakeholders to decide on dispute resolution methods.
- **Conflict Mitigation:** Encourages collaborative problem-solving, fostering a more amicable resolution environment.
- **Specialized Insolvency Mediation Cell:** Independent secretariat manages and administers insolvency mediations, adding efficiency.
- **Adaptation to Global Practices:** Positions the IBC in line with international standards, attracting confidence from global investors.

- **Phased Introduction:** Allows stakeholders to adapt and learn from the process, minimizing disruptions.



CHALLENGES

- **Enforceability Concerns:** The enforceability of mediated settlements may be a concern, as parties might question the legal standing of agreements reached through mediation.
- **Exclusion of Financial Creditors:** The exclusion of financial creditors from the initial scope of voluntary mediation provisions raises concerns about comprehensive representation in the process.
- **Dilution of Code Objectives:** Some stakeholders may fear that voluntary mediation could dilute the fundamental objectives of the Insolvency and Bankruptcy Code, such as time-bound resolution.

WAY FORWARD

- Introduce a provision within the IBC explicitly recognizing and enforcing mediated settlements, providing legal validity to agreements reached through mediation. This can enhance confidence in the process.
- Engage all key stakeholders including financial creditors to establish a more inclusive framework. Top of Form
- The proposed recommendations focus on establishing a parallel and voluntary process alongside insolvency proceedings, aiming to enhance the overall efficiency and flexibility of dispute resolution mechanisms under the IBC.

3.10. SOVEREIGN GOLD BOND (SGB) SCHEME

Context

The RBI recently began the subscription process for Series IV of the Sovereign Gold Bond Scheme.

SOVEREIGN GOLD BOND (SGB) SCHEME

- It is a government initiative launched in 2015, that allows individuals to invest in gold bonds.
- These bonds are denominated in grams of gold and are linked to the prevailing market price of gold.
- The scheme offers investors an alternative to owning physical gold, providing a convenient and secure way to invest in gold.

BENEFITS OF SOVEREIGN GOLD BOND SCHEMES

- **Elimination of Storage Risk and Cost:** Investors are relieved of the risk and cost associated with physical storage of gold, as SGBs are held in electronic form.
- **Tax Benefits:** Exempt from Capital Gains Tax: Investors are exempt from capital gains tax if they hold the bonds until maturity.
- **Indexation Benefits:** Long-term capital gains upon transfer of bonds enjoy indexation benefits.
- **Hassle-free Ownership:** Investors enjoy ownership of gold

FEATURES OF THE SGB SCHEME

Items	Details
Issuance	It is issued by the Reserve Bank of India on behalf of the Government of India.
Eligibility	SGBs are available for sale to resident individuals, Hindu Undivided Families (HUFs), Trusts, Universities, and Charitable Institutions.
Tenor	The tenor of SGBs is eight years, with an option of premature redemption after the fifth year.
Minimum size	The minimum permissible investment in SGBs is one gram of gold.
Maximum limit	Individuals can subscribe up to 4 kg, HUFs up to 4 kg, and trusts and similar entities up to 20 kg per fiscal year (April-March), as notified by the Government from time to time.
Joint holder	In case of joint holding, the investment limit of 4 kg applies to the first applicant only.
Tax treatment	The interest on SGBs is taxable as per the provisions of the Income Tax Act, 1961. However, the capital gains tax arising on the redemption of SGBs by individuals is exempted.
Tradability	SGBs are eligible for trading.
SLR eligibility	SGBs obtained by banks through the pledge process are considered part of their Statutory Liquidity Ratio requirements.
Sales channel	SGBs are sold through Scheduled Commercial banks (except Small Finance Banks, Payment Banks, and Regional Rural Banks), Stock Holding Corporation of India Limited, Clearing Corporation of India Limited, designated post offices, and National Stock Exchange of India Limited and Bombay Stock Exchange Limited, either directly or through agents.

without the hassle of physical possession, mitigating risks and storage expenses.

- **Tradability:** SGBs are tradable on stock exchanges within a fortnight of issuance, providing liquidity and flexibility to investors.
- **Transferability:** SGBs can be transferred through the execution of an Instrument of Transfer in accordance with the provisions of the Government Securities Act.

LIMITATIONS OF SOVEREIGN GOLD BOND

- **Illiquidity:** Sovereign Gold Bonds (SGBs) have a lock-in period of 5 years, limiting liquidity compared to physical gold.
- **Market Dependency:** Returns on SGBs are subject to fluctuations in the gold market, potentially affecting investor gains.
- **Limited Flexibility:** Selling SGBs before maturity may result in losses due to market conditions and premature redemption penalties.

3.11. REPORT ON INSURANCE SECTOR

Context

The Lok Sabha's Standing Committee on Finance in its report has given recommendations to boost the insurance sector.

SOME KEY RECOMMENDATIONS OF THE STANDING COMMITTEE

- **Insurance coverage:** In 2021-22, insurance penetration (percentage of insurance premium to GDP) in India was 4.2% as compared to the global average of 7%. The Committee recommended that there is a need to create mass awareness about the need and benefits of having insurance protection and diverse insurance products.
- **Composite Licensing:** The committee recommends composite licensing for insurance companies, allowing them to offer both life and non-life insurance products.
- **GST Rate Reduction:** The committee suggests reducing the Goods and Services Tax (GST) rates, especially for health and term insurance, from the current 18%.
- **Catastrophe Insurance Focus:** The committee recommended that the government explore options for insuring homes and properties, particularly in disaster-prone areas through specialized insurance businesses with subsidized premiums.
- **Vehicle Insurance Compliance:** The committee addresses the issue of a significant number of vehicles, especially commercial ones, operating without insurance coverage, posing risks in accidents. Measures like integrating data and ensuring compliance are suggested.

Composite Licensing

- Composite licensing enables insurance companies to operate across different categories of insurance services under a single license.
- Previously, insurers needed separate licenses for life, general, and health insurance operations.
- With composite licensing, insurers can offer a comprehensive range of insurance products, including life, non-life (e.g., motor and property), and health insurance, all under one regulatory framework.
- Advantages include cost and compliance benefits for insurers, as well as wider coverage and options for customers, enhancing insurance reach and awareness.

- **On-Tap Bonds for Insurance Investment:** The committee proposes issuing 'on-tap' bonds with maturities of up to 50 years, expanding investment options for insurance companies.
- **Data Integration and Enforcement:** The committee recommends utilizing data integration, particularly from the Insurance Information Bureau of India (IIB) to enhance compliance. Around 56% of vehicles lack coverage, urging e-Challan enforcement with integrated data.

- **Compensation for Accident Victims:** Addressing the plight of accident victims involving commercial vehicles, the committee urges ensuring proper insurance coverage and compensation to avoid disruptions in local communities.
- **Government Bonds Extension:** The recommendation includes extending the maximum tenure of government bonds for insurance investment from 40 to 50 years.

Health insurance

Class of business	No. of policies (in lakh)		No. of lives (in lakh)		Gross premium (in ₹ crore)	
	2020-21	2020-22	2020-21	2020-22	2020-21	2020-22
Government sponsored	0.001	0.001	3,429	3,065	4,290	6,076
Group	9.1	7	1,187	1,623	28,108	36,891
Individual	228.3	219.3	531	516	25,840	30,085
Total	237.4	226.3	5,147	5,204	58,238	73,052

Source: Standing Committee Report

- **Regulatory Evaluation:** Both IRDAI and the Reserve Bank of India are urged to evaluate requirements for insurance coverage in the context of auto and commercial vehicle loans provided by financial institutions.

DATA RELATED TO THE INSURANCE SECTOR

- India's insurance sector constituted around 2% of the global insurance market in 2020.
- India ranked tenth globally in insurance business with a 1.85% market share in 2021, showing improvement from 1.78% in 2020.
- Total insurance premiums in India increased by 13.46% (7.8% inflation-adjusted) in 2021, surpassing global growth of 9.04% (3.4% inflation-adjusted).
- In life insurance, India is ranked ninth globally in 2021, while in non-life insurance, it holds the fourteenth position.
- The recommendations aim to streamline insurance operations, enhance coverage, reduce GST burdens, and ensure compliance, with a focus on broader societal implications, especially in disaster-prone and accident-related scenarios. Overall, the committee stresses the importance of enhancing public understanding of insurance products and their benefits through targeted awareness efforts.

3.12. VOLUNTARY RETENTION ROUTE (VRR)

Context

To encourage Foreign Portfolio Investments (FPIs) in India's debt markets, the Reserve Bank of India (RBI) has launched the Voluntary Retention Route (VRR).

KEY DETAILS ABOUT THE VOLUNTARY RETENTION ROUTE

- **Background:** To counter a sharp depreciation of the rupee in October 2018, the central bank unveiled a new investment route (VRR) alongside exploring a special NRI bond scheme, both aimed at attracting dollar inflows. The RBI had introduced VRR in March 2019.
- **Purpose:** VRR aims to attract stable, long-term FPI investments into India's debt markets, offering operational flexibility to FPIs.
- **Eligibility:** Any entity registered with the Securities and Exchange Board of India (SEBI) as an FPI can utilize the Voluntary Retention Route.

INVESTMENT CONDITIONS

- **Separate Indications:** Investments under VRR are categorized into corporate debt (VRR-Corp) and Government securities (VRR-Govt).
- **Allocation Process:** FPIs receive individual investment allocations through an auction process, with the committed portfolio size (CPS) determined based on the proposed retention period.
- **Investment Requirements:** FPIs must invest the allocated CPS in debt instruments and maintain it throughout the retention period, with a minimum investment of 67% of the total CPS.

Key difference between VRR and Regular FPI Route

- VRR investment differs from regular FPI in two key ways:
 - ✓ Flexible retention periods.
 - ✓ Investments via this route will be exempt from the usual regulatory norms for FPI investments in debt markets, if FPIs agree to hold a specified minimum percentage of their investments in India for a period as set by the RBI.

IMPACT ON CURRENCY AND ECONOMY

- **Currency Appreciation:** Increased FPI flow through VRR may lead to a surge in dollar circulation, potentially appreciating the Indian Rupee against the US dollar.
- **Economic Growth:** VRR can contribute to India's economic growth by attracting stable FPIs into the debt markets, and bolstering investment opportunities.

PROPOSAL FOR INCREASED INVESTMENT LIMIT

- **Current Limit:** The existing overseas investment limit in VRR stands at Rs 90,630 crore, which has been fully utilized.
- **Expansion Proposal:** The RBI is considering raising the overseas investment limit in VRR by an additional Rs 40,000 crore, aiming to attract more foreign capital into Indian local debt securities.

3.13. GLOBAL ALLIANCE ON CIRCULAR ECONOMY AND RESOURCE EFFICIENCY (GACERE)

Context

India recently became a member of the Global Alliance for Circular Economy and Resource Efficiency (GACERE).

ABOUT GLOBAL ALLIANCE FOR CIRCULAR ECONOMY AND RESOURCE EFFICIENCY (GACERE)

- **Aim:** GACERE is an alliance of governments at the global level to work together on a global just circular economy transition and more sustainable management of natural resources.
- Established by the **European Union (EU), in collaboration with the United Nations Environment Programme (UNEP) and the United Nations Industrial Development Organization (UNIDO).**
- **Membership**
 - ✓ **Total Members:** Currently comprises 17 member countries, including prominent nations like Canada,

Japan, Switzerland, India, and the European Union.

- ✓ **Observer Countries:** Mexico and Singapore participate as observer countries, indicating broader interest and engagement in the alliance's objectives.

Circular Economy

- In a circular economy, things are made and consumed in a way that minimizes our use of the world's resources, cuts waste and reduces carbon emissions.
- Products are kept in use for as long as possible, through repairing, recycling and redesign – so they can be used again and again.

• Working Areas

✓ **Advocacy for a Just Transition**

- Shifting towards circular economy for fairer resource utilization, promoting sustainable consumption and production practices.
- Contribution to Paris Agreement goals, biodiversity preservation, and pollution reduction.

✓ **Mapping Domestic Policies**

- Study existing policies and frameworks supporting circular economy transition and industrial symbiosis.
- Emphasis on successful policies promoting just transitions and sustainable human development.

✓ **Identifying Barriers and Gaps**

- Recognize obstacles in decoupling economic growth from resource use and biodiversity loss.
- Explore opportunities for greener global value chains.

✓ **Research and Governance**

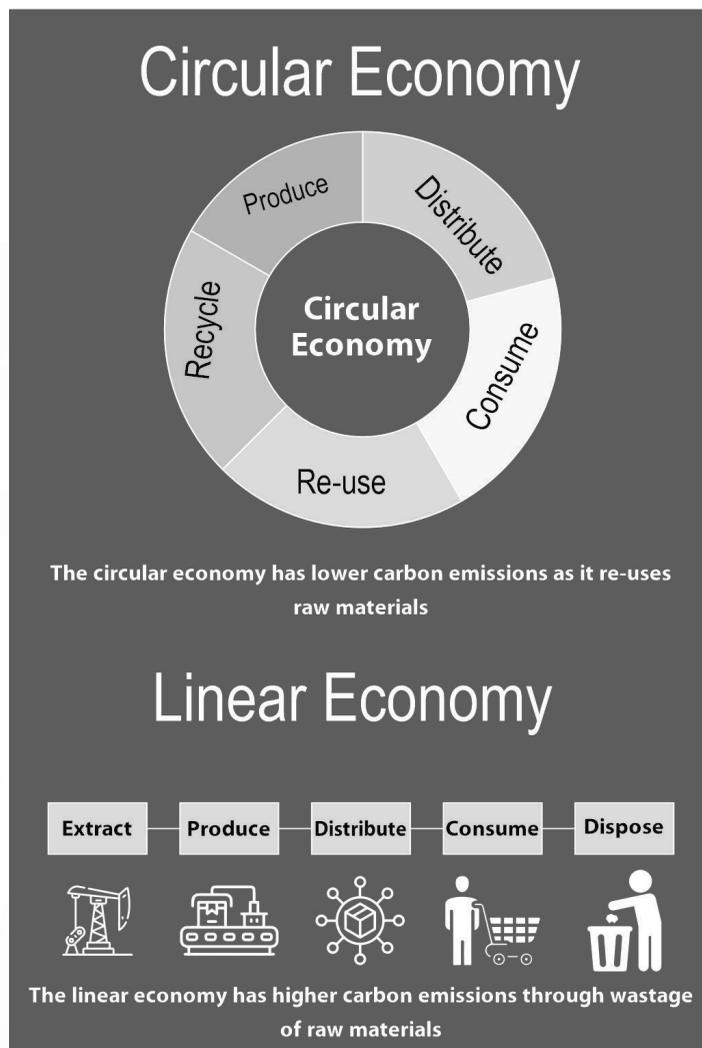
- Address research needs and governance improvements.
- Focus on specific resources and global coordination.

• **Facilitating Global Conversations**

- ✓ GACERE’s efforts align with global goals such as the Paris Agreement and the Kunming-Montreal Global Biodiversity Framework.

SIGNIFICANCE

- It provides a platform for global collaboration on circular economy and resource efficiency.
- Its objectives encompass advocacy, research, partnership-building, and governance improvement.



ART AND CULTURE

4.1. MARATHA MILITARY LANDSCAPES OF INDIA

Context

The Ministry of Culture announced that India is nominating the 'Maratha Military Landscape' for inclusion in the UNESCO World Heritage List for the 2024-25 cycle.

MORE ON THE NEWS

- The twelve parts of this nomination:
 - ✓ Includes Salher fort, Shivneri fort, Lohgad, Khanderi fort, Raigad, Rajgad, Pratapgad, Suvarnadurg, Panhala Fort, Vijay durg, Sindhudurg in **Maharashtra and Gingee Fort in Tamil Nadu.**
- This is not the first time that the Maratha Military Landscape has been considered for nomination, as it was also included in the Tentative List of UNESCO World Heritage Sites in 2021.

ABOUT MARATHA MILITARY LANDSCAPES OF INDIA

- It showcases the exceptional fortification and military systems conceived by the Maratha rulers between the 17th and 19th centuries.
- It embodies a remarkable network of forts developed in the diverse terrains of the Sahyadri mountain ranges, the Konkan Coast, the Deccan Plateau, and the Eastern Ghats in the Indian Peninsula.
- The inception of the **Maratha Military ideology can be traced back to the 17th century** during the reign of Maratha King Chhatrapati Shivaji Maharaj in 1670 CE, continuing through subsequent rules until the Peshwa rule in 1818 CE.
- There are more than **390 forts in Maharashtra** out of which only 12 forts are selected under the Maratha Military Landscapes of India, of these eight forts are protected by the Archaeological Survey of India.
- These are Shivneri Fort, Lohgad, Raigad, Suvarnadurg, Panhala Fort, Vijaydurg, Sindhudurg and Gingee Fort whereas Salher Fort, Rajgad, Khanderi Fort and Pratapgah are protected by the Directorate of Archaeology and



ABOUT UNESCO WORLD HERITAGE

- The United Nations Educational, Scientific and Cultural Organization (UNESCO) seeks to encourage the identification, protection and preservation of cultural and natural heritage around the world considered to be of outstanding value to humanity.
- Currently, **India boasts 42 World Heritage sites**, comprising 34 cultural sites, seven natural sites, and one mixed site.
- Maharashtra contributes significantly to this list, hosting six World Heritage Sites, viz. Ajanta Caves (1983), Ellora Caves (1983), Elephanta Caves (1987), Chhatrapati Shivaji Maharaj Terminus (formerly Victoria Terminus) (2004), Victorian Gothic and Art Deco Ensembles of Mumbai (2018), and the Western Ghats of Maharashtra, Karnataka, Tamil Nadu, and Kerala as a serial property in the natural category (2012).

4.2. AUROVILLE EXPOSURE TOUR

Context

Recently, students participated at the Auroville Exposure tour under Ek Bharat Shreshtha Bharat programme.

MORE ON THE NEWS

- The program aims to **underscore the importance of educational and cultural tours aligned with themes outlined in the Aurobindo's** (150th birth anniversary), G-20 Declaration, National Education Policy, and Ek Bharat Shreshtha Bharat (EBSB).

- The primary focus of the initiative is to **expose youth to spirituality and Sri Aurobindo's philosophy.**

ABOUT AUROVILLE FOUNDATION

- It is an autonomous organization under the Ministry of Education and is responsible for organizing the program.

- Auroville is an experimental township situated in the state of Tamil Nadu, with some areas extending into the Union Territory of Pondicherry.
- Founded in 1968 by Mirra Alfassa, also known as 'the Mother', the name 'Auroville' is derived from the French language, where 'Aurore' means dawn, and 'Ville' means village or city.
- The city is named after Sri Aurobindo, and its establishment was proposed in 1964 at the annual conference of the Sri Aurobindo Society in Pondicherry.

ABOUT SRI AUROBINDO

- Born on August 15, 1872, in Kolkata, West Bengal.
- Renowned as a poet, thinker, freedom fighter, yogi, and spiritual leader.
- Contributed articles to the **Bengali weekly 'Yugantar'**.
- Established the philosophical magazine **Arya in 1914**.

- Founding member of the **Anushilan Samiti**, a youth club protesting against British atrocities.
- Charged in the **Alipore Bomb Case (1906-1910)** and faced imprisonment.
- Founded the **Sri Aurobindo Ashram in 1926**, a community of spiritual seekers.
- Devoted his life to the development of "integral" yoga.

Ek Bharat Shreshtha Bharat (EBSB) programme

- It aims to enhance interaction & promote mutual understanding between people of different states/UTs through the concept of state/UT pairing.
- The states carry out activities to promote a sustained and structured cultural connect in the areas of language learning, culture, traditions & music, tourism & cuisine, sports and sharing of best practices, etc.
- The Ministry of Education has been designated as the Nodal Ministry for co-ordination of the programme.

4.3. SUBIKA PAINTINGS

Context

Subika Paintings of Manipur are facing the risk of extinction due to neglect.

ABOUT SUBIKA PAINTING

- Experts suggest the use of Subika paintings dates back to the 18th or 19th century.
- It is a type of painting closely related to the cultural history of the **Meitei community**.

Meitei community of Manipur

- They are organized into clans that avoid intermarriage.
- While speaking a Tibeto-Burman language, the Meitei culturally distinguish themselves from neighbouring hill tribes by adopting Hindu customs.
- Despite their adherence to Hindu rituals, they also maintain the worship of indigenous deities.
- The Meitei economy is centred on rice cultivation.

Surviving through six manuscripts:

- ✓ Subika,
- ✓ Subika Achouba,
- ✓ Subika Laishaba,
- ✓ Subika Choudit,
- ✓ Subika Cheithil, and
- ✓ Thengrakhel Subika.

- While the royal chronicle, Cheitharol Kumbaba, doesn't mention a specific founder, there is a possibility that this artistic tradition predates the introduction of the writing tradition in the state.

SUBIKA LAISHABA

- Subika Laishaba represents a direct and authentic continuation of the Meitei cultural tradition depicted through visual images having elements like **lines, shapes,**



Source: Indian Express

forms, colours, and patterns.

- Subika Laishaba's painting comprises **cultural motifs derived from existing features** and other influences shaped

by their cultural perspectives.

- The visual depictions in this manuscript are **locally prepared**, including **handmade paper or tree bark**.

4.4. GYANVAPI MOSQUE

Context

The Varanasi District Court reviewed a petition requesting the Archaeological Survey of India (ASI) to examine the unexplored basements of the Gyanvapi Mosque

KEY HIGHLIGHTS OF THE CASE

- According to **Hindu petitioners**, the Gyanvapi mosque **was built on the site of an ancient Hindu temple devoted to Lord Shiva**, which was destroyed by Mughal emperor Aurangzeb in the 17th century. They want permission to worship within the mosque compound.
- The **Anjuman Intezamia Masjid Committee**, which manages the Gyanvapi mosque, **claims it has been a mosque for centuries** and that the **Places of Worship Act of 1991 bans changing the religious character of any site of worship established before August 15, 1947**.

The Places of Worship Act of 1991

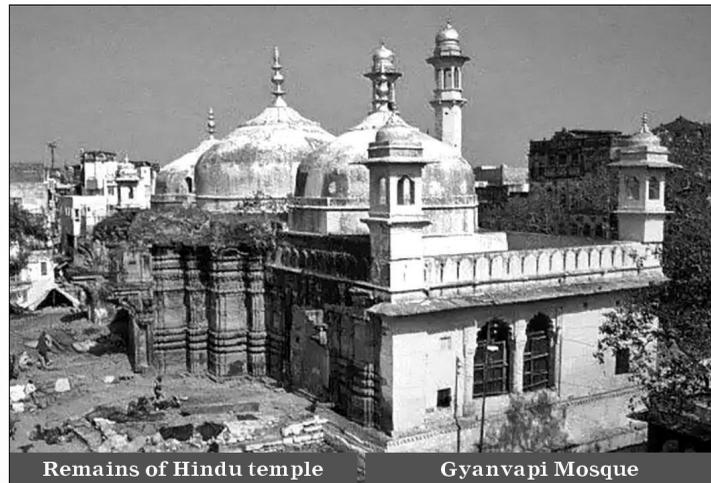
It is an attempt to preserve and defend the religious identity of India's places of worship.

- **Section 3:** Prohibits the whole or partial conversion of the place of worship to another religious denomination or within the same denomination.
- **Section 4(1):** Ensures a house of worship's religious identity remains unchanged since August 15, 1947.
- **Section 4(3A):** The Act does not apply to ancient and historical monuments, archaeological sites, and remains covered by the Ancient Monuments and Archaeological Sites and Remains Act, 1958.
- **Section 5:** The Act excludes the Ram Janmabhoomi-Babri Masjid in Ayodhya and any related legal processes.
- **Section 6:** Penalties for breaking the Act include up to three years in prison and fines.

KEY HIGHLIGHTS OF THE ASI REPORT

- **Statues:** The survey found pieces of statues of **Hindu deities, such as Hanuman, Ganesha, Nandi, etc within the mosque complex**.

- **Yonipattas and Shiv Linga:** During the survey, several yonipattas (bases of shivling) were discovered.
- **Inscriptions:** 32 Indian inscriptions inscribed in **Devanagari, Grantha, Telugu, and Kannada scripts**.
- **Marks:** Marks on the structure included a **swastika and trident (Trishula)**.



Remains of Hindu temple

Gyanvapi Mosque

ARCHITECTURAL OF GYANVAPI MASJID

- It is a one-of-a-kind **combination of Mughal and Hindu architectural styles**: this is evident in-
 - ✓ Red sandstone (commonly used in Mughal architecture) and white marble (often seen in Hindu temples).
 - ✓ Ornate carvings (possibly influenced by Hindu temple design).
- It elaborates **carvings, minarets, and a huge courtyard**.
- The main prayer space welcomes visitors with magnificent **calligraphy, arches, and domes**.

4.6. SRILA PRABHUPADA

Context

The Prime Minister addressed the 150th anniversary of Srila Prabhupada ji at Bharat Mandapam.

ABOUT SRILA PRABHUPADA

- He founded the **International Society for Krishna Consciousness (ISKCON)**.
- **ISKCON has translated Shrimad Bhagavad Geeta and other Vedic literature into 89 languages**, playing a crucial role in the distribution of Vedic literature worldwide.

- He **established over a hundred temples and wrote several books**, which spread the teachings of Bhakti Yoga worldwide.
- He was also **respected as the world's prominent authority on Bhakti-Yoga viz. a devotional service to Lord Krishna**.
- In his later years, he became an **influential communicator of Gudiya Vaishnava Sampradaya's theology**.

- He launched the Gaudiya Mission in 1918 to maintain and spread Vaishnavism.



ABOUT GAUDIYA VAISHNAVISM

- It is a **Vaishnava Hindu religious movement** and derives its **inspiration from Chaitanya Mahaprabhu** (a 15th-century Vedic spiritual leader, is revered as an avatar of Lord Krishna, and as the founder of Gaudiya Vaishnavism, he is credited with popularizing the 'Maha Mantra' or 'Hare Krishna Mantra' among his followers).
- The term '**Gaudiya**' refers to the **Gaura region in Bengal** which is deeply connected with **Vaishnavism viz. the worship of Vishnu**.
- It centers around the devotional worship of **Radha and Krishna (known as bhakti-yoga)** and their incarnations of the supreme **God i.e., Svayam Bhagavan**.
- This devotion primarily manifests in the act of singing the **holy names of Radha and Krishna, notably 'Hare', 'Krishna' and 'Rama', usually accompanied by the Hare Krishna mantra, also known as kirtan and the accompanying dance.**

4.7. MAHARISHI DAYANAND SARASWATI

Context

Recently, the Prime Minister virtually addressed the 200th birth anniversary celebrations of Swami Dayanand Saraswati.

ABOUT SWAMI DAYANAND SARASWATI

- He was born on February 12, 1824, in Tankara, Gujarat.
- He was a social reformer who **founded Arya Samaj (1875) to counter the prevalent social inequalities**.
- Its Motto was '**Go back to the Vedas**'.



EDUCATIONAL REFORMS

- He set up several Gurukuls to teach his followers the knowledge of the Vedas.
- Inspired by his beliefs, his disciples **established the Dayanand Anglo Vedic College Trust and Management Society**.

- **The first DAV High School was established in Lahore with Mahatma Hans Raj.**

SOCIAL AND RELIGIOUS REFORMS

- **Shuddhi Movement:** The Shuddhi Movement was introduced to bring back the individuals to Hinduism who were converted to other religions such as Christianity or Islam.
- **Opposition to Sati and Child Marriage:** He opposed the practices of Sati and Child Marriage which considered them detrimental to society and against the Vedic principles.
- **Advocate for Women's rights:** He advocate women's rights and empowerment and also encouraged women to receive

education and participation in social, political, and religious spheres.

- He promoted **monotheism** and rejected the worship of multiple deities, advocating for the worship of one formless God (Ishwar).
- Dayanand opposed caste-based discrimination and advocated for social equality, education for all, and the upliftment of women.

About Arya Samaj

- Dayanand Saraswati formed the Arya Samaj at Bombay in 1875. Arya Samaj was a Hindu reform movement which means 'Society of the Nobles'.
- Motto: 'Krinvanto Vishwam Aryam' means 'Make this World Noble'.
- The Samaj launched programs to support widow remarriages around the 1880s.
- **Famous Personalities:** Lala Lajpat Rai, Vinayak Damodar Savarkar, Madam Cama, Ram Prasad Bismil, Madan Lal Dingra and Subhash Chandra Bose.

LITERACY WORK

- The philosophy of Dayanand Saraswati can be attributed to various famous works viz. '**Satyartha Prakash**' (The Light of Truth), '**Veda Bhashya Bhumika**', and '**Veda Bhashya**'.
- Also, the journal '**Arya Patrika**' was edited by him which reflected his thoughts.
- **Sanskrit Grammar Works:** Contributions to Sanskrit grammar and linguistics and also includes Siddhant Kaumudi and Sanskar Vidhi.

4.8. DHOKRA SHILPKALA ART

Context

Recently, **Chhattisgarh's Ocher Studio** has been helping to preserve the 4,000-year-old craft 'Dhokra Shilpkala Art'.

ABOUT DHOKRA SHILPKALA ART

- It is believed to derive its name from the **Dhokra Damar tribes**, who are **traditional metal smiths in Central India**.
- It has a rich history spanning over 4,000 years, making it **one of the oldest documented metal casting techniques**.
- The roots of Dhokra Sculpture can be traced back to **tribal communities in Chhattisgarh, Jharkhand, West Bengal, and Odisha**, where it has become an integral part of their cultural and religious practices.
- **Artistry and Designs**
 - ✓ Characterized by rustic charm, Dhokra Shilpkala features **organic designs inspired by nature, mythology, and everyday life**.
 - ✓ Artisans draw inspiration from a **variety of sources, incorporating motifs such as animals, birds, deities, and tribal symbols into their creations**.
 - ✓ From small figurines and jewelry to larger sculptures and functional items, Dhokra **Shilpkala encompasses a diverse range of artistic expressions**.
- **Technique and Process:** Dhokra Shilpkala distinguishes itself through its **unique metal casting technique, utilizing the lost wax casting method**, also known as *cire perdue*.



Source: Goan connection

LOST WAX METHOD

- The lost wax method, also known as **investment casting or precision casting**, is a process used to create metal sculptures, jewelry, and intricate metal parts with high accuracy and detail.

4.9. BOCHASANWASI AKSHAR PURUSHOTTAM SWAMINARAYAN SANSTHA (BAPS) TEMPLE

Context

The Prime Minister of India inaugurated Bochasanwasi Akshar Purushottam Swaminarayan Sanstha (BAPS) Hindu Mandir in Abu Dhabi, the first Hindu temple in the United Arab Emirates.

ABOUT BAPS TEMPLE

- The temple was constructed by the **Bochasanwasi Akshar Purushottam Swaminarayan Sanstha (BAPS)**, which is a denomination of the **Swaminarayan Sampradaya, a Vaishnav sect of Hinduism**.



Source: Arabian Business

- **External Facade:** **Pink sandstone** from Rajasthan, Italian marble for the interior.
- **Architectural Design:** Traditional stone Hindu temple with seven shikharas.

BAPS

- The organization is named after Bhagwan Swaminarayan (a religious leader) and was established by Shastriji Maharaj in 1907.
- It is a socio-spiritual Hindu faith with its roots in the Vedas and was pioneered by Bhagwan Swaminarayan in the late 18th century.
- The Akshardham temples in Delhi and Gujarat are managed by BAPS.
- ✓ Each shikhara **narrates the tales from the Ramayana, Mahabharata, Shiva Purana, and Bhagavatam**.
- Also, each shikhara is adorned with **depictions of deities such as Ayyappa, Jagannath, Swaminarayan, and Venkateshwara**.

- **Spiritual river**
 - ✓ A 'holy river' surrounds the temple having waters from the **Ganga and Yamuna brought into it.**
 - ✓ Also, the '**Saraswati**' river is depicted in the form of white light. A 'Varanasi-ghat' has been created where Ganga passes.
- **Bells:** There are around 96 bells which are installed around the path of the temple. This pays **tribute to Pramukh Swami Maharaj's life.**
- It features two central domes viz. **the Dome of Harmony and the Dome of Peace.**
- A **Wall of Harmony, one of the largest 3D-printed walls in the UAE.** The word 'harmony' has been written in 30 different ancient and modern languages.
- There is a **special pillar, called the 'Pillar of Pillars', which**

has around **1,400 small pillars carved into it.**

RECOGNITION

- The temple received accolades such as the **Best Mechanical Project of the Year 2019 and the Best Interior Design Concept of the Year 2020** for its architectural excellence and innovative design.

LEADERSHIP INVOLVEMENT

- **Sheikh Mohammed Bin Zayed Al Nahyan, President of the UAE,** played a significant role in facilitating the construction of the temple and **was also the chief guest at the Vibrant Gujarat Global Summit 2024,** demonstrating the strong ties between the UAE and India.

4.10. RENAMED INDIRA AND NARGIS AWARDS FROM THE NATIONAL AWARDS

Context

The Ministry of Information & Broadcasting (I&B) has dropped the names of former Prime Minister Indira Gandhi and late actor Nargis Dutt from the National Film Awards.

RECENT KEY CHANGES

- **Renaming of Awards**
 - ✓ The 'Indira Gandhi Award for Best Debut Film of a Director' will now be called 'Best Debut Film of a Director'.
 - ✓ 'Nargis Dutt Award for Best Feature Film on National Integration' has become the 'Best Feature Film Promoting National, Social and Environmental Values.
- **Changes in Language Category**
 - ✓ The award for 'Best Feature Film' in each of the languages specified in Schedule VIII of the Constitution has been renamed as 'Best (name of the language) Feature Film'.
 - ✓ Awards for 'Best Animation Film' and 'Best Special Effects' have been clubbed under a new category viz. 'Best AVGC (animation, visual effects, gaming and comics) Film', with two further sub-categories.
- **Prize Money**
 - ✓ The prize money for the **Dadasaheb Phalke Award,** presented for one's lifetime contribution to the field of cinema, has been increased from Rs 10 lakh to Rs 15 lakh.
 - ✓ For **Swarn Kamal and Rajat Kamal awards,** the prize money has been upped to Rs 3 lakh and Rs 2 lakh respectively, as opposed to earlier cash prizes ranging between Rs 50,000 and Rs 2 lakh.

- **Background**

- ✓ The Ministry of Information & Broadcasting constituted a committee under the chairmanship of the Additional Secretary (I&B) and made several recommendations.

About National Awards

- It began in 1954 and is currently managed by the Directorate of Film Festivals.
- The awards are given in the categories of Feature Films and Non-Feature Films made in Hindi and other regional languages.
- **About the Indira Gandhi Award for Best Debut Film of a Director:**
 - ✓ It is an annual award presented by the Director of Film Festivals. This award was instituted in 1980, at the 28th National Film Awards.
 - ✓ The award was instituted in 1965, at the 13th National Films Award and awarded annually for films produced in the year across the country, in all Indian languages.
- **About Nargis Dutt Award for Best Feature Film on National Integration:**
 - ✓ Nargis's name came to be associated with the National Film Awards in 1965, during the 13th edition of the National Film Awards. It is awarded in all Indian languages.

ENVIRONMENT

5.1. SUPREME COURT (SC) ON THE DEFINITION OF FOREST

Context

For the identification and preservation of forest lands, the Supreme Court recently instructed state and union territories to adhere to the definition of 'forest' as established in T.N. Godavarman Thirumulkpad's (1996) judgment.

KEY HIGHLIGHTS OF VERDICT

- The Supreme Court was hearing a PIL challenging the constitutionality of the Forest (Conservation) Amendment Act, 2023.
- The court effectively suspended **Section 1A of the Forest (Conservation) Amendment Act, 2023 which narrowed the definition of forests for diversion purposes.**
 - ✓ Section 1A: According to which land has to be either notified as a forest or specifically recorded as a forest in a government record to qualify as a "forest".
- **States and UTs must follow the definition of "forest" as per the 1996 TN Godavarman judgment until the process of identifying forest land is complete.**
 - ✓ This definition is broader than the one in the Forest (Conservation) Amendment Act 2023, which only considers notified or recorded forests.
- **The central government must collect details on lands identified as forests based on the TN Godavarman judgment 1996 from states and UTs within two weeks.**
 - ✓ States and UTs have until March 31st to submit these reports.
 - ✓ **The central government must then digitize these records and publish them online by April 15th.**
No new zoos or safaris can be set up in identified forest areas without court approval.
 - ✓ (Zoo or safaris are exempted as forests under Section 5 of the Forest (Amendment) Act, 2023.
 - ✓ This restriction applies to government-owned or authorized zoos and safaris outside protected areas.

T.N. Godavarman Thirumulkpad vs Union of India (1996)

- According to the judgment, forests would include:
 - ✓ Any land recorded as 'forests' in government records (Section 2 of the Forest Conservation Act, 1980).
 - ✓ Any land that satisfied the dictionary definition of forest. (Oxford Dictionary: Forest as 'large area covered with trees and undergrowth').

FOREST CONSERVATION ACT, 1980

Key Features of Act

- Before de-reserving or diverting forest lands for non-forestry purposes, **prior approval from the Central Government is mandatory.**

- The State Government is authorized to use forests exclusively for forestry purposes.
 - ✓ Any other utilization requires prior approval from the Central Government.
- After Central Government approval, the State Government can issue orders for specific actions:
 - ✓ Declaration of parts of reserve forest for non-forest purposes (e.g., mining, agriculture).
 - ✓ Clearing naturally grown trees, with replacement by economically important trees (reforestation).

FOREST TYPES

The Act defined reserved forests, protected forests, village forests, and private protected forests:

- **Reserved Forests:** Directly supervised by the government, no public entry is allowed for timber collection or cattle grazing.
- **Protected Forests:** Managed by the government, local people are allowed to collect fuel wood, and timber, and graze cattle with care to avoid serious damage.
- **Village Forests:** Assigned to a village community for responsible use.
- **Private Protected Forests:** Protected areas with land rights owned by an individual or organization.

Certain non-forest activities like construction, pipelines for water supply, check posts, wireless communications, etc., are exempted under the Act.

FOREST (CONSERVATION) AMENDMENT ACT, 2023

- The Act amends the Forest (Conservation) Act, 1980 to make it applicable to certain types of land.

Key Features of the Act

- The **Section 1A covers two types of land:**
 - ✓ Land declared/notified as a forest under the Indian Forest Act, 1927, or any other law.
 - ✓ Land not covered in the first category but notified as a forest on or after October 25, 1980 (Forest Conservation Act, 1980), in a government record.
- The Act won't apply to land changed from forest to non-forest use before December 12, 1996 (T.N. Godavarman judgment), by a state/UT authority.

Status of Forest in India (As per India State of Forest Report, 2021)

- Total forest and tree cover of the country is 80.9 million hectares which is 24.62 percent of the geographical area of the country.
- Area-wise Madhya Pradesh has the largest forest cover in the country followed by Arunachal Pradesh, Chhattisgarh, Odisha, and Maharashtra.
- Forest cover as a percentage of total geographical area, the top five States are Mizoram (84.53%), Arunachal Pradesh (79.33%), Meghalaya (76.00%), Manipur (74.34%) and Nagaland (73.90%).
- India is ranked 10th in the world, with 24.62% of land area under forest and tree cover, even though it accounts for 2.4 % of the world's surface area and sustains the needs of 17 % of humans and 18 % livestock population.

- Certain land types are exempted from the Act, including forest land along rail lines, public roads, and roadside amenities (up to 0.10 hectares).
- Exemptions for land within 100 km from international borders, for strategic projects concerning national security, and for defense-related projects in left-wing extremism areas.
- Prior approval of the central government is required for assigning forest land to any entity, including those owned and controlled by the government.
- The Act restricts the de-reservation of forests or using forest land for non-forest purposes.
 - ✓ Restrictions can be lifted with prior central government approval.
- Non-forest purposes exclude certain activities related to forest and wildlife conservation, such as establishing check posts, fire lines, fencing, and wireless communication.

Various challenges faced in Forest (Conservation) Amendment Act, 2023

- Exempting land near border areas for national security projects may adversely impact the forest cover and wildlife in northeastern states.
- A blanket exemption for projects like zoos, eco-tourism

facilities, and reconnaissance surveys may adversely affect forest land and wildlife.

- Various critics argued that Joint Parliamentary Committees had recommended various suggestions for protecting the indigenous rights of tribals, but these suggestions have been dwindled.

GOVERNMENT INITIATIVES TO BOOST FOREST COVER

- **National Afforestation Programme (NAP):** It aims at the ecological revitalization of deteriorated forests and the sustainable development of forest resources through active community involvement.
- **National Mission for Green India (GIM):** It aims at protecting, restoring, and enhancing India's diminishing forest cover and responding to climate change by a combination of adaptation and mitigation measures.
- **National Forest Policy, 1988:** To ensure environmental stability and maintenance of ecological balance including atmospheric equilibrium which is vital for the sustenance of all life forms, human, animal, and plant
- **Compensatory Afforestation Fund Act, 2016 (CAF Act):** It provides the legal framework for compensating the loss of forest and ecosystem services due to diversion of forest land for non-forestry purposes as per provisions of the Forest (Conservation) Act, 1980.

WAY FORWARD

- The recent Supreme Court verdict upholding the broader definition of "forest" is a positive step towards stronger forest protection. States and UTs must now identify and record forest land based on this definition, ensuring comprehensive conservation efforts.
- Existing initiatives like the National Afforestation Programme, National Mission for Green India, and Compensatory Afforestation Fund Act provide frameworks for forest restoration and compensation for land diversion.
- Encouraging practices like selective logging, agroforestry, and community-based forest management can help reduce deforestation and ensure sustainable forest use.

5.2. HUMAN-ANIMAL CONFLICT

Context

Recently, the Kerala Legislative Assembly passed a resolution urging the Union Government to amend relevant sections of the Wildlife Protection Act of 1972 to address the increasing human-animal conflict in the state.

MORE ON THE NEWS

- In the resolution, the Kerala Government has demanded the following:
 - **Demand to amend section on hunting:**
 - ✓ **Section 11(1) (A)** of the Wildlife Protection Act, 1972 regulates the hunting of wild animals.
 - ✓ **Section 11 (1) (A):** The Chief Wildlife Warden (CWLW) of

the state has the authority to permit the killing/hunting of dangerous wild animals that are a threat to human life/severely disabled/diseased.

- Kerala wants to amend Section 11 (1)(A) to give this power of the CWLW to **Chief Conservators of Forests (CCFs)** instead. This would make it easier and quicker to deal with dangerous wildlife situations at a local level.

• **Demand to declare Wild Boar as Vermin**

- ✓ Under **Section 62 of the Wildlife Protection Act**, the Union Government can declare any wild animal other than those specified in Schedule I to be vermin for any area/state for some time.
- ✓ Kerala wants the Central government to declare wild boars as vermin under **Section 62** as they are causing significant threats to both human life and crops.
- ✓ By declaring them as vermin, the state and its citizens will be enabled to control their population by hunting them.

Wild Boar (Sus scrofa)
<ul style="list-style-type: none"> • Range: Widest range among all pigs, sometimes referred to as the European wild boar. • Description: Swift, nocturnal, and omnivorous animals with sharp tusks. • Distribution: Largest of the native pigs. Native to forests spanning from western and northern Europe to North Africa, Andaman Islands (India), and China. • IUCN Status: Least Concern • WPA 1972: Schedule III

WILDLIFE (PROTECTION) ACT, 1972 OVERVIEW

- **Objective:** Enacted for the protection of plant and animal species across India
- **Evolution:** Before the Act, India had only five designated national parks. Presently, there are 106 National Parks in the country.
- **Authorities Appointed:**
 - ✓ The **Central Government** appoints a **Director of Wildlife Preservation** and subordinate officers.
 - ✓ **State Governments** appoints **Chief Wildlife Wardens (CWLW)** and Wildlife Wardens for districts.
- **Salient Features:**
 - ✓ **Prohibition of Hunting:** Hunting of specified wild animals is prohibited unless approved by CWLW for reasons like threat to human life or incurable disease.
 - ✓ **Protection of Plants:** Prohibits uprooting or collecting specified plants without permission, except for educational or scientific purposes.
 - ✓ **Declaration of Sanctuaries and National Parks:** The Central Government can declare areas as Sanctuaries or National Parks based on ecological significance.
 - ✓ **Ownership of Wildlife Products:** Hunted wild animals and related products deemed government property unless declared vermin.
- **Bodies Constituted:**
 - ✓ **National Board for Wildlife (NBWL):** Apex body **chaired by the Prime Minister** for reviewing wildlife matters and approving projects near protected areas.
 - ✓ **Standing Committee of NBWL:** Approves projects within protected areas or a 10 km radius. It is **chaired by the Environment Minister**.

- ✓ **State Board for Wildlife (SBWL):** State-level advisory body **chaired by the Chief Minister**, advising on protected areas and conservation policies.
 - ✓ **Central Zoo Authority:** Regulates zoos, provides recognition, and oversees animal transfers.
 - ✓ **National Tiger Conservation Authority (NTCA):** Aims to strengthen tiger conservation, designates Tiger Reserves, and is **chaired by the Environment Minister**.
 - ✓ **Wildlife Crime Control Bureau (WCCB):** Combats organised wildlife crime, collects intelligence, and assists in prosecutions.
- **Schedules under the WPA 1972:** The Wildlife (Protection) Act, 1972 categorises the protection status of diverse plants and animals into **six schedules**.

Schedule	Definition	Examples
Schedule I	Endangered species receive rigorous protection, prohibiting poaching, killing, trading, etc.	Black Buck, Bengal Tiger, Clouded Leopard, Snow Leopard, Swamp Deer, Himalayan Bear, Asiatic Cheetah, Kashmiri Stag, Lion-tailed Macaque, Musk Deer, Rhinoceros, Brow Antlered Deer, Capped Langur, Golden Langur, Hoolock Gibbon
Schedule II	High protection, bars trade and hunting except under threat to human life or due to incurable disease/disorder.	Assamese Macaque, Pig Tailed Macaque, Stump Tailed Macaque, Bengal Hanuman langur, Himalayan Black Bear, Jackal, Flying Squirrel, Giant Squirrel, Sperm Whale, Indian Cobra, King Cobra
Schedule III & IV	Non-endangered species are protected with hunting prohibition, with lesser penalties compared to Schedule I and II.	Chital (spotted deer), Bharal (blue sheep), Hyena, Nilgai, Sambhar (deer), Sponges, Flamingos, Hares, Falcons, Kingfishers, Magpie, Horseshoes, Crabs
Schedule V	Vermin species are allowed hunting due to their tendency to carry disease and destroy plants and food.	Common Crows, Fruit Bats, Rats, Mice
Schedule VI	Regulates cultivation, possession, sale, and transportation of specified plants, requiring prior permission from a competent authority.	Beddome's cycad, Blue Vanda (Blue Orchid), Red Vanda (Red Orchid), Kuth (Saussurea lappa), Slipper orchids (Paphiopedilum spp.), Pitcher plant (Nepenthes khasiana)

Factors Contributing to Human-Animal Conflict

- **Increasing Interaction:** Expanding human populations encroach upon wildlife habitats, leading to more frequent encounters and resource competition. Destruction of buffer zones between settlements and forests intensifies these interactions.
- **Fragmentation of Habitats:** Development projects like roads and railways disrupt natural habitats, leading to loss of animal life and habitat fragmentation.
- **Climate Change:** Changing weather patterns due to climate change force animals to seek food and shelter outside their usual habitats.
- **Lack of Protected Areas:** Most species reside outside protected areas, exposing them to human activities and increasing conflict. For example, tiger habitats in India extend beyond protected areas.
- **Alien Invasive Species:** Invasive plants reduce food sources for herbivores, leading them to graze on crops and escalate conflicts.
- **Poaching:** Illegal poaching reduces the prey base for predators, forcing them to seek alternative food sources in nearby villages.

CHALLENGES POSED BY SUCH CONFLICTS

- **Loss of Life and Livelihood:** These conflicts pose a threat to human property, livelihoods and life itself
- **Loss of Biodiversity:** Human-animal conflicts pose a significant risk to biodiversity, affecting ecosystems and species survival.

- **Disease Transmission:** Zoonotic diseases transmitted by wild animals, such as Kyasanur Forest Disease and Nipah virus, pose health risks to humans.
- **Impact on Conservation Efforts:** Recurring conflicts undermine public support for conservation, hindering efforts to protect forests and wildlife.
- **Impact on Sustainable Development:** Reducing Human-animal conflict is critical for achieving biodiversity conservation goals, affecting sustainable development objectives like SDG 15 (life on land).

WAY FORWARD/SUGGESTIONS

- Focus on improving the safety of both people and wildlife while promoting cohabitation as the primary goal of human-wildlife conflict management.
- Government initiatives should aim to reduce communities' reliance on forests by promoting socioeconomic development and offering sustainable livelihood alternatives.
- Provide technical expertise and organisational support to communities near wildlife habitats to integrate coexistence into their planning and management practices.
- Embrace the **One Health approach**, which recognises the interconnectedness of human, animal, plant, and environmental health to achieve optimal outcomes for health and wellbeing.
- Incorporate human-wildlife coexistence into the SDG framework to achieve the vision of "living in peace with nature".

5.3. INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC) WORK ON SEVENTH CLIMATE ASSESSMENT REPORT

Context

The IPCC Bureau, which prepares climate assessment reports, failed to reach a consensus on establishing a timeline for publishing its reports under **the Seventh Assessment Cycle (AR7)** at the **60th session of IPCC (IPCC-60)** in Turkey.

MORE ON THE NEWS

- During the IPCC-60 talks, the IPCC Bureau agreed to produce the full assessment and synthesis reports, the methodology reports, and a special report.
- Several member countries also requested the Bureau to **speed up** the production of AR7 reports by 2028 to align with the **second Global Stocktake (GST)**.
- However, the Bureau couldn't reach a consensus on the date of release of the full reports due to the longer time required to review, finalise, and publish the approved texts.
- Several developing countries, **including Egypt, India, Brazil, China, South Africa, Saudi Arabia, and Kenya**, have also raised concerns about this faster timeline.
- They emphasized that a **condensed cycle could compromise the content** due to insufficient new scientific papers

and incomplete modelling efforts to understand climate changes comprehensively.

- Thus, a decision on the **timeline for the assessment reports is pending** and will be addressed during **the 61st session of the IPCC**.
 - ✓ However, **the special report on climate change and cities** and **two methodology reports on short-lived climate forcers** and **carbon removal** will be published in 2027.

ABOUT THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC)

- It was set up by the World Meteorological Organisation (**WMO**) and the United Nations Environment Programme (**UNEP**) to provide governments at all levels with scientific information that they can use to develop climate policies.

- The IPCC is an organization of governments that are members of the United Nations or WMO. It has **currently 195 members**.
- After the publication of the AR6 synthesis report, the IPCC initiated its seventh cycle (AR7) by nominating and electing an IPCC Bureau.

Global Stocktake (GST)
<ul style="list-style-type: none"> • To assess the world’s progress towards the goals of the Paris Agreement, UNFCCC countries conduct a ‘global stocktake’ (GST) once every 5 years. • The GST serves as a mechanism for all stakeholders to collectively measure progress, identify gaps, and chart a better course of climate action. • The first GST started in 2022 and concluded at COP28 in December 2023. It requested the IPCC to align its work with subsequent stocktakes, so that it provides relevant and timely information. • The second GST is due in 2028 and member countries have requested the IPCC to publish its AR7 assessment reports before the stocktake so that countries could measure their progress against the state of the planet.

KEY FINDINGS OF ASSESSMENT REPORTS

IPCC’s Assessment Reports	Key Findings of Reports
First Assessment Report (1990)	It highlighted that global temperatures have already risen by 0.3 to 0.6 degrees Celsius in the last 100 years and will further increase by 2 degrees Celsius by 2025 and 4 degrees Celsius by 2100 compared to pre-industrial levels. The report also forecasted a likely sea-level rise of 65 cm by 2100. This report formed the basis for the negotiation of the UN Framework Convention on Climate Change (UNFCCC) in 1992, known as the Rio Summit.
Second Assessment Report (1995)	Based on additional evidence, it revised the projected rise in global temperature to 3 degrees Celsius above pre-industrial levels by 2100 and sea-level rise to 50 cm. AR2 served as the scientific basis for the Kyoto Protocol in 1997.
Third Assessment Report (2001)	It revised the projected rise in global temperatures to a range of 1.4 to 5.8 degrees Celsius by 2100 compared to 1990. The report predicted increased average rainfall and anticipated sea-level rise of up to 80 cm by 2100 from 1990 levels.

Fourth Assessment Report (2007)	A 70% increase in greenhouse gas emissions between 1970 and 2004. In the worst-case scenario, the report projected a potential global temperature increase of 4.5 degrees Celsius by 2100 compared to pre-industrial levels, and sea levels could be 60 cm higher than 1990 levels. The report won the 2007 Nobel Peace Prize for IPCC. It provided the scientific input for the 2009 Copenhagen climate meeting.
Fifth Assessment Report (2014)	The report projected a potential increase in global temperature of up to 4.8 degrees Celsius by 2100 compared to pre-industrial times. AR5 emphasized the risk of a “large fraction of species” facing extinction and the undermining of food security. This assessment report provided the scientific basis for the negotiations of the Paris Agreement in 2015.
Synthesis Report (SYR) for the Sixth Assessment Cycle (2023)	The global surface temperature has already warmed by 1.1°C over pre-industrial levels, leading to extreme and unpredictable weather events that risk human health, fortunes, and ecosystems. Existing policies, as indicated by countries’ Nationally Determined Contributions (NDC), are insufficient to prevent a temperature rise beyond 1.5°C, and further make it harder to limit warming below 2°C. To achieve the 1.5°C goal, the global net zero must be achieved in the early 2050s. Significant implications for India: Highly vulnerable population: India needs to prioritize adaptation strategies to minimize losses in lives, livelihoods, and biodiversity. Focus on grants and policies: Grants and policies should specifically address adaptation needs. Climate-resilient development: Development strategies should prioritize resilience to climate impacts. Lower per-capita emissions: Existing energy efficiency policies can help achieve this. Decarbonization: Transitioning to cleaner energy sources like solar is crucial.

ASSESSMENT REPORTS (ARS) OFFER NUMEROUS BENEFITS

- The reports provide a **rigorous and objective synthesis** of the latest scientific knowledge on climate change, drawing from thousands of peer-reviewed studies.
- The reports offer **evidence-based recommendations for policymakers** at national and international levels to mitigate climate change and adapt to its impacts.
- The reports raise **public awareness about the urgency and seriousness** of climate change, highlighting the scientific consensus on its human-caused nature and potential consequences.

- The reports serve as a **common scientific foundation for international negotiations** and agreements on climate change, such as the Paris Agreement.

ASSESSMENT REPORTS (ARS) FACE SEVERAL CHALLENGES

- Integrating and presenting **complex scientific findings from diverse fields** in a clear and accessible way for policymakers and the public remains a challenge.
- **Limited access to reliable data**, especially from developing countries, can hinder the comprehensiveness and accuracy of the reports.
- The IPCC's **limited budget can hinder its ability to conduct comprehensive** research, engage in widespread outreach activities, and ensure timely completion of reports.
- Ensuring equitable **distribution of the burdens and**

benefits of climate action across different countries and communities remains a critical challenge.

WAY FORWARD

- While the AR7 work program is finalized, the full assessment report timeline remains undecided. Striking a **balance between scientific rigour and timely delivery** is crucial.
- Effectively communicating **complex scientific findings to policymakers and the public** in an accessible way remains a challenge that needs continuous improvement.
- Ensuring **equitable distribution of the burdens and benefits of climate action** across different countries and communities is crucial for sustainable solutions.
- By addressing these key areas, the IPCC can continue to play a vital role in informing and guiding global climate action.

5.4. INDIAN SNOW LEOPARD

Context

Recently, the Minister of Environment, Forest, and Climate Change released India's first 'Snow Leopard Population Assessment Report'.

KEY HIGHLIGHTS OF THE REPORT

- The Snow Leopard Population Assessment in India Program is the first-ever scientific exercise that reports a population of 718 in India.
- The Indian snow leopard population is estimated to be around one-sixth to one-ninth of the global population.
- The four-year-long estimation exercise revealed approximately **718 snow leopards in the wild in India**.
- **Ladakh has the highest estimated number (477), followed by Uttarakhand (124), Himachal Pradesh (51), Arunachal Pradesh (36), Sikkim (21), and Jammu and Kashmir (9).**
- **The Indian snow leopard population constitutes 10-15% of the global population (the largest population is found in China).**

ABOUT SNOW LEOPARDS

- **Habitat:**
 - ✓ They inhabit mountainous regions of central and southern Asia.
 - ✓ In India, they are found in the Western Himalayas (Jammu and Kashmir, Himachal Pradesh) and Eastern Himalayas (Uttarakhand, Sikkim, Arunachal Pradesh).
 - ✓ Hemis National Park (Ladakh) is the largest national park in India and a significant snow leopard habitat.
- **Conservation Status:**
 - ✓ IUCN Red List: Listed as Vulnerable.
 - ✓ CITES and CMS: Appendix-I.
 - ✓ Wildlife (Protection) Act 1972: Schedule I
- **Conservation Efforts by India:**
 - ✓ **Global Snow Leopard and Ecosystem Protection (GSLEP) Programme:** India has been participating since 2013.



- ✓ **Himal Sanrakshak:** Launched in October 2020 to engage local communities in snow leopard protection.
- ✓ **First National Protocol (2019):** Launched for Snow Leopard Population Assessment, aiding in population monitoring.
- ✓ **SECURE Himalaya:** GEF-UNDP funded project focusing on conserving high-altitude biodiversity and reducing dependency on natural ecosystems.
- ✓ **Project Snow Leopard (PSL):** Launched in 2009, it emphasizes an inclusive and participatory approach to conserving snow leopards and their habitat.
- ✓ **Recovery Program:** The snow leopard is part of the recovery program for 21 critically endangered species under the Ministry of Environment, Forest & Climate Change.
- ✓ **Padmaja Naidu Himalayan Zoological Park,** Darjeeling, West Bengal, houses a snow leopard conservation breeding program.

5.5. THANTHAI PERIYAR SANCTUARY AND RIGHTS OF FOREST DWELLERS

Context

The recent notification of the Thanthai Periyar Wildlife Sanctuary in Erode's district of Tamil Nadu has triggered concerns among nearby forest-dwelling communities.

MORE ON THE NEWS

- Recently, the Tamil Nadu government declared the reserve forests in Bargur Hills in the Erode district as the Thanthai Periyar Wildlife Sanctuary, making it the 18th wildlife sanctuary of the State.
- This has led to fear among the forest dwellers around the sanctuary that the notification may deny their rights under the Forest Rights Act (FRA), 2006.

About Thanthai Periyar Wildlife Sanctuary

- **Strategic Location:** It is located between the Sathyamangalam Tiger Reserve (STR) of Tamil Nadu and the Male Mahadeshwara Hills Tiger Reserve and the Cauvery Wildlife Sanctuary of Karnataka.
- **Ecological Importance:** This sanctuary merges the Eastern Ghats with the Western Ghats at the Nilgiris.
- **Connectivity:** Interconnected with the Kollegal forests of Karnataka and the Nilgiris, it forms one of the most diverse habitats in the region
- **Water Source:** The sanctuary's landscape serves as the catchment area for the Palar River, a tributary of the Cauvery River.
- Under the new notification, the **six tribal forest villages** have been denied basic rights and facilities because these are not revenue villages which excluded from the sanctuary.
- But these settlements are confined to an arbitrary area of 3.42 sq. km. Due to the new notification, cattle grazing within the Thanthai Periyar Sanctuary has been prohibited.
 - ✓ This could potentially impact Bargur cattle, a traditional breed native to the Bargur forest hills, as they may lose access to their traditional grazing areas.
- This order contradicts the provisions of the **Forest Rights Act (2006)** which recognises the rights of grazing and traditional seasonal resource access of nomadic or pastoralist communities in all forests including in National Parks, Sanctuaries, and Tiger Reserves.

NOTE: In March 2022, the Madras High Court revised an older order imposing a total ban on cattle grazing in all the forests of Tamil Nadu and restricted the ban to National Parks, Sanctuaries, and Tiger Reserves.

- Notably, Tamil Nadu is the only state in India where such a ban exists.

FOREST RIGHTS ACT, 2006

- The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, or The **Forest Rights Act (FRA), 2006** was implemented to rectify the injustice suffered by tribal communities and forest dwellers stemming from the colonial-era forest laws in the country.
- Under the **Forest Rights Act of 2006**, forest dwellers are granted the following rights –

Who are Forest Dwellers?

According to FRA 2006, Forest Dwellers are:

- Members or communities of the Scheduled Tribes who primarily reside in and depend on forests or forest lands for their livelihood needs.
- Any member or community who, for at least three generations (75 years) before December 13, 2005, has primarily resided in forest land for genuine livelihood needs.

1. Land Rights

- ✓ Forest dwellers have the right to ownership of land that they have been farming, with a maximum limit of 4 hectares per family.
- ✓ Ownership is restricted to actual land cultivated by the family, and no new lands can be granted.
- ✓ The land cannot be sold or transferred except through inheritance.

2. Use Rights

- ✓ Forest dwellers have rights to extract Minor Forest Produce (such as tendu leaves, herbs, medicinal plants, etc.), grazing areas, etc.

- ✓ Minor forest produce excludes timber.

3. Relief and development rights

- ✓ Rehabilitation in case of illegal eviction, forced displacement, and access to basic amenities. However, these rights are subject to certain restrictions aimed at the protection of forests.

4. Right to Protect and Conserve

- ✓ Forest-dwelling communities have the right to protect and manage the forest resources.
- ✓ This is crucial for communities safeguarding their forests and wildlife against threats from forest mafias, industries, and land grabbers.

ADVANTAGES OF THE FOREST RIGHTS ACT (FRA)

- **Empowerment of Forest Communities:** FRA recognises and grants rights, leading to improved socio-economic conditions and a sense of ownership.
- **Biodiversity Conservation:** Involvement of local communities in forest management contributes to biodiversity conservation through traditional knowledge.
- **Social Justice:** FRA addresses historical injustices by recognising the rights of tribal and forest-dwelling communities, promoting social justice and inclusive development.
- **Protection of Livelihoods:** The act safeguards livelihoods by granting legal rights to access and use forest resources sustainably.
- **Participatory Governance:** FRA fosters a participatory approach, involving local communities in decision-making processes related to forest management.

DISADVANTAGES AND CHALLENGES

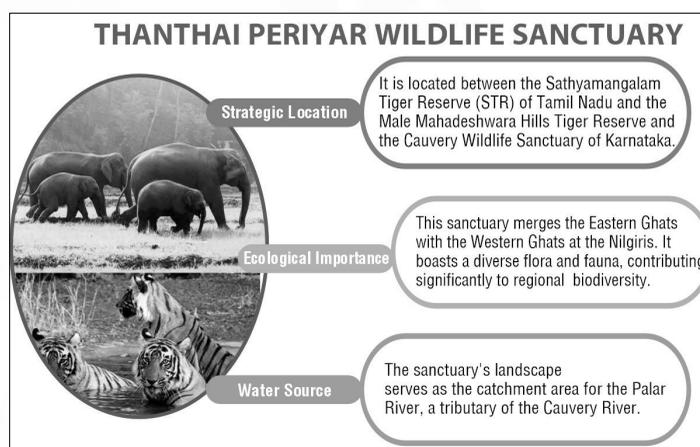
- **Implementation Challenges:** Inconsistent implementation across states poses hurdles in realising FRA's objectives.
- **Lack of Awareness:** Limited understanding of the act among forest-dwelling communities hinders effective implementation.
- **Bureaucratic Hurdles:** Complex administrative procedures

slow down the recognition and vesting of forest rights.

- **Conflict with Conservation Goals:** Debates arise regarding the balance between recognising traditional rights and conservation objectives, particularly in protected areas.
- **Legal Challenges:** Disputes related to provisions' interpretation and claims verification lead to delays and uncertainties.

WAY FORWARD

- **Overcome Bureaucratic Indifference:** Address bureaucratic indifference towards FRA implementation through increased accountability and awareness campaigns.
- **Enhance Public Awareness:** Increase public awareness about the FRA's significance and benefits to promote broader support and understanding among stakeholders.



- **Strengthen Democratic Forest Governance:** Promote democratic forest governance by empowering local communities and ensuring their participation in decision-making processes related to forest management.
- **Community-led Conservation:** Unlock the potential for community-led conservation and sustainable livelihoods by fully implementing the FRA and supporting community initiatives.

5.6. THE WATER (PREVENTION AND CONTROL OF POLLUTION) AMENDMENT BILL

Context

Recently, the **Rajya Sabha passed the Water (Prevention and Control of Pollution) Amendment Bill, 2024** which seeks to amend the Water (Prevention and Control of Pollution) Act, of 1974.

ABOUT WATER (PREVENTION AND CONTROL OF POLLUTION) BILL, 2024

- The bill proposes amendments to the **Water (Prevention and Control of Pollution) Act of 1974**, which currently includes penal provisions for non-compliance or violation of its regulations, punishable by imprisonment.
- The proposed amendment aims to rationalize criminal provisions, ensuring that individuals, businesses, and companies can operate without the apprehension of imprisonment for minor, technical, or procedural lapses.
- It emphasizes aligning the **penal consequences of an offense with its severity.**

- A significant aspect of the amendment is the **decriminalization of penal provisions**, replacing them with penalties, with exceptions for sections 25 and 26 of the Water (Prevention and Control of Pollution) Act, 1974.
 - ✓ Section 25 pertains to mandatory consent for operation from state pollution boards, while section 26 deals with the discharge of sewage or trade effluents.
- The bill grants the **central government the authority to exempt specific categories of industrial plants from the application of Section 25**, reducing redundancy in oversight and reducing the burden on regulatory agencies.

Water (Prevention and Control of Pollution) Act, 1974

Objective: Prevent and control water pollution, restore water wholesomeness.

Key Points:

- Establishes Central and State Pollution Control Boards.
 - Sets effluent discharge standards for industries and municipalities.
 - Requires consent from Pollution Boards for discharging pollutants into water bodies.
 - Empowers Boards to:
 - ✓ Investigate and inspect potential polluters.
 - ✓ Issue directions to control pollution.
 - ✓ Take emergency measures in case of severe pollution.
 - Provides mechanisms for appeals and revisions of Board decisions.
 - Levies cess on water consumption by certain industries to fund pollution control activities.
- **Sections 41 to 45A of the Water (Prevention and Control of Pollution) Act, 1974** provide for the imposition of **financial penalties instead of court prosecution**.
 - The bill stipulates penalties ranging from **ten thousand rupees to 15 lakh rupees for violations** related to discharging polluting substances into water bodies.
 - **Nomination of Chairperson of State Pollution Control Boards:**
 - Under the proposed legislation, the **central government will define the process for appointing chairpersons of State Pollution Control Boards**.
 - This amendment introduces specific mandatory criteria, experience, and procedures to ensure an equitable selection process for chairpersons.
 - Additionally, it **grants the central government the authority to provide directives concerning the approval, rejection, or withdrawal of consent by any state board** for the establishment of industries, operations, processes, or the

implementation of new or modified outlets for treatment and disposal systems.

APPLICABILITY

- Initially, the application of this law will be limited to Himachal Pradesh, Rajasthan, and the union territories. Other states have the option to pass resolutions to extend its applicability within their jurisdictions.

SIGNIFICANCE

- This move aims to streamline business operations, reducing bureaucratic oversight and enhancing regulatory mechanisms.
- It liberates businesses from excessive inspections, promoting a more efficient system.
- The government gains the flexibility to grant specific exemptions to environmentally friendly industries.
- Enhanced transparency in addressing various concerns related to water pollution.

CONCERNS

- The government is gradually removing criminal charges for environmental offenses and reducing penalties. The long-term consequences of these lenient policies and exemptions from regulations on the environment are not being adequately considered.
- The amendments to the Water Pollution Control Act could potentially lead to increased river pollution, requiring the government to invest significant funds in projects like **Namami Gange Programme**.
 - ✓ Despite spending ₹12,000 crores on cleaning the Ganga river, pollution levels are still quite high.
- Critics argue that the bill undermines the federal structure of water management, emphasizing the importance of local and state-level monitoring of water bodies and sources.

WAY FORWARD

- **Strengthen regulations:** Enforce strict monitoring and regulations to meet pollution standards and prevent unauthorised discharge into water bodies.
- **Consult stakeholders:** Engage environmental experts, industry representatives, and civil society to refine proposed amendments and address concerns.
- **Ensure transparency:** Maintain transparency in exemption processes and establish accountability mechanisms for regulatory decisions.

5.7. FIVE WETLANDS ADDED TO RAMSAR SITES

Context

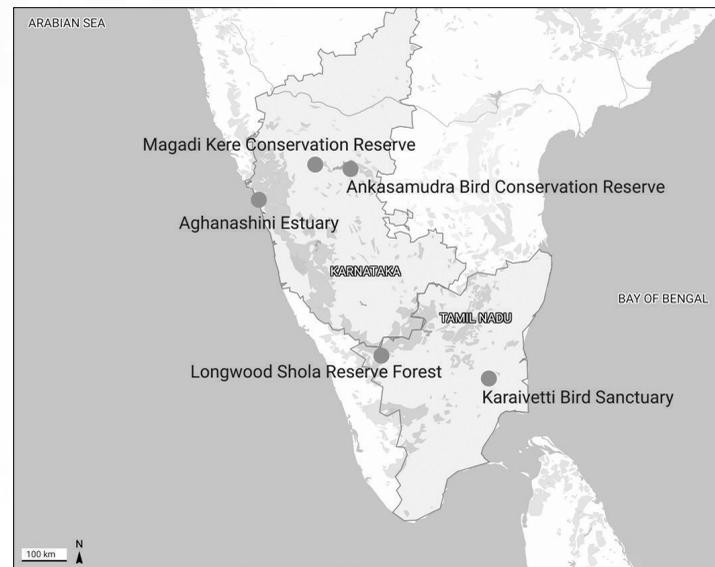
The Union Environment Minister recently announced the addition of five Indian wetlands to the prestigious global list of Ramsar sites, designating them as wetlands of international importance.

NEW ADDED WETLAND SITES

- **Ankasamudra Bird Conservation Reserve (Karnataka):**
 - ✓ It is a **historically constructed Village Irrigation Tank** boasting ecological significance and rich biodiversity.
 - ✓ Notably, it sustains more than 1% of the biogeographic population of **Painted Stork and Black-headed Ibis**.
- **Aghanashini Estuary (Karnataka):**
 - ✓ It formed at the **confluence of the Aghanashini River with the Arabian Sea** and plays a pivotal role in offering various **ecosystem services**.
 - ✓ It encompasses flood risk mitigation, biodiversity conservation, and support for traditional activities such as **fish farming in rice fields (known as Gazni rice fields)**, bivalve shell collection, and salt production.
- **Magadi Kere Conservation Reserve (Karnataka):**
 - ✓ It was created as a **man-made wetland for rainwater storage and irrigation** and serves as a habitat for **two vulnerable species viz. the Common Pochard and River Tern**.
 - ✓ Additionally, it harbors four near-threatened species: the Oriental Darter, Black-headed Ibis, Woolly-necked Stork, and Painted Stork.
 - ✓ Furthermore, it acts as a **significant wintering ground for the Bar-headed Goose**.
- **Karaichetti Bird Sanctuary (Tamil Nadu):**
 - ✓ It is among Tamil Nadu's largest inland wetlands, and **holds importance for groundwater recharge** in the region.
- **The Longwood Shola Reserve Forest (Tamil Nadu):**
 - ✓ It is named after the **Tamil word "Solai" denoting a tropical rainforest** and is situated in the upper reaches of the Nilgiris, Anamalais, Palni hills, Kalakadu, Mundanthurai, and Kanyakumari in Tamil Nadu.
 - ✓ These forested wetlands serve as critical habitats for **globally endangered species such as the Black-chinned Nilgiri Laughing Thrush, Nilgiri Blue Robin, and the vulnerable Nilgiri wood pigeon**.

ABOUT RAMSAR SITES AND RAMSAR CONVENTION

- **Origins:** A Ramsar site is a wetland internationally recognized as significant under the Ramsar Convention, an intergovernmental environmental treaty founded by UNESCO in 1971.
- World Wetlands Day (WWD) is observed globally on 2nd February to commemorate the adoption of the Ramsar Convention.



- **Identification Process:** The Ramsar recognition involves identifying wetlands that hold international importance, particularly those serving as habitats for waterfowl, encompassing approximately 180 species of birds.
- **Pioneering Ramsar Sites in India:**
 - ✓ The first Ramsar Sites designated were Chilika Lake (Orissa) and Keoladeo National Park (Rajasthan).
 - ✓ Largest Ramsar Site: The Sundarbans (West Bengal) hold the distinction of being the largest Ramsar Site.
 - ✓ Over the last ten years, the number of Ramsar sites in India has grown from 26 to 80, with 38 new sites added in the last three years.

5.8. HIMALAYAN GRIFFON VULTURE

Context

Recently, in the first-ever tri-state synchronized vulture survey, around 300 Himalayan Griffon Vultures were spotted in Wayanad Wildlife Sanctuary.

CHARACTERISTICS OF HIMALAYAN GRIFFON VULTURES

- **Description:** The Himalayan Griffon Vulture, scientifically known as *Gyps himalayensis*, belongs to the family Accipitridae and shares similarities with the European Griffon Vulture.
 - ✓ It features a bald white head, broad wings, and short tail feathers, with distinctive white neck ruff and yellow bill.
- **Distribution:** Primarily inhabits the Himalayas, including the Tibetan plateau, as well as Central Asian mountains, occasionally migrating altitudinally to northern India.
- **Role in Ecosystem:** Vultures are essential carrion-eating birds, playing a crucial role as nature's clean-up crew and helping control wildlife diseases.

CONSERVATION STATUS

- **Conservation Status:** Listed as Near Threatened (NT) on the IUCN Red List.
- **Indian Species:** Several, including the Bearded, Long-billed, Slender-billed, and Oriental white-backed vultures, are protected under Schedule I of the Wildlife Protection Act 1972.



CONSERVATION EFFORTS

- **India's Initiatives**
 - ✓ The Ministry of Environment, Forests and Climate Change (MoEFCC) launched a **Vulture Action Plan 2020-25**.

✓ Vulture Conservation and Breeding Centres (VCBCs), established in Pinjore, Haryana, and currently managed by the Bombay Natural History Society (BNHS), are integral to these efforts.

- **International Collaboration:** SAVE (Saving Asia's Vultures from Extinction) is a consortium aimed at coordinating conservation efforts to prevent the extinction of critical vulture species in South Asia.

VULTURE'S PROTECTION STATUS

Vulture species	Scientific name	IUCN Category
Oriental White-backed Vulture	<i>Gyps bengalensis</i>	Critically Endangered
Long-billed Vulture	<i>Gyps indicus</i>	Critically Endangered
Slender-billed Vulture	<i>Gyps tenuirostris</i>	Critically Endangered
Red-headed Vulture	<i>Sarcogyps calvus</i>	Critically Endangered
Egyptian Vulture	<i>Neophron percnopterus</i>	Endangered
Himalayan Vulture	<i>Gyps himalayensis</i>	Near Threatened
Cinereous Vulture	<i>Aegypius monachus</i>	Near Threatened
Bearded Vulture	<i>Gypaetus barbatus</i>	Near Threatened
Eurasian Griffon	<i>Gyps fulvus</i>	Least Concern

5.9. BLACK-NECKED CRANE

Context

The Wildlife Institute of India and the Zoological Survey of India recently conducted an assessment of the population of black-necked cranes.

KEY POINTS

- As per a survey conducted by the Wildlife Institute of India in 2016-17 **in the Ladakh region**, the population size of the black-necked crane was **around 66-69 individuals**.
- **In Arunachal Pradesh**, a small population of approximately **11 cranes arrives during the winter months**.
- **About Black-Necked Cranes (*Grus nigricollis*)**
 - ✓ **Appearance:** They have a distinctive black neck and head, with a contrasting white body, red crown patch, and black tail feathers.
 - ✓ They stand around 55-59 inches tall with a wingspan of 90-96 inches.
- **Habitat:** They are primarily found in **high-altitude regions of Central Asia**. Specifically, its range includes **parts of India, Bhutan, China, and Tibet**.
 - ✓ **In India**, they are commonly observed in regions such as **Ladakh in Jammu & Kashmir, as well as Arunachal Pradesh**.



- ✓ These birds **inhabit alpine meadows, wetlands, and river valleys at elevations** ranging from 8,000 to 15,000 feet above sea level. They **breed in marshy areas and nest on the ground**.
- **Migration:** Seasonal migration **between breeding and wintering grounds**, observed in regions like Ladakh and Arunachal Pradesh in India during winter.
- **Cultural Significance:** The people in **Sangti, Zemithang, and Chug are mostly Monpas, who follow Tibetan Buddhism, which considers the black-necked crane as an embodiment of the sixth Dalai Lama**. Thus, they revere the bird.
- **Feeding Habits:** Primarily **herbivorous, feeding on roots, tubers, grains, and insects in wetland habitats**, foraging in shallow water and marshes.
- **Threats:**
 - ✓ Loss of habitat is occurring due to development projects taking place on the wetlands.
 - ✓ 'Feral (domestic) dogs' cause damage to their eggs and chicks.
 - ✓ Increasing grazing pressure on the limited pastures near the wetlands.

MEASURES TO PROTECT THE BLACK-NECKED CRANE

- **Conservation Status**
 - ✓ IUCN status: **Near Threatened**
 - ✓ Listed in **Schedule I of the Wild Life (Protection) Act, 1972**.
 - ✓ Listed in **Appendix I of CITES** and the Convention on Conservation of Migratory Species (**CMS**).
- **Habitat Conservation:**
 - ✓ Important habitats designated as Protected Areas, e.g., **Changthang Sanctuary, Ladakh**.
 - ✓ **Tso Kar Wetlands Complex** designated as a Ramsar Site.
- **Policy Framework:**
 - ✓ **National Wildlife Action Plan (2017-2031)** includes specific chapters and actions for wildlife conservation.
 - ✓ Financial assistance provided to States/Union Territories under the '**Development of Wildlife Habitats**' scheme.
 - ✓ **Guidelines issued under Section 33** of the Wild Life (Protection) Act, 1972, for **management planning** of the Protected Area.

5.10. NITROGEN POLLUTION

Context

Recently, a report published by Nature Communications highlighted the increasing water scarcity worldwide due to a decline in water quality, particularly attributed to nitrogen pollution in rivers.

KEY FINDINGS OF THE STUDY

- The study introduces **the term "clean-water scarcity"** and examines both water quantity and quality.
- The study **considers global nitrogen pollution and numerous meteorological and socioeconomic scenarios**.
- Nitrogen pollution can **triple water scarcity in around 2000 sub-basins** (smaller units within a larger catchment area) **globally**.
- Water scarcity is expected to **affect 33% of global river subbasins by 2050**.
- **Water scarcity hotspots:** Nitrogen pollution **threatens sub-basins in South China, Central Europe, North America, and Africa**.
- **Impact on India:** Nitrogen contamination in rivers originates from diverse sources, such as human waste, agricultural activities, and fertiliser use.
 - ✓ In a concerning projection, sewage is anticipated to emerge as the primary contributor to nitrogen pollution in rivers, driven by rapid urbanization and insufficient wastewater treatment facilities.

NITROGEN POLLUTION

- It refers to the **high concentration of nitrogen compounds** in the environment.
- An excess of **some nitrogen compounds, such as nitrous**

- oxide and ammonia, results in nitrogen pollution from human activities** such as agriculture, industrial processes, and transportation.
- Each year, the environment loses 200 million tonnes of reactive nitrogen, which accounts for 80% of the total.
- It **absorbs into the rivers, soil, and lakes and is released into the atmosphere**.
- In some cases, nitrogen **contributes to ozone depletion and climate change**.

Nitrogen

- Nitrogen makes up 78% of the Earth's atmosphere. It makes the sky blue, makes up most of the air we breathe, and is found in all living things.
- Nitrogen fertilizers the croplands and it is an essential component of protein, which all living species require for growth.
- Nitrogen is the most common element in our atmosphere.
- Most organisms require pure nitrogen to be chemically linked with other elements, either naturally or artificially.

SOURCES OF NITROGEN POLLUTION

- **Agriculture:** The nitrogen and phosphorus in animal manure and chemical fertilizers are necessary to grow crops.
- **Stormwater:** Precipitation on hard surfaces, such as rooftops, sidewalks, and roadways, can carry pollutants like nitrogen and phosphorus into nearby waterways.

- **Wastewater:** Sewer and septic systems process enormous amounts of waste but may not always remove enough nitrogen and phosphorus before discharge into rivers.
- **Fossil fuels:** They are used for electricity, industry, transportation, and agriculture contributing to rising nitrogen levels in the atmosphere.
- **Around the house:** Fertilizers, yard and pet waste, and some soaps and detergents contain nitrogen and phosphorus, which can contribute to nutrient contamination if not used or disposed of properly.

IMPACTS OF NITROGEN POLLUTION

- **On Aquatic Ecosystem:** It leads to **toxic algal blooms and coastal dead zones** which pose a significant threat to biodiversity worldwide **such as in the Gulf of Mannar (India)**.
- **Contribution to Climate Change:** Release of **Nitrous oxide and ammonia emissions which can lead to the formation of nitrous oxide and fine particulate matter**. These GHGs can contribute to global warming and climate change.
- **On Health:** A rise in nitrate levels in water sources increases the **risk of methemoglobinemia in infants and cancer in adults**.

MEASURES TO CONTROL NITROGEN POLLUTION

- **At the National level:**
 - ✓ **Soil Health Card:** It provides farmers with **detailed insights into soil's nutritional status** and recommendations for optimal nutrient application for **reduction in nitrogen consumption in agriculture**.

- ✓ **Neem Coated Urea:** Made **mandatory to enhance the effectiveness of nitrogen use** in agriculture which allows plants more time to absorb it efficiently.

- **At the International level:**
- **Gothenburg Protocol (1999):** It is a **multi-pollutant protocol designed to reduce acidification, eutrophication, and ground-level ozone by setting emissions ceilings** for sulfur dioxide, nitrogen oxides, and ammonia.

Eutrophication

Definition: Eutrophication is the process where a water body becomes overly enriched with nutrients, particularly phosphorus and nitrogen, leading to excessive growth of algae and other aquatic plants.

Causes:

- Agricultural runoff containing fertilizers.
- Discharge of sewage and wastewater.
- Industrial effluents rich in nutrients.
- Atmospheric deposition of pollutants.

Effects:

- Excessive algae growth, leading to algal blooms.
- Depletion of oxygen levels due to decomposition of organic matter by bacteria, resulting in hypoxic or anoxic conditions.
- Decline in biodiversity as certain species outcompete others.
- Negative impacts on aquatic ecosystems, including fish kills and loss of habitat.
- Degradation of water quality, making it unsuitable for drinking, recreation, and supporting aquatic life.

5.11. EARTH SYSTEM MODEL

Context

India is developing a novel Earth system model aimed at enhancing climate forecast accuracy and monitoring the impacts of the climate crisis.

ABOUT EARTH SYSTEM MODEL

- It is open-source software that is developed by the Indian Institute of Tropical Meteorology and the Centre for Climate Change Research (CCCR).

OBJECTIVE

- To improve climate forecasts and predict climate impacts in India and globally.
- To provide reliable future projections of global and regional climate, including Indian monsoon rainfall.
- Integration of various components of the Earth system to estimate climate under different conditions.

KEY POINTS

- Expected completion by 2025.

- It is designed to integrate Earth system components interaction: atmosphere, ocean, land, ice, and biosphere.

MC4 Scheme Overview

Objectives

- Enhance observational database and climate models to understand monsoonal precipitation changes and their impacts in a warming environment.
- Improve predictive understanding of interactions among monsoon dynamics, clouds, aerosols, precipitation, and the water cycle in a changing climate.

Ministry / Department

- Ministry of Earth Sciences (MoES)

Target Audience

- Institutions and organizations engaged in Earth sciences domain.

- Based on numerical weather prediction and data assimilation.
- Will facilitate long-term climate studies.
- Will generate reliable future projections of global and regional climate, especially Indian monsoon rainfall.
- Incorporates components from the Climate Forecast System (CFS) by the National Center for Environmental Prediction (NCEP, USA).
- Aim to provide policy-relevant information based on robust scientific analysis and assessments.
- Recognizes the complexity of climate change impacts in the Indian subcontinent, including the influence of the Indian monsoon and geographical features like the Himalayas and the Indian Ocean.

FUNDING

- A total of ₹192.28 crores has been allocated for the development of the climate forecasting system under the Monsoon Convection, Clouds, and Climate Change (MC4) sub-scheme.

SIGNIFICANCE

- Enhances India's capability in climate modeling.
- Provides valuable data for impact assessment studies.
- Helps quantify uncertainties in regional climate projections.
- Complements global perspectives provided by Intergovernmental Panel on Climate Change (IPCC) reports with regional insights.

5.12. GUPTESHWAR FOREST AS A BIODIVERSITY HERITAGE SITE

Context

The Odisha government has designated the Gupteswar forest as its fourth Biodiversity Heritage Site (BHS).

ABOUT GUPTESWAR FOREST

- The 'Gupteswar Forest' (part of Eastern Ghats in southern Odisha) attracts naturalists, environmentalists, researchers, and tourists due to its rich biodiversity.
- The area is home to a variety of wildlife, including the mugger crocodile, sacred Grove Bush Frog, Kanger Valley Rock Gecko, and avifauna like Jerdon's baza, black baza, Malabar trogon, white-bellied woodpecker, common hill myna, and banded bay cuckoo.

Biodiversity Heritage Sites (BHS):

- Section 37 of the Biological Diversity Act (BDA) of 2002 recognizes BHS as a unique conservation technique.
 - ✓ Section 37 (1): The State Government may regularly notify Biodiversity Heritage Sites in the Official Gazette in collaboration with local bodies.
- These sites have high biodiversity, rare and threatened species, keystone species, natural importance, wild ancestors of domesticated/cultivated species, fossil beds, and cultural, ethical, or decorative values for maintaining cultural diversity.
- The creation of BHS does not impose restrictions on local practices except those voluntarily adopted by the communities

- ✓ The area also has **threatened medicinal plants like the**

Indian trumpet tree, Indian snakeroot, and wild crop relatives of ginger and turmeric.

- ✓ The limestone caves of Gupteswar are adorned with eight species of bats out of the total 16 species found in southern Odisha.
- ✓ Among them, two species *Hipposideros galeritus* and *Rhinolophus rouxii* are under the near-threatened category of the International Union for Conservation of Nature (IUCN).

CAVE SHRINE

- The **cave shrine of Gupteswar is on a lush green hill**, 58 km from Jeypore and 80 km away from Koraput, amidst deep forest. The **Cavernous interior of the temple enshrines a huge 'lingam' (Shiva-Linga God)**.
- The cave is a multi-chambered wonder, Gupteswar is also Popularly known as Gupta Kedra Shabari, a Rocky Stream of Great Scenic Beauty Flows by Gupteswar.
- It is believed that **Lord Rama when passed through this region on his way to Panchbati Dandaka-ranya**.
- Odisha now **boasts four Biodiversity Heritage Sites**, including **Mandasaru BHS in the Kandhamala district**, **Mahendragiri BHS in Gajapati district**, and **Gandhamardan BHS in Bargarh and Bolangir district**.

Biodiversity heritage sites in India

**Sacred Grove at Sural
Bhatori Monastery,**
Himachal Pradesh

High Altitude Meadow,
Himachal Pradesh

**Birch-pine Forest
Patch,** Himachal Pradesh

Naro Hills,
Madhya Pradesh

Amarkantak,
Madhya Pradesh

Patakot,
Madhya Pradesh

Landorkhori,
Maharashtra

Ganeshkhind Garden
Maharashtra

**Schistura
Hiranyakeshi,**
Maharashtra

**Bambarde
Myristica
Swamps**
Maharashtra

Purvatali Rai, Goa

University of
Agricultural Sciences,
GKVK Campus,
Bengaluru

**Nallur Tamarind
Grove,** Bengaluru

Hogrekan,
Chikmagalur

Ambaraguda,
Shimoga

Asramam,
Kerala

**Ghariyal Rehabilitation
Centre,** Uttar Pradesh

Dhotrey BHS,
West Bengal

Tonglu BHS,
West Bengal

**Baneswar
Shiva Dighi**
West Bengal

Khlaw Kur Syiem Kmielng,
Meghalaya

**Borjuli Wild
Rice Site,** Assam

**Hajong Tortoise
Lake,** Assam

Majuli,
Assam

Dialong Village,
Manipur

Unakoti,
Tripura

Chilkigarh Kanak Durga,
West Bengal

Mandasaru,
Odisha

**Mahendragiri hill
Biodiversity Heritage
Site,** Odisha

Glory of Allapalli,
Maharashtra

Ameenpur lake,
Telangana

**Arittapatti Biodiversity
Heritage Site,**
Tamil Nadu

**Baramura
waterfall,** Tripura

Silachari Caves,
Tripura

**Debbari or
Chabimura,** Tripura

Betlingshib,
Tripura

Source: nbaindia.org

5.13. UN WORLD RESTORATION FLAGSHIPS

Context

The UN Environment Programme (UNEP) and the Food and Agriculture Organization of the United Nations (FAO) established seven activities as UN World Restoration Flagships.

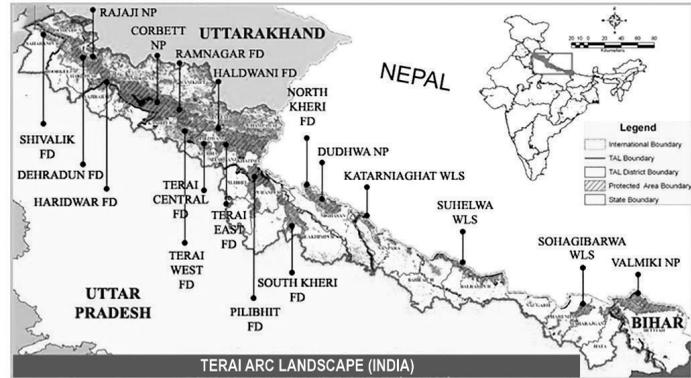
ABOUT PROGRAMME

- The United Nations named seven initiatives from across Africa, Latin America, the Mediterranean and Southeast Asia as the intergovernmental organisation’s World Restoration Flagships.
- **Objective:** Prevent, halt, and reverse ecosystem degradation across all continents and oceans to protect ecosystems affected by wildfires, drought, deforestation, and pollution.
- **Support:** The UN will provide technical and financial support for these efforts.

THE SEVEN INITIATIVES ARE

- **The Restoring Mediterranean Forests Initiative:** It involves Lebanon, Morocco, Tunisia, and Turkey.
 - ✓ Since 2017, almost 2 million hectares of woods have been restored, with the goal of reaching over 8 million by 2030.
- **The Living Indus initiative:** It was approved by Pakistan’s parliament following the 2022 climate change-induced floods.
 - ✓ It was officially launched at the 27th Conference of Parties to the United Nations Framework Convention on Climate Change in Sharm el-Sheikh.
 - ✓ The aim is to restore twenty-five million hectares of the Indus River basin by 2030.
- **The Action Andina Social Movement:** It was led by the non-profit Andean Ecosystems Association (ECOAN), and aims to protect and restore one million hectares of Andean forests.
 - ✓ These tropical and subtropical forests grow along the slopes of South America’s Andes mountains.
- **The Sri Lanka Mangrove Regeneration Initiative:** It is a science-driven initiative led by local people.
 - ✓ It focuses on restoring the ecosystem’s natural balance and aims to restore 10,000 hectares of mangroves by 2030.

- ✓ Since beginning in 2015, efforts have resulted in 500 hectares of restored mangroves, according to a UN statement.



- **The Terai Arc Landscape (TAL):** The TAL spans 810 km from the Yamuna in the west to the Bhagmati river in Nepal in the east.
 - ✓ It aims to restore forests in critical corridors through collaboration with local communities, including citizen scientists, anti-poaching units, and forest guards.
 - ✓ It comprises the Shivalik hills, bhabhar regions, and Terai floodplains that span over India (Uttarakhand, Uttar Pradesh, Bihar) and Nepal’s low-lying hills. Plans to rehabilitate 350,000 hectares of woods by 2030.
- **Regreening African agriculture:** It will improve the carbon storage, crop and grass yields, soil resilience (prevents flooding), and provides natural fertilizer through fixed nitrogen.
- **The Growing Forests in Africa’s Drylands:** This Initiative aims to increase restoration efforts from 41,000 to 229,000 hectares by 2030. African farmers grow tens of millions of trees annually.

5.14. PINTAILS AND PLOVERS

Context

Recently, numerous northern pintails and plovers were found dead in Pulicat Wetland.

ABOUT NORTHERN PINTAIL

- It is a species of migratory duck known for its long, slender neck, and pointed tail.
- **Description**
 - ✓ Nickname: “The greyhound of the skies.”
 - ✓ Medium-sized duck with a distinctive long, narrow tail.
- The male has a chocolate-brown head with a white stripe extending from the throat down the neck, while the rest of the body is gray.
 - ✓ The female is mottled brown overall, with a more subdued coloration compared to the male.
- **Habitat**

- ✓ Breeds in northern regions of North America, Europe, and Asia.
- ✓ During migration, they can be found in a variety of wetland habitats, including marshes, ponds, lakes, and coastal areas.

MIGRATION

- ✓ Northern pintails undertake long-distance migrations, with some populations traveling thousands of miles between breeding and wintering grounds.
- ✓ Wintering grounds include parts of North America, Central America, northern South America, Europe, Africa, and Asia (India).

Pulicat Lake

- **Location:** Pulicat Lake is situated on the border of Andhra Pradesh and Tamil Nadu states in India.
- **Size:** It is the second largest brackish water lake/lagoon in India, with over 96% of its area located in Andhra Pradesh.
- **Geography:** Separated from the Bay of Bengal by Sriharikota island, home to the Satish Dhawan Space Centre.
- **Hydrology:** Fed by the Arani River at its southern tip, the Kalangi River from the northwest, and smaller streams. The Buckingham Canal runs along its western side.
- **Ecological Significance:** Encompasses the Pulicat Lake Bird Sanctuary, renowned for its diverse bird species, including migratory birds like flamingos and pelicans.
- **Conservation Status:** Designated as a Ramsar site.
- **Threats:** Faces challenges such as pollution, encroachment, and siltation, necessitating conservation efforts.

BEHAVIOR

- ✓ Often found in mixed flocks with other duck species during migration and wintering.
- ✓ Feeds primarily by dabbling for plant matter, seeds, and small invertebrates in shallow water.
- ✓ During the breeding season, nests are built on the ground near water, typically concealed among vegetation.

CONSERVATION

- ✓ IUCN Status: Least Concern.
- ✓ Threats include habitat loss, degradation, and hunting, but populations remain relatively stable overall.

CULTURAL SIGNIFICANCE

- ✓ Northern pintails are popular among birdwatchers and hunters for their striking appearance and challenging behavior.
- ✓ Considered a symbol of wetland conservation efforts due to their reliance on healthy wetland habitats.

ABOUT PLOVERS BIRDS

• Characteristics

- ✓ Plovers are aquatic birds known for their wading behavior (in which an animal walks while partially submerged in water). They inhabit various regions globally, excluding Antarctica. Belonging to the subfamily Charadriinae, they are primarily waterfowl.

• Migration

- ✓ Northern nesting plovers are migratory, undertaking seasonal journeys. Often seen traveling and foraging in groups or flocks during migration.

5.15. PUBLIC ACCOUNTS COMMITTEE ON PLASTIC WASTE POLLUTION

Context

A parliamentary panel expressed disappointment at the casual approach of the CPCB in dealing with plastic waste. It has recommended a comprehensive policy to address plastic pollution effectively.

CONCERNS HIGHLIGHTED BY THE PAC

- **Inadequate Efforts:** There is insufficient commitment to disposing of plastic waste appropriately, leading to the pollution of air, water, and soil, adversely affecting public health.
- **Surge in Plastic Waste:** The quantity of plastic waste in India has seen a substantial increase, escalating from 16 lakh to 41 lakh tons annually between 2015 and 2021.
- **Ineffective Implementation:** Despite the ministry's imposition of a ban on plastic carry bags with a thickness of less than 120 microns since December 31, 2022, there has been a lack of effective implementation.
- **Lax Oversight:** The Central Pollution Control Board and State Pollution Control Boards have not been stringent enough in regulating plastic factories, allowing them to operate without proper permits.
- **Data Deficiency:** Accurate data on plastic waste generation and recycling is lacking, hindering comprehensive efforts to address the plastic pollution crisis.
- **Issues in Collection and Disposal of Single-Use Plastic:**

Challenges persist in the collection, sorting, and proper disposal of single-use plastic, exacerbating the difficulties in managing plastic waste.

KEY RECOMMENDATION OF PAC TO MITIGATE PLASTIC POLLUTION

- **Online Reporting for Plastic Waste Generation:** Encouraging individuals to participate in online reporting, documenting their plastic waste production with images and location details, to monitor plastic pollution at the community level.
- **Enforcement of Cleaner and Greener Practices in Cities:** Imposition of penalties for cities lacking efficient mechanisms for plastic waste management, promoting the adoption of cleaner and greener solutions to address environmental concerns.
- **International Collaboration for Best Practices Exchange:** Fostering international cooperation by exchanging best practices with other countries to develop and implement effective strategies to combat plastic pollution on a global scale.

IMPACT OF PLASTIC POLLUTION ON OUR ECOSYSTEMS AND WILDLIFE

- **Threat to Animal Life:** Plastic poses threat to animals both on land and in the ocean, as ingestion or entanglement can lead to severe harm or death.
- **Disruption of Aquatic Food Chains:** Microplastics pose a significant threat to marine life by disrupting aquatic food chains.
- **Chemical Hazards:** The chemicals in plastic can harm animals and the environment when released, contributing to ecological damage.
- **Human Health Concerns:** Minute plastic particles can contaminate the food we consume, posing potential health risks to humans.
- **Ecological Disturbance:** Improperly disposed plastic waste can spoil the ground, making it challenging for plants and animals to thrive in affected areas.
- **River Blockage and Flooding:** Plastic waste in water bodies can obstruct rivers and exacerbate flooding issues, amplifying the environmental consequences of plastic pollution.

INITIATIVES TAKEN TO TACKLE PLASTIC POLLUTION

- **Swachh Bharat Mission:** The Swachh Bharat Abhiyan also addresses the issue of plastic waste through awareness campaigns and waste management initiatives.
- **Plastic Waste Management Rules, 2016:** India has implemented comprehensive rules for managing plastic waste, along with extended producer responsibility.
- **Global Alliance for Incinerator Alternatives (GAIA):** GAIA promotes alternatives to incineration and landfills and encourages sustainable plastic management.
- **The Ocean Cleanup Project:** To develop advanced technologies to remove plastic debris from the oceans, aiming to reduce the impact of plastic on marine ecosystems.
- **Plastic Pollution Coalition:** This global organization brings together individuals and organizations to raise awareness about plastic pollution, encouraging collaborative efforts to reduce plastic usage and promote a plastic-free world.
- **Single-Use Plastics Ban:** Several nations, including India, have implemented or proposed bans on single-use plastics to curb their widespread use and environmental impact.
- **Circular Economy Initiatives:** Circular economy models, emphasizing the importance of recycling, reusing, and

reducing plastic consumption to create a more sustainable and environmentally friendly system.

Extended Producer Responsibility (EPR)

- **Definition:** Producer's responsibility for environmentally sound product management throughout its lifecycle.
- **EPR Certificates:** Surplus certificates can be traded, establishing a market for plastic waste management.
- **Centralized Online Portal:** Set up by the Central Pollution Control Board (CPCB) for registration and annual returns by producers, importers, brand-owners, and waste processors.

Targets:

- **EPR Target:** Increased to 70% in 2022-23 and reached 100% from 2023-24 onwards.

WAY FORWARD FOR ADDRESSING PLASTIC POLLUTION

- **Comprehensive Policy Implementation:** Develop and implement a comprehensive policy focusing on efficient waste management, recycling, and sustainable alternatives.
- **Ban on Hard-to-Recycle Plastics:** to curb their production and usage.
- **Promotion of Eco-Friendly Alternatives:** Actively promote and incentivize the use of eco-friendly alternatives to plastic, encouraging industries and consumers to adopt sustainable materials that have a reduced environmental impact.
- **Strengthening CPCB's Role:** Enhance the role of the Central Pollution Control Board (CPCB) by providing additional resources, training, and authority to ensure a proactive and effective approach to plastic waste management.
- **Public Awareness Campaigns:** Public awareness campaigns to educate citizens about the adverse effects of plastic pollution and foster a sense of collective responsibility.
- **Periodic Review and Adaptation:** Periodically review and strategies, regular assessments will ensure the continued effectiveness of initiatives against plastic pollution.
- Addressing plastic pollution is paramount for preserving ecosystems, safeguarding wildlife, and protecting human health. Mitigating its impact ensures sustainable environments, cleaner oceans, and a healthier planet for current and future generations.

5.16. GROW PORTAL

Context

The **NITI Aayog** recently unveiled the 'Growing and Restoration of Wasteland with Agro-forestry (GROW) portal, aiming to strengthen the efforts in **environmental conservation and sustainable land use**.

ABOUT GROW

- It is a **multi-institutional effort led by NITI Aayog** which utilises remote sensing and GIS to assess agro-forestry sustainability across all districts.
- **Objective:** To transform **India's wastelands into productive agroforestry zones**.
- **Promotion of Agroforestry:** There is a need for the promotion of agroforestry especially for **reducing the import of wood and wood products and carbon sequestration** to combat climate change and addressing sub-optimal use of arable land.

KEY HIGHLIGHTS

- An **Agroforestry Sustainability Index (ASI)** was developed for national level prioritization of greening and restoration projects.
- The **GROW-Sustainability Mapping portal BHUVAN** allows universal access to state and district-level data. The GROW initiative aligns with national commitments, aiming to **restore 26 hectares of degraded land by 2030** and to create an additional carbon sink of 2.5 to 3 billion tonnes of carbon dioxide equivalent.
- It underscores the potential benefits of **converting underutilized areas, especially wastelands for agroforestry**.

CONCERNS RAISED

- ✓ India, ranked as the seventh-largest country globally, grapples with challenges such as expanding urban areas, land degradation, and unequal resource distribution.
- ✓ Roughly 16.96% of India's Total Geographical Area (TGA) consists of wastelands, necessitating their conversion into productive assets.

MEASURES TAKEN

- **Union Budget 2022-23** prioritized agroforestry and private forestry which is India's commitment to enhancing productivity, profitability, and sustainability.

- **Integrated Wasteland Development Programme (IWDP):** To develop wastelands mainly in non-forest areas by involving local people at every stage of development.
- **Wasteland Reclamation:** To restore wasteland, revive biodiversity, improve the lives of affected communities, and enhance ecological and economic value.
- Some states such as **Andhra Pradesh and Maharashtra** have high scope for using wasteland due to their large wasteland area.
- Efforts align with various global commitments such as the **Paris Agreement, Bonn Challenge, UN Sustainable Development Goals, UNCCD, and Green India Mission**, among others.



GEOGRAPHY AND DISASTER MANAGEMENT

6.1. EASTERN RAJASTHAN CANAL PROJECT (ERCP)

Context

Recently, a memorandum of understanding (MoU) was signed between the Union government, Madhya Pradesh, and Rajasthan governments for the ambitious Eastern Rajasthan Canal Project (ERCP).

ABOUT EASTERN RAJASTHAN CANAL PROJECT (ERCP)

- It was designed for intra-basin water transfer within the Chambal basin.
- It aims to utilize surplus monsoon water from the Kalisindh, Parvati, Mej, and Chakan sub-basins, diverting to water-deficient sub-basins like Banas, Gambhiri, Banganga, and Parbati.
- According to Ministry of Jal Shakti, the link project aims to provide drinking and industrial water to 13 districts (Alwar, Bharatpur, Dholpur, Karauli, Sawai-Madhopur, Dausa, Jaipur, Ajmer, Tonk, Bundi, Kota, Baran, and Jhalawar) in eastern Rajasthan and the Malwa and Chambal regions of Madhya Pradesh.
- Additionally, the project is expected to facilitate irrigation in an area of around 2.8 lakh hectares in each state.
- It implements the Modified Parbati-Kalisindh-Chambal-ERCP (Modified PKC-ERCP) Link Project.
- It is designed under the centre's National Linking of River Project (NLRP).

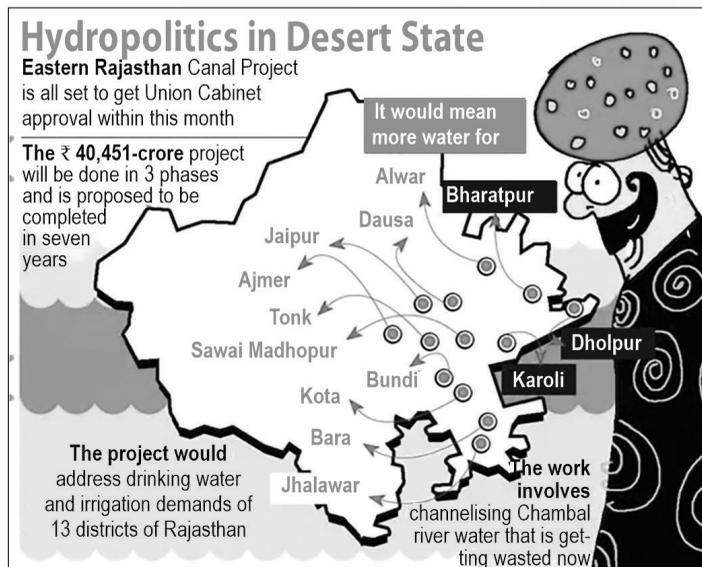
- The preliminary feasibility report for the Kalisindh-Chambal link canal project was prepared and distributed to the concerned states in September 1991.
- The report suggests diverting water from the Newaj River (a tributary of Kalisindh) and Kalisindh itself to the Chambal River, proposing potential diversion points at either the Rana Pratap Sagar dam/the Gandhi Sagar dam.

National River Linking Project (NLRP) (under Ministry of Jal Shakti)

- It is an ambitious initiative aiming to interlink 14 Himalayan and 16 peninsular rivers through an extensive network of 30 canals that will result in the creation of a South Asian Water Grid.
- Historical Context:
 - ✓ The Concept of river interlinking in India dates back to 1858, originating from the vision of British irrigation engineer Sir Arthur Thomas Cotton.

Components of NLRP:

- Himalayan Component:
 - ✓ Aims to construct storage reservoirs on the Ganga and Brahmaputra rivers and their tributaries in India and Nepal.
 - ✓ Proposes the connection of the Ganga and Brahmaputra basins to the Mahanadi basin and links the Eastern tributaries of the Ganga with the Sabarmati and Chamba river systems.
- Peninsular Component:
 - ✓ Proposes linking the Mahanadi and Godavari to feed the Krishna, Pennar, Cauvery, and Vaigai rivers, among other connections.



ABOUT THE PARBATI-KALISINDH-CHAMBAL (PKC) RIVER LINK PROJECT

- The project was devised in 1980 by the former Union Ministry of Irrigation (now Department of Water Resources) and the Central Water Commission.

BENEFITS OF RIVER INTERLINKING

- **Hydrological Balance:** Addresses India's hydrological imbalance by transferring water from flood-prone regions to drought-prone areas, mitigating the impact of erratic rainfall patterns.
- **Irrigation Benefits:** Potential to irrigate water-scarce regions, fostering employment, boosting crop outputs, and advancing India's progress towards food security.
- **Power Generation:** Potential to generate hydroelectric power, reducing reliance on coal-based plants and contributing to India's climate goals under the Glasgow Climate Pact and the Paris Agreement.

- **Water Supply:** Can Provide clean drinking water, addressing issues of drinking water scarcity in India.
- **Industrial Water Usage:** Offers water for industrial use, supporting economic activities and industrial growth.
- **Environmental Conservation:** Supports fisheries and wildlife survival, particularly during water-scarce periods, and reduces forest fires associated with climatic conditions.

CHALLENGES OF RIVER INTERLINKING

- **Climate Change Impact:** Melting glaciers due to climate change may reduce surplus water availability in rivers, questioning the long-term sustainability of interlinking projects.
- **Human Cost:** Loss of livelihood and displacement, particularly affecting poor and tribal communities, necessitates careful consideration of rehabilitation efforts and addressing social concerns.
- **Financial Burden:** High capital requirements present a significant financial challenge and may not yield a favorable cost-benefit ratio.
- **Ecological and Biodiversity Impact:** Mixing waters from

diverse rivers may disrupt local ecosystems and biodiversity.

- **Political Hurdles:** Implementation relies on inter-state cooperation; earlier rejection of ECRP by Madhya Pradesh highlights the political challenges associated with the River Linking Project.

WAY FORWARD

- **Groundwater Management:** Emphasize improving and managing the groundwater system, including identifying and protecting recharge mechanisms, enhancing recharge where possible, and regulating groundwater use at the aquifer level.
- **Promote the Concept of virtual water:** Advocate for virtual water, encouraging practices where countries import certain water-intensive goods instead of producing them domestically and saving local water for other purposes.
- **National Waterways Project (NWP):** Consider alternatives like the National Waterways Project (NWP) as opposed to the River Linking Project. The NWP acts as a water grid, requiring less land, offering year-round navigation, and involving zero pumping.

6.2. ATMOSPHERIC RIVER

Context

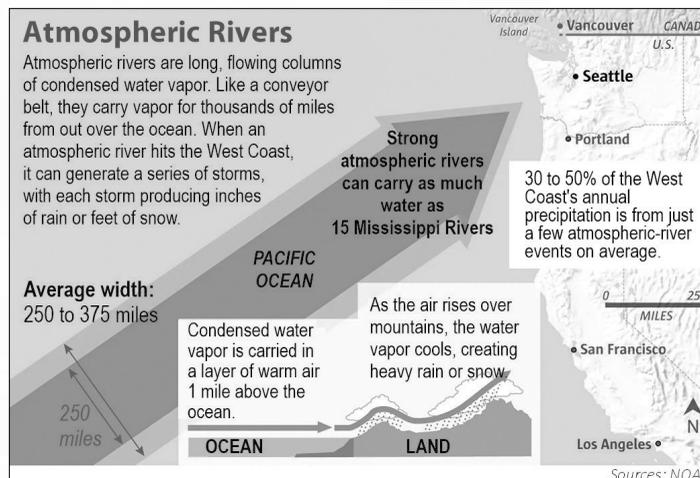
Recently, an atmospheric river storm headed toward southern California unleashed life-threatening floods and landslides in the region.

ABOUT ATMOSPHERIC RIVER

- Atmospheric rivers are relatively long, narrow regions in the atmosphere that transport most of the water vapour **outside of the tropics to higher latitudes.**
- **It accounts for almost 90 per cent of the global moisture movement from the tropics towards the poles, establishing them as the foremost conveyors of freshwater on Earth.**
- **Atmospheric rivers form predominantly in the tropics or subtropics, where warm ocean surfaces evaporate significant amounts of water into the atmosphere.**
- Simultaneously, the Earth may experience ten or more atmospheric rivers, showcasing the widespread influence of these phenomena across the globe.
- Among the notable atmospheric rivers, the most significant is the Pineapple Express, renowned for transporting moisture from the tropical Pacific, encircling Hawaii, and delivering it to the West Coasts of the United States and Canada.

SOME FEATURES OF THE ATMOSPHERIC RIVER

- These atmospheric rivers are 250 to 375 miles in width and can extend over a thousand miles in length.
- They occur more frequently on the East Coast than on the West Coast, aligning with the increased prevalence of extratropical cyclones.



- On average, an atmospheric river transports a volume of water vapour approximately equivalent to the average water flow at the Mississippi River's mouth, the second-longest river in North America.
- As atmospheric rivers encounter obstacles like mountains or interact with local atmospheric conditions, they are forced to rise.
- During this ascent, the moisture they carry undergoes cooling and condensation, potentially leading to heavy rainfall or snowfall.

- When atmospheric rivers move over land, they induce conditions similar to hurricanes, featuring intense and rapid rainfall, cyclone-force winds, and increased wave heights.
 - ✓ While these rivers play a crucial role as a significant source of rainfall, they also pose hazards, contributing to flash flooding, mudslides, and landslides that can lead to loss of life and property destruction.

EFFECT OF GLOBAL WARMING ON ATMOSPHERIC RIVERS

- Global warming leads to increased ocean temperatures, resulting in higher rates of evaporation and moisture content in the atmosphere.

- ✓ This increased moisture can intensify atmospheric rivers, amplifying their strength and precipitation potential.
- Warmer atmospheric temperatures allow the air to hold more moisture. It can lead to an increase in extreme weather events, such as storms or cyclones.

CONCLUSION

- In summary, while vital for precipitation, atmospheric rivers carry benefits and risks, emphasising the importance of understanding and managing their impacts on the environment and society.

6.3. LA NINA'S INFLUENCE ON AIR QUALITY

Context

A recent study by researchers at the Indian Institute of Tropical Meteorology (Pune) and the National Institute of Advanced Studies (Bengaluru) has suggested a correlation between air pollution influenced by El Niño and La Niña events in India.

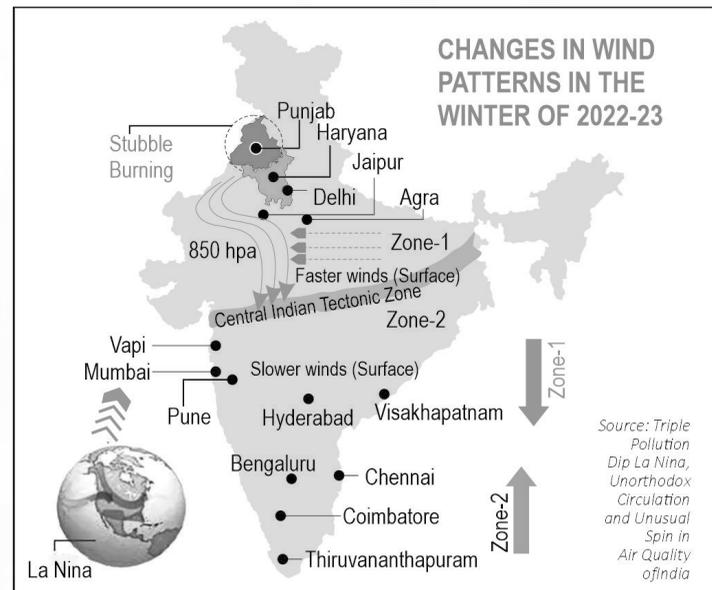
KEY FINDINGS OF THE STUDY

- The study found that **Delhi air was cleaner than usual, and Mumbai air was dirtier than usual in the winter of 2022** could be explained by the record-breaking **La Niña event in the Pacific Ocean**, which persisted for the third consecutive year.
- The study found that:
 - ✓ Among the north Indian cities, **Ghaziabad registered the most significant improvement with a reduction of 33%**, followed by Rohtak (30%) and Noida (28%). **Delhi showed an improvement of around 10%**.
 - ✓ On the contrary, **Mumbai recorded the highest deterioration with a 30% increase in PM_{2.5} levels**, followed by other peninsular Indian cities like **Coimbatore (28%), Bengaluru (20%), Chennai (12%), etc.**
- The study revealed a **significant alteration in wind circulation patterns during the winter of 2022**. Normally, winds blowing from the northwest direction were diverted southwards due to the prolonged La Niña effect.
- This deviation in wind patterns **resulted in a redirection of pollutant-laden winds from regions like Punjab and Haryana away from Delhi**. Instead, they impacted cities in southern regions such as Mumbai, Bengaluru, and Chennai.
- La Niña affects meteorological conditions such as wind patterns and temperatures, influencing the distribution of air pollutants.
- Climate change could exacerbate the strength and frequency of La Niña events, potentially amplifying their impact on air quality in Indian cities.

IMPLICATIONS AND RECOMMENDATIONS

- Climate change scenarios may heighten **La Niña's influence on air quality, posing challenges for pollution control efforts**.
- **Long-term strategies** to reduce emissions at their source

are crucial for addressing air pollution effectively.



- **Short-term solutions**, such as artificial rain or odd-even schemes, are deemed ineffective in tackling the underlying issue of high baseline emissions.
- Government focus should remain on sustainable measures to curb emissions rather than relying on temporary fixes, ensuring both improved air quality and climate resilience.

UNDERSTANDING EL NIÑO AND LA NIÑA:

- ✓ El Niño and La Niña are **two phases of the El Niño-Southern Oscillation (ENSO) cycle**, a naturally occurring climate phenomenon. ENSO involves the interaction between the ocean and atmosphere in the equatorial Pacific Ocean, influencing global weather patterns.

- **El Nino**

- ✓ It is a **climate phenomenon characterized by the abnormal warming of sea surface temperatures in the central and eastern Pacific Ocean, along the equator.**

- **Causes**

- ✓ It events typically occur irregularly every 2 to 7 years and are triggered by the weakening or reversal of trade winds in the Pacific Ocean.
- ✓ This weakening allows warm surface waters to migrate eastward, suppressing the normal upwelling of cold, nutrient-rich waters along the South American coast.

- **La Nina**

- ✓ It is the opposite phase of El Niño, characterized by cooler-than-average sea surface temperatures in the central and eastern Pacific Ocean.
- ✓ **Causes:** It occur when trade winds intensify, pushing warm surface waters westward and allowing cold, nutrient-rich waters to upwell along the South American coast.

IMPACT ON INDIA

- **Monsoon Patterns:** El Nino events tend to weaken the Indian monsoon, leading to below-average rainfall and drought conditions in some parts of the country.
 - ✓ Conversely, La Nina events can strengthen the monsoon, resulting in above-average rainfall and sometimes causing floods in certain regions.
- **Temperature Patterns:** El Nino events can lead to

warmer-than-average temperatures in India, exacerbating heatwaves and drought conditions.

- ✓ La Nina events, on the other hand, may bring cooler temperatures, mitigating the intensity of heatwaves.
- **Agricultural Production:** The impact of El Nino and La Nina on monsoon patterns directly affects agricultural production in India.
 - ✓ Below-average rainfall during El Nino events can lead to crop failures and food shortages, while above-average rainfall during La Nina events can boost crop yields but also increase the risk of flooding and waterlogging.
- **Water Resources:** Water availability and management are significantly influenced by El Nino and La Nina events. Drought conditions during El Nino events can strain water resources, affecting drinking water supply, irrigation, and hydropower generation.
 - ✓ Conversely, above-average rainfall during La Nina events can replenish reservoirs but also increase the risk of floods and landslides.
- **Health and Socio-Economic Impacts:** El Nino and La Nina events can impact public health and socio-economic well-being in India.
 - ✓ Droughts, food shortages, and water scarcity during El Nino events can lead to malnutrition, displacement, and economic losses.
 - ✓ Conversely, floods and waterborne diseases during La Nina events can pose health risks and disrupt livelihoods.

6.4. MARINE HEATWAVE

Context

A study in Nature Communications found that the Arctic Ocean has experienced unusual Marine Heatwaves (MHWs) events since 2007, linked to greenhouse gases and rapid sea ice melting.

KEY HIGHLIGHTS OF THE STUDY

- The Arctic Sea has seen a reduction in perennial sea ice cover since the mid-1990s, with more uniformed sea ice promoting faster melting and increased solar **radiation absorption**.
- A worrying trend has emerged in the Arctic Ocean, with marine heatwaves occurring for six consecutive years from 2015 through 2021.
- Since 2007, 11 marine heatwaves have occurred in the Arctic Ocean, with the average temperature rising 2.2 degrees Celsius above the seasonal average.
- The summer of 2007 marked the beginning of a shift towards a new era of marine heatwaves over the shallow marginal seas of the Arctic Ocean.

IMPACT

- These MHWs events, which are defined as long periods of

abnormally warm sea-surface temperatures, coincide with major ice decreases in the Arctic Sea.

- Marginal Seas like Kara, Laptev, East Siberian, and Chukchi are most affected by MHW events.
- These marginal seas are predominately covered by first-year ice, floating ice of no more than a year's growth developing from young ice.
 - ✓ First-year ice: It refers to sea ice that formed during the current freezing season and has not survived a melting season.

MARINE HEAT WAVE (MHW)

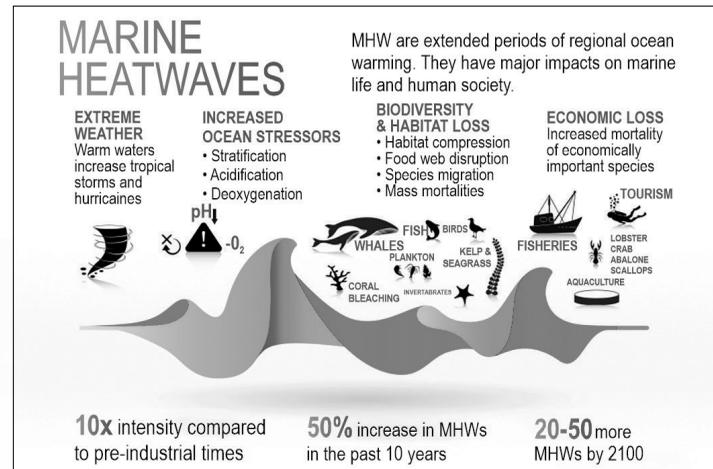
- It is a period of abnormally high ocean temperatures relative to the average seasonal temperature in a particular marine region
- It occurs when the **surface temperature of the particular region of the sea rises to 3 to 4 degrees Celsius above the average temperature for at least five days.**

CAUSES OF MARINE HEATWAVE

- **Global warming:** Greenhouse gases (GHGs) are a significant factor in causing moderate marine heatwaves (MHWs), with a high probability of contributing to events exceeding 1.5°C.
 - ✓ **For example:** The temperature reached 21.1 degrees Celsius, breaking the previous record of 21 degrees Celsius in 2016.
- **Ocean Currents:** The most frequent cause of marine heat waves is ocean currents, which can warm the ocean surface through warming via the atmosphere or by collecting warm water regions and air-sea heat transfer.
 - ✓ **For example:** warm ocean currents create the conditions that spawn tropical cyclones and hurricanes.
- **Winds:** Normally, sunlight heats the surface of the water by penetrating the atmosphere. The warmer water does not mix with the colder water below when there are light winds.
- **Climate Change:** Marine heatwaves can also be brought on by broad climate impacts like the El Niño Southern Oscillation (ENSO).
 - ✓ **For example:** For example, the “El Niño” phenomenon appears to enhance the emergence of marine heatwaves in the central and eastern regions of the Pacific Ocean.

Steps taken to tackle Marine Heat Wave

- The Ministry of Earth Sciences recommends to new generation of autonomous floats (Argo floats) that will measure the real-time temperature and salinity in full ocean volume.
- Developing networks, such as the Marine Heatwave International Group, will allow experts to implement research programmes globally.



WAY FORWARD

- **Nature-based solutions:** To meet the targets set by the Paris Agreement, governments must invest in nature-based solutions in addition to rapidly decreasing fossil fuel emissions. The IUCN Global Standard for Nature-based Solutions should be used throughout the project’s planning and implementation.
- **International Cooperation:** To exchange information, statistics, and best practices for MHW prevention on a worldwide basis, and promote international cooperation and networks like the Marine Heatwave International Group.
- **Adaptation:** National and sub-national governments should develop and implement strategies to safeguard communities and strengthen regional ocean resilience.



7.1. DEEP-TECH TECHNOLOGY

Context

In the Interim Budget 2024-25, the Finance Minister (FM) proposed a new scheme for strengthening deep-tech technologies for defence purposes and expediting 'Atmanirbharta'.

KEY HIGHLIGHTS OF CONTEXT

- The FM announced a Rs 1 lakh crore fund to provide long-term, cost-effective, or interest-free loans dedicated to research and development initiatives.
- A new scheme will also be introduced to enhance deep-tech capabilities in the defence sector, which later on may be extended to promote deep-tech startups across all sectors.

ABOUT DEEP TECH AND ITS IMPORTANCE

- Deep tech refers to advanced and groundbreaking technologies that have the potential to bring about significant and transformative changes and provide solutions for the future.
- The term encompasses cutting-edge research in various fields such as nanotechnology, biotechnology, material sciences, quantum technologies, semiconductors, artificial intelligence, data sciences, robotics, 3D printing, etc.
- These technologies are expected to play a crucial role in addressing complex global challenges like climate change, hunger, epidemics, energy access, mobility, infrastructure, and cybersecurity.
- Advanced capabilities in deep tech are also likely to enhance productivity, drive economic growth and create jobs in coming years, and offer competitive advantage to countries with strong foundations in different areas of deep tech.

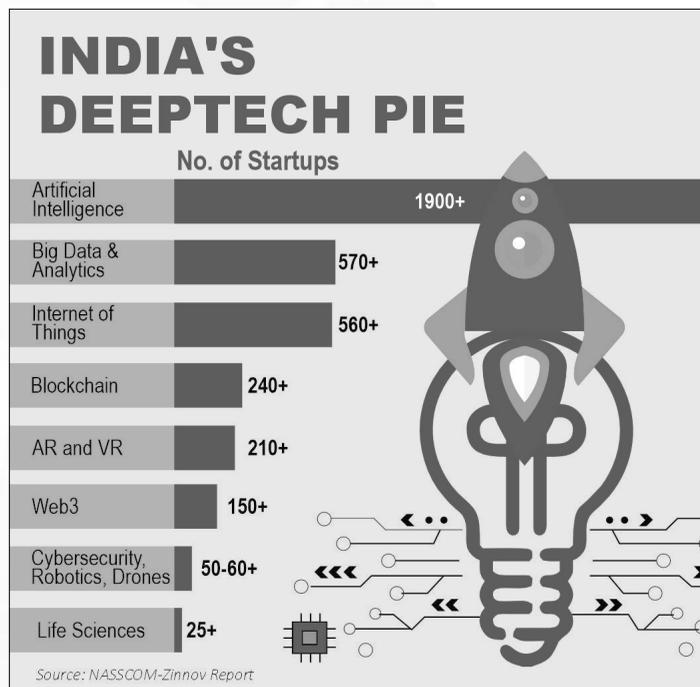
CURRENT STATUS OF DEEP TECH IN INDIA

- India stands as the world's 3rd largest Startup ecosystem, boasting over 3000 deep tech enterprises spearheading technological breakthroughs in Artificial Intelligence (AI), Machine Learning (ML), Big Data analytics, Internet of Things (IoT), Quantum Computing, and more.
 - ✓ Bengaluru accounts for 25-30% of India's deep-tech startups, followed by Delhi-NCR (15-20%) and Mumbai (10-12%)
- The Deep Tech startup ecosystem in India has experienced a robust growth rate, exceeding 40% Compound Annual Growth Rate (CAGR) in the last four years. The count of startups utilizing deep tech has surged by 3.5 times since 2017.

ADVANTAGES OF DEEP TECH IN INDIA

- **Innovation Catalyst:** Deep tech, encompassing AI, ML, and IoT, empowers Indian businesses to lead in innovation,

enabling the development of groundbreaking products in sectors like healthcare, manufacturing, and finance.



- ✓ **Precision Agriculture:** AI and sensors in precision farming maximize yields, reduce waste, and adapt to climate change in agriculture.
- ✓ **Cleaner Energy Grid:** AI optimization of renewable sources like solar and wind reduces dependence on fossil fuels, creating a cleaner energy grid.
- ✓ **Healthcare Transformation:** AI-powered diagnostics, genomics for personalized medicine, and telemedicine revolutionize healthcare delivery.
- **Economic Growth and Jobs:** Deep tech contributes significantly to economic growth, positioning India as a global hub for innovation and creating high-skilled jobs.
- **Boost Global Competitiveness:** The adoption of technologies like blockchain, IoT, and quantum computing positions Indian companies competitively on the global stage. Skill development in these areas allows Indian professionals to contribute to global projects, enhancing the nation's reputation in the tech industry.

- **Enhanced Decision-Making:** Deep tech in India, utilizing AI and ML, provides advanced analytics for improved decision-making. Real-time data processing and analysis offer crucial insights, enhancing operational efficiencies and enabling swift responses to market trends.
- **Competitive Advantage:** Utilizing advanced technologies like AI and ML enables businesses to optimize processes, automate tasks, and reduce operational costs. Cost savings can be reinvested in research, development, and improving customer experiences, positioning businesses as leaders in their sectors.
- **Environmental Impact:** Deep tech optimizes renewable energy sources, monitors pollution levels, and develops solutions for environmental issues, contributing to sustainability.

National Deep Tech Startup Policy (NDTSP)



It aims to **harness the transformative potential of technological advancements** across various sectors, thereby enhancing India's capabilities and global competitiveness significantly.

It aims to **stimulate innovation, spur economic growth, and promote societal development** by leveraging research-based deep-tech inventions.

Four Pillars of NDTSP:

- 01 Ensuring the Security of India's Economic Future
- 02 Facilitating a Seamless Transition to a Knowledge-Driven Economy
- 03 Bolstering National Capability and Sovereignty through the Atmanirbhar Bharat Imperative
- 04 Fostering Ethical Innovation

CHALLENGES OF DEEP TECH IN INDIA

- **Lack of Adequate Funding:** India's R&D spending as a percentage of GDP (0.65%) is far below the global average (1.8%) and competitor nations.
- **NDTSP Implementation Concerns:** Effective implementation and impact of the NDTSP remains uncertain.
- **Capital Intensive:** Deep tech projects often require substantial upfront costs and long development cycles, making them unattractive to traditional investors.

- **Talent and Expertise:** Deep tech projects demand specialized knowledge in advanced scientific and engineering domains. Attracting and retaining skilled talent is difficult, especially in competitive markets or amid a shortage of qualified professionals.
- **Regulatory and Legal Hurdles:** Deep tech innovations may face regulatory challenges as novel technologies may not be adequately covered by existing regulations.
- **Technology Adoption and Market Acceptance:** Introducing disruptive solutions may face resistance, requiring efforts to educate users and demonstrate benefits. Achieving widespread adoption and market acceptance is a slow and challenging process.
- **Intellectual Property Protection:** Ensuring strong IP protection is complex and expensive, particularly when dealing with international patent laws.
- **Limited Private Partnerships:** Insufficient collaboration between industry, research institutions, and government hinders progress.

INITIATIVES TAKEN BY THE GOVERNMENT TO SUPPORT DEEP TECH

- **Digital India innovation:** The Ministry of Electronics and Information Technology (MeitY) has initiated thematic funds in the Budget of 2022-23 to promote sunrise sectors, including deep tech startups.
- **Digital payments and financial services firm Paytm had entered into an agreement with the IT ministry's startup hub to scale deep-tech startups.**
- **National Association of Software and Services Companies (NASSCOM):** It has unveiled Deep Tech Club (DTC) 2.0, marking the second edition of its DeepTech Mentoring program. This initiative aims to foster and champion Indian DeepTech products that offer solutions to global challenges.
- **National Quantum Mission (NQM):** It aims to seed, nurture and scale up scientific and industrial R&D and create a vibrant & innovative ecosystem in Quantum Technology (QT)
- **National Research Foundation:** It aims to strengthen the governance structure of research-related institutions and will improve linkages between R&D, academia, and industry.
- **AIM PRIME (Atal Innovation Mission - Program for Researchers in Innovation, Market Readiness and Entrepreneurship) program:** It is aimed at promoting early-stage science-based, deep technology ideas to market through training and guidance over a period of 12 months using a blended learning curriculum.
- **Prime Minister's Science, Technology, and Innovation Advisory Council (PM-STIAC):** Their focus includes enhancing future preparedness, formulating and coordinating S&T

missions, fostering an enabling ecosystem for techno-entrepreneurship, driving innovation and technology, developing innovation clusters, and facilitating effective public-private linkages, among other responsibilities.

WAY FORWARD

- Strategic implementation of the National Deep Tech Startup Policy (NDTSP) to address challenges like funding, intellectual property, regulations, and talent acquisition.
- Increasing government spending on research and development (R&D) to reach 2% of GDP will provide substantial support for innovation and technological advancements.
- Strengthening public-private partnerships is vital,

encouraging private sector investment and fostering collaboration for sustained growth. Building stronger connections between public institutions, private enterprises, and startups facilitates collaborative innovation, propelling the industry forward.

- Lastly, a significant focus on talent development is necessary, nurturing skilled professionals through targeted investments in educational programs.

CONCLUSION

- Deep tech offers significant opportunities for India, but addressing challenges and effectively implementing supportive policies are key to success.

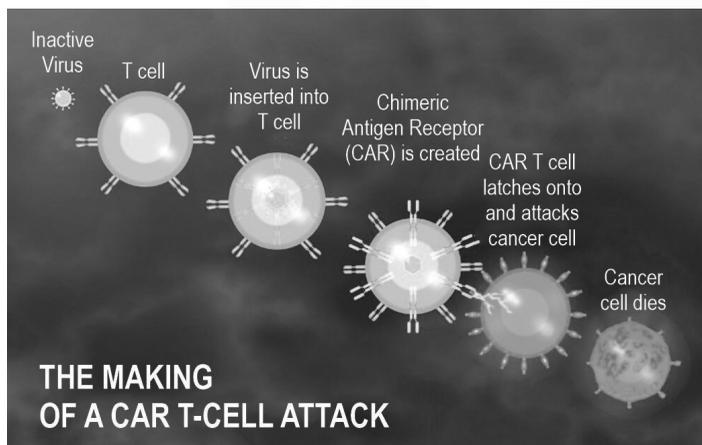
7.2. INDIA'S CAR T-CELL THERAPY

Context

Recently, Central Drugs Standard Control Organisation (CDSCO) approved the commercial use of CAR-T cell therapy, marking a significant milestone in cancer treatment.

ABOUT CAR T-CELL THERAPY

- CAR T-cell therapy, or Chimeric Antigen Receptor T-cell therapy, is a **type of immunotherapy used in the treatment of certain cancers.**
- ✓ **NOTE: T cells, also known as T lymphocytes, are a type of white blood cell or immune cell that play a central role in the immune response.**
- It involves a highly personalized approach **where a patient's T cells are extracted from their body.** These T cells are then **genetically modified in a laboratory to express a chimeric antigen receptor (CAR)** on their surface.



- The CAR is designed **to recognize specific proteins on the surface of cancer cells.** Once the T cells have been engineered to express the CAR, they are **multiplied in the laboratory to create a large population of these modified cells.**
- Finally, the expanded and modified T cells are infused back into the patient.

- **The goal of CAR T-cell therapy is to enhance the patient's immune system to effectively target and destroy cancer cells.**

SIGNIFICANCE

- **Precision Treatment:** CAR-T cell therapy is highly personalized and ensures precision which minimizes damage to healthy cells and reduces side effects compared to traditional treatments like chemotherapy.
- **Potential for Lifelong Immune Memory:** There is the potential for CAR-T cells to create a sort of immune memory, helping the body recognize and fight cancer if it attempts to return.
- **Reduced Relapse Rates:** Early indications suggest lower rates of cancer relapse, particularly for patients in the early stages of the disease.
- **Ongoing Research and Development:** The introduction of CAR-T cell therapy has spurred increased interest and investment in immunotherapy research. Ongoing advancements in this field may lead to further improvements and applications in the future.

CHALLENGES

- **Cost Barriers:** CAR-T cell therapy can be expensive, limiting accessibility for many patients.
- **Limited Applicability:** Currently, CAR-T cell therapy is most effective for certain blood cancers, restricting its use for other types of cancer.
- **Unknown Long-Term Effects:** The therapy may have side effects, and its long-term impact is still under study.
- **Complex Process:** The process of genetically modifying T cells is intricate, requiring specialized facilities and expertise.

WAY FORWARD

- **Research and Development:** Invest in research to broaden the range of cancers treatable with CAR-T cell therapy.
- **Training:** Provide training for healthcare professionals in the administration and management of CAR-T cell therapy.
- **Collaboration:** Encourage international collaboration for

knowledge exchange and resource sharing to make this therapy more accessible and affordable.

- **Regulatory Support:** Create supportive policies that facilitate the integration of CAR-T cell therapy into standard cancer treatment protocols.

7.3. LAW COMMISSION REPORT SUGGESTS A PLAN TO TACKLE EPIDEMICS

Context

The 286th Law Commission Report highlights 'significant deficiencies' issues in managing epidemics, emphasizing the outdated Epidemic Diseases Act, of 1897 (EDA).

MORE ABOUT THE NEWS

- The COVID-19 pandemic prompted a detailed examination to address deficiencies in the legal framework for future epidemics.
- A panel led by Justice Ritu Raj Awasthi submitted a report that calls for a comprehensive overhaul of existing epidemic laws.

KEY HIGHLIGHTS OF THE REPORT

Limitations of the existing EDA

- The EDA, being a century-old law, lacks effectiveness in dealing with modern infectious disease challenges such as Ebola, Zika, COVID-19, etc.
- During COVID-19, immediate response was invoked under the Disaster Management Act, of 2005.
- Amendments were made to the Epidemic Diseases Act in 2020, but critical gaps remained related to the distribution of functions, authority, penalties, etc.
- The report points out potential abuse of the colonial-era legislation such as centralization of power at the Union Government, etc.

Proposal for Change

- The Law Commission recommends the creation of an Epidemic Plan and Standard Operating Procedure (SOP).
- **Epidemic Plan:**
 - ✓ Central government responsibility, in collaboration with states, ministries, health institutions, experts, and stakeholders.
 - ✓ Must be prepared, enforced, and revised regularly.
 - ✓ Inclusive provisions on quarantine, isolation, lockdowns, disease surveillance, medical supplies, information dissemination, testing, research, and waste disposal.
- **SOP Implementation**
 - ✓ Aims to prevent conflicts between states and the Central government.
 - ✓ Defines three stages of infectious disease spread and corresponding responses.

The law commission made a clear demarcation of functions and authority between the Centre, State, and local authorities. It divided the functions and authorities into 3 stages:



1st Stage

Outbreaks in the State:

- States empowered to take measures aligned with the Epidemic Plan.
- Local authorities can implement preventive measures at a micro-level.

2nd Stage

Inter-State Spread:

- The central government frames regulations based on the Epidemic Plan.
- States follow these regulations for a coordinated response.

3rd Stage

Extreme Threat:

- Central government intervenes if states can't contain the infection, ensuring uniform measures and addressing conflicting guidelines.

Penalty Enhancement

- The existing penalty provisions as not stringent enough. There is a proposal for enhanced penalties to act as a more effective deterrent.
 - ✓ Under the Bharatiya Nyaya Sanhita, 2023 (erstwhile Indian Penal Code), the punishment has been enhanced to a jail term that may extend to one year or a fine of ₹5,000 (up from IPC Section 188's jail term of up to six months and a fine of ₹1,000)

Recommendations

- Strengthen legal foundations to ensure a more effective, coordinated, and adaptable response to future epidemics in India.
- There is a need for a broad framework and concerted approach for utilizing resources of both public and private sectors.
- Clearly define powers and obligations at different levels of government.
- Uphold the fundamental rights of citizens while implementing preventive and control measures.

WAY FORWARD

- In conclusion, the Law Commission's report underscores the imperative for a comprehensive overhaul of epidemic laws.
- The commission recommended an Epidemic Plan, SOP, clear demarcation of powers, and enhanced penalties for a more robust, coordinated, and rights-respecting response to future health crises.

7.4. MQ-9B DRONE

Context

Recently, the US Congress formally notified the possible sale of 31 MQ-9B high-altitude long-endurance armed Unmanned Aerial Vehicles (UAV) to India.

ABOUT MQ-9B UAV

- The MQ-9B Predator drone is a variant of the MQ-9 "Reaper" developed by **General Atomics Aeronautical Systems (GA-ASI)**, with its primary purpose being for the United States Air Force (USAF).
- The MQ-9B drone has two variants - **Sky Guardian** and **Sea Guardian**. The latter has been in operation by the Indian Navy since 2020.

FEATURES OF THE MQ-9B SEA GUARDIAN

- These drones are categorised as high-altitude, long-endurance UAVs, designed for extended flight durations at altitudes exceeding 40,000 feet. With a maximum endurance of 40 hours, they provide a reliable platform for prolonged surveillance.
- It is armed with strike missiles, allowing it to engage and eliminate enemy targets with high precision.
 - ✓ This feature enhances its effectiveness in various roles, including land and maritime surveillance, anti-submarine warfare, anti-surface warfare, electronic warfare, and expeditionary missions.
- It is capable of automatic take-offs and landings, providing operational flexibility.
- It can safely integrate into civil airspace, enabling joint forces and civil authorities to obtain real-time situational awareness in the maritime domain, day or night. The drone's impressive carrying capacity of up to 5,670 kg and a fuel capacity of 2,721 kg also enhances its operational capabilities.

POTENTIAL

- MQ-9B can provide roughly 80% of the capability of a large human-flown maritime patrol aircraft at about 20% of its cost per hour, making it a more economical choice for navies.



MQ-9B
Predator Drones

Max Gross Takeoff Weight: **5,670 kg**
Fuel Capacity: **2,721 kg**
Payload Capacity: **2,177 kg across 9 hardpoints (8 wing, 1 centerline)**

Crew:
Two pilots in ground control stations

Weapons
Laser guided missiles
Anti-tank missiles
Anti-ship missiles

Missions

- Humanitarian Assistance/Disaster Relief
- Search and Rescue
- Law Enforcement
- Border Enforcement
- Defensive Counter Air
- Airborne Early Warning

Missions

- Electronic Warfare
- Anti-Surface Warfare
- Anti-Submarine Warfare
- Airborne Mine Counter Measures
- Long-Range Strategic ISR
- Over-the-Horizon Targeting

- The MQ-9B will significantly improve the Indian armed forces' intelligence, surveillance, and reconnaissance (ISR) capabilities.
- It will also work in tandem with the US-origin P-8I long-range maritime patrol aircraft, significantly increasing the Indian Navy's surveillance over the Indian Ocean Region.
- All members of the Quad group - US, India, Australia, and Japan - have used MQ-9B Sea Guardian drones at some point of time.

7.5. EXERCISE VAYU SHAKTI-24

Context

The Indian Air Force (IAF) conducted Exercise Vayu Shakti-24 at the Pokhran Air to Ground Range, near Jaisalmer in Rajasthan.

ABOUT EXERCISE VAYU SHAKTI-24

- The theme of Exercise 2024 is 'lightning strike from the sky'.
- Fighter aircraft of the Indian Air Force including the Rafale, Su-30 MKI, MiG-29, Mirage-2000, Tejas and Hawk attacked and destroyed simulated enemy targets on the ground and in the air with deadly precision.



- **Fighter Jets at Vayu Shakti:** All frontline aircraft, including Rafale, Su-30MKIs, LCA Tejas, Mirage 2000 MiG-29s and Prachand attack choppers, will take part in Exercise Vayu Shakti.
- It is the first of the three major exercises that the IAF will undertake this year; the other two being Ex Gagan Shakti in April and Ex Tarang Shakti by the middle of this year.

ABOUT GAGAN SHAKTI

- It, **conducted once in five years**, is also expected to see the Su-30s and the other maritime role fighter aircraft squadrons flying in close coordination with the naval assets including the P-8I maritime surveillance aircraft and MiG-29K fighters.
- The exercise demonstrated the Air Force's agility by swiftly shifting deployed assets from the western sector to the eastern front in less than 48 hours.
- It aimed to evaluate IAF's preparedness and endurance for a potential two-front war scenario with China and Pakistan.

BACKGROUND

- It is a triennial exercise, conducted once every three years. It is aimed at showcasing the capability of the IAF to conduct full spectrum operations (Day and Night). The last edition of Vayu Shakti was held in February 2019.

OBJECTIVE

- Exercise Vayu Shakti will showcase the compelling display of IAF's offensive and defensive prowess, seamlessly operating both day and night.

ABOUT TARANG SHAKTI

- India will host the largest multi-nation air exercise on Indian soil.
- Expected to involve 12 global air forces, the focus is on improving interoperability, sharing best practices, and enhancing military cooperation among participating countries.
- Participants include fighter jets, transport aircraft, helicopters, mid-air refuelers, AWACS aircraft, and unmanned systems.

7.6. NEURALINK BRAIN IMPLANT

Context

As per Neuralink (computer-brain interface company), the first human has recently received a brain chip implant.

ABOUT NEURALINK BRAIN IMPLANT

- Its objective revolves around bridging the gap between the nervous system and computers, with a focus on addressing brain disorders, mitigating brain injuries, and various other applications.
- The primary goal is to empower individuals to control computer cursors or keyboards solely through their thoughts, enabling seamless interaction with technology.
- The initial beneficiaries of this technology are expected to be individuals who have lost the use of their limbs.

FUNCTIONING OF THE BRAIN CHIP

- **Procedure of Implantation:** The brain chip undergoes placement within the motor cortex of the brain through a minimally invasive surgical procedure, facilitated by robotic assistance.
 - ✓ Comprising thin, flexible threads or wires embedded with electrodes, the chip targets specific brain regions to capture neural activity.
- **Data Collection:** The implanted electrodes detect electrical signals generated by active neurons, converting this brain activity into digital data.

Neuralink

- It is a brain-chip startup founded by Elon Musk in 2016, with the primary goal of developing advanced Brain-Machine Interface (BMI) Technologies.
- Neuralink's device, approximately the size of a coin, is surgically implanted into the skull. It includes ultra-thin wires that extend into the brain, establishing a Brain-Computer Interface (BCI).
- The implanted disk is designed to register and interpret brain activity. It captures neural signals, providing a means to understand and analyze the thoughts and commands generated by the brain.
- Neuralink received clearance from the U.S. Food and Drug Administration (FDA) last year to conduct its first trial involving human participants.

✓ Subsequently, the chip processes the gathered information, discerning patterns and translating them into actionable commands.

- **Communication Protocol:** Following data processing, the chip wirelessly transmits the interpreted information to an external device, such as a computer or smartphone, utilizing a low-power transmitter.

ABOUT NEURONS

- Neurons, or nerve cells, serve as the fundamental and smallest units of the nervous system.
- These cells form intricate neural circuits, communicating rapidly through a combination of electrical impulses and chemical signals, facilitating the transmission of information throughout the body.

7.7. InTranSE PROGRAM

Context

During the launch event of "Digital India Future LABS Summit 2024" held at IIT- Delhi, three Indigenous Technologies designed and developed by CDAC Thiruvananthapuram under InTranSE Program.

MORE ON THE NEWS

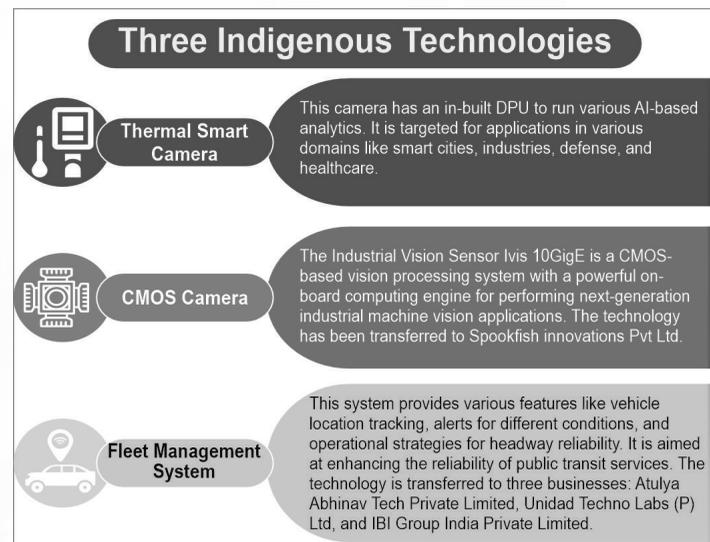
- **Indigenous Technologies Developed by CDAC:** Thermal camera, CMOS camera and Fleet Management System.
- These technologies were designed and developed under the InTranSE Program of the Ministry of Electronics and Information Technology (MeitY) were transferred to 12 Industries.
- It is step towards Innovation, Science and Technology theme of Vikshit Bharat @2047 of Prime Minister Initiative.

ABOUT InTranSE PROGRAM

- **Intelligent Transportation Systems Endeavour (InTranSE)** is organized by MeitY and C-DAC in collaboration with IIT-Madras, IIT-Bombay & IISc-Bangalore.

OBJECTIVE

- To facilitate a common platform for leading scientists, researchers, industrialists, system integrators, user agencies to explore emerging technologies and trends in Intelligent Transportation Systems suitable for Indian conditions.
- It also showcases indigenously developed technologies under InTranSE program.



SIGNIFICANCE

- ✓ It aims to enhance traffic efficiency by mitigating traffic issues, optimizing infrastructure utilization, providing users with advanced traffic information, reducing travel time, and elevating the safety and comfort of commuters.

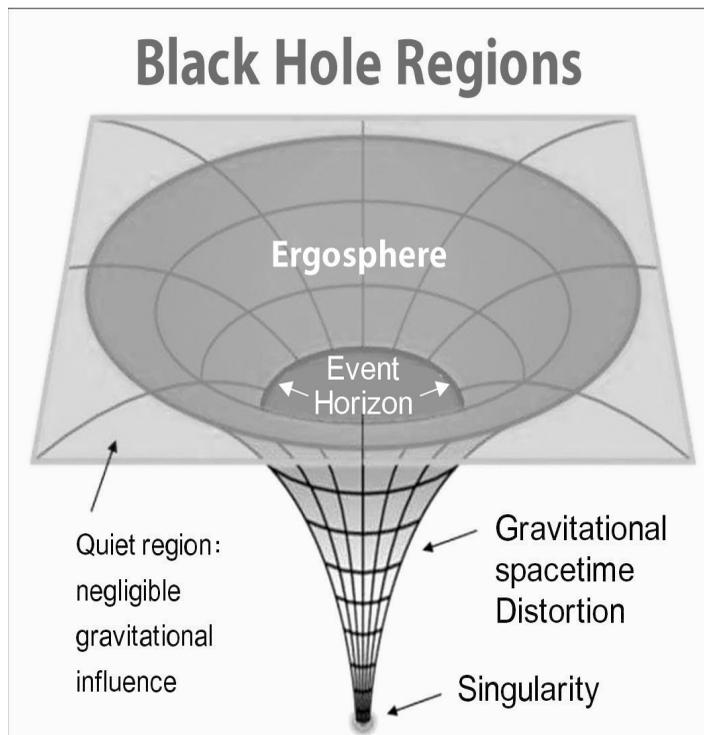
7.8. ROTATING BLACK HOLE

Context

Recently, scientists theorize that the rotating black holes have a unique feature i.e., a region outside their event horizon called the ergosphere.

ABOUT ROTATING BLACK HOLE

- It is also known as a Kerr black hole.
- Named after the mathematician Roy Kerr, in 1963, was the first to solve Einstein's field equations for such **Rotating Uncharged Black Holes**.



CHARACTERISTIC FEATURES

- It possesses only mass and angular momentum, lacking electrical charge.
- It rotates about a central axis, and its defining feature is its angular momentum.
- It lacks electrical charge, which is the third possible property of a black hole.

ABOUT ERGOSPHERE

- Rotating black holes (Kerr black holes) have a unique feature: a region outside their outer event horizon called the ergosphere.
- The label 'ergosphere' comes from 'ergon', the Greek word for 'work'. It is so named because it is possible to extract matter and energy from the ergosphere, but not from beyond the event horizon.
- Some scientists have suggested using this possibility to send an object into the ergosphere and allow it to accelerate there along the black hole's direction of rotation, so that it comes out moving faster.

Black Hole

- It is formed when a really massive star runs out of fuel to fuse, blows up, leaving its core to implode under its weight to form a black hole.
- The centre of a black hole is a gravitational singularity, a point where the general theory of relativity breaks down, i.e. where its predictions don't apply. A black hole's great gravitational pull emerges as if from the singularity.
- **Event horizon** describes a sphere around the singularity: when anything enters this sphere, it can't escape unless it travels faster than light (which is impossible).
- Unlike non-rotating black holes (Schwarzschild), which also have an ergosphere, Kerr black holes exhibit a larger and more elongated ergosphere due to their rotation.
- It is a region that extends beyond the event horizon, allowing matter and light to enter, which potentially escape the gravitational pull of the black hole.
- It has sufficient velocity, comparable to the speed of light.
- Within this region, spacetime itself is dragged along with the rotation of the black hole.
- The ergosphere is its potential for energy extraction through the Penrose process viz. a method for extracting energy and angular momentum from the ergosphere of a rotating black hole.

7.9. INDIA'S FIRST HYPERVELOCITY EXPANSION TUNNEL TEST FACILITY

Context

The Indian Institute of Technology Kanpur (IIT-K) has recently developed and tested India's first Hypervelocity Expansion Tunnel Test Facility.

ABOUT INDIA'S FIRST HYPERVELOCITY TEST FACILITY

- The facility, named **S2** or '**Jigarthanda**', is a **24-meter-long facility located at IIT Kanpur's Hypersonic Experimental Aerodynamics Laboratory (HEAL)** within the Department of Aerospace Engineering, IIT-Kanpur.
- It is an **expansion tunnel in an aerodynamic testing facility** that is capable of generating high-energy test conditions with **negligible or no ionization for achieving the goal of**

high speeds for an aircraft.

• Design and Development

- ✓ **Indigenous Development:** Designed and developed over **three years** by the **Department of Science and Technology (DST)** and **IIT Kanpur**.
- ✓ **Funding:** Supported by the **Fund for Improvement in S&T Infrastructure (FIST)** and the **Aeronautical Research and Development Board (ARDB)** of DST.

- **Speed Range and Capabilities**

- ✓ Capable of **generating flight speeds between 3-10 km/s.**
- ✓ **Simulates hypersonic conditions during atmospheric and asteroid entry, scramjet flights, and ballistic missiles.**

- **Significance**

- ✓ **For ISRO and DRDO:** Critical asset for the Indian Space Research Organisation (ISRO) and the Defence Research and Development Organisation (DRDO).

- ✓ **Testing Ground:** Facilitates testing for ongoing missions like Gaganyaan, Reusable Launch Vehicles (RLV), and hypersonic cruise missiles.
- ✓ **Global Standing:** Places India among a select few countries with advanced hypersonic testing capabilities.
- ✓ **Capacity Boost:** Major enhancement for India's space and defence sectors, fostering the development of advanced hypersonic technologies.

7.10. HIGH-ALTITUDE PSEUDO SATELLITE (HAPS)

Context

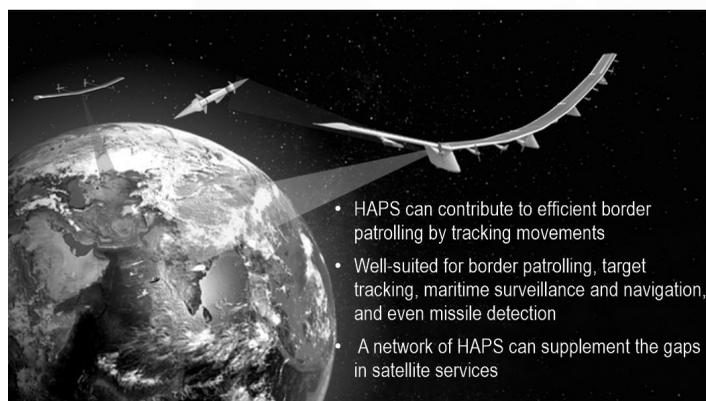
Recently, The National Aerospace Laboratories (NAL), Bengaluru, completed the first test of a solar-powered 'High-Altitude Pseudo Satellite'(HAPS).

ABOUT HIGH-ALTITUDE PSEUDO SATELLITE (HAPS)

- HAPS a new age unmanned aerial vehicle (UAV) that can hold a fixed position.
- It can fly at an altitude of 18-20 km from the ground- almost double the heights attained by commercial airplanes.
- It can generate solar power, so it can remain in the air for months, even years, offering it advantages of a satellite.
- Significantly cost-effective compared to traditional satellites, as it doesn't require a rocket launch.

NEED OF HAPS

- The development of high-endurance, high-altitude flying instruments arose from the desire to have **continuous surveillance of border areas to detect changes or movements, particularly in the wake of the Doklam standoff in 2017.**



- **Benefit over battery-powered UAVs and satellites:** Battery-powered UAVs can remain in the air for a limited period and can scan relatively smaller areas.
 - ✓ Satellites placed in low-earth orbits and meant to observe the Earth usually move in their orbits and are not watching constantly.

POTENTIAL BENEFITS OF HAPS

- **Search and rescue missions:** It travels closer to the earth

than a satellite but can loiter (wait) more readily in a local area than other aircraft. This means that they are excellent tools for observation, including search and rescue missions.

- **Disaster relief:** These vehicles can offer live situation reports and even replace failed communication networks, making them ideal for disaster relief.
 - ✓ These vehicles offer potential advantages as they can provide services with minimal ground network infrastructure, which is ideal when a disaster is unfolding or expected to occur.
- **Environmental monitoring:** These vehicles can fill in the gaps for environmental monitoring with a continuous flow of data with low latency. They can cover a vast area, scanning, detecting, and tracking concerns.
- **Agriculture:** These vehicles work much like drones for agriculture, allowing monitoring and management. They again offer real-time information with reliable imagery and low latency, ensuring crops are as productive as possible.
- **Maritime monitoring:** These vehicles are vital for surveillance, including maritime monitoring. They can be used for pollution monitoring, vessel detection, and search and rescue missions.
- **Military intelligence:** These vehicles can do much for the military beyond search and rescue and maritime monitoring applications. They can collect a lot of data, which along with their wide range and high altitude, can allow for military surveillance and reconnaissance.

INDIA AND HAPS

- ✓ HAPS is a still-developing technology, and the successful test flight puts India among a very small group of countries currently experimenting with this technology.
- ✓ A **Bengaluru-based New Space Research and Technologies, a deep-tech start-up, flew a similar solar-powered UAV, having developed the technology through the Innovation of Defence Excellence initiative of the Defence Ministry.**

SOME COUNTRIES THAT ARE INVOLVED IN DEVELOPING HAPS

- ✓ NASA has been using solar-powered engines for its Pathfinder series of aircraft.

- ✓ China, South Korea, and the UK are some of the other countries where this development is taking place. Some private companies are also developing HAPS, even in India.

7.11. LYMPHATIC FILARIASIS

Context

Recently, the Ministry of Health & Family Welfare launched a nationwide Mass Drug Administration (MDA) campaign to Eliminate Lymphatic Filariasis (LF).

ABOUT LYMPHATIC FILARIASIS

- It is a human disease **caused by parasitic worms known as filarial worms**.
- The worms can live for approximately 6–8 years and, during their lifetime, produce millions of microfilariae (immature larvae) that circulate in the blood.
- Infection occurs when lymphatic parasites **are transmitted via mosquitoes**. This can **infect the lymphatic system and lead to the abnormal enlargement of body parts**, causing pain, and severe disability.

LYMPHATIC FILARIASIS

DISEASE

Infection: Filarial parasites spread by mosquitoes

Disease: Impairs function of lymphatic vessels

Normal vessels | Dilated vessels

856 Million people AT RISK

ELIMINATION

Large-scale treatment of all at-risk populations can stop spread of infection

Vector control can supplement impact of large-scale treatment

Morbidity management & disability prevention to alleviate suffering due to disease

- 6.7 billion treatments delivered (2000-2016)
- 499 million people no longer require treatment
- Prevented or cured more than 97 million cases
- US\$ 100 billion averted lifetime economic loss

Lymphatic Filariasis eliminated as a public health problem in 10 countries

- **Causes:** It is caused by microscopic, thread-like worms. There are three types of these thread-like filarial worms:
 - ✓ **Wuchereria bancrofti**, which is responsible for 90% of the cases.
 - ✓ **Brugia malayi**, which causes most of the remainder of the cases.
 - ✓ **Brugia timori**, which also causes the disease.
- It is considered **globally as a neglected tropical disease (NTD)**.
- It is a leading cause of permanent disability worldwide.
- **Affected area:** It affects the lymph nodes and lymph vessels.

- **Symptoms:** Fever; Testicular and/or genital pain; Skin removal; Limb or genital swelling.

DISEASE INCIDENCE IN INDIA

- **In India, LF is prevalent in 11 endemic states:** Assam, Bihar, Uttar Pradesh, Jharkhand, Odisha, Chhattisgarh, Karnataka, Kerala, Madhya Pradesh, West Bengal, and Gujarat.

Nationwide Mass Drug Administration (MDA) Campaign

- It involves giving treatment to an entire population or every person in a geographical area.
- This initiative plays an important role in the control and eradication of neglected tropical diseases (NTDs).
- India is committed to eliminating Lymphatic Filariasis by 2027, three years ahead of the global target.

TREATMENT

- Mass drug administration (MDA) is the most cost-effective approach to treating LF and preventing its transmission.
- **WHO recommends a triple therapy combination of ivermectin (I), diethylcarbamazine (D), and albendazole (A) for MDA against LF.**

ENHANCED STRATEGIES FOR ELIMINATION OF LYMPHATIC FILARIASIS

- MDA Fashion Mission**
MDA Campaign twice a year synchronized with NDD (10th Feb and 10th August)
- Morbidity Management and Disability Prevention (MMDP)**
• Early diagnosis and treatment
• Engagement of medical colleges for strengthening MMDP services
- Vector Control (Surveillance & Management)**
Integrated Vector Control with multi sectoral coordinated efforts
- High-Level Advocacy**
For inter sectoral convergence with allied departments and ministries such as Ministry of water and sanitation, Ministry of Panchayati Raj, Ministry of HRD, Ministry of Urban and Rural Development
- Innovative Approaches**
Leveraging existing digital platforms for LF and explore alternate diagnostics

- Multiple rounds of MDA, covering over 65 percent of the population in LF-endemic areas, are necessary for success.

INDIA'S INITIATIVES

- **The Union Minister of Health and Family Welfare has introduced an advanced five-pronged strategy aimed at eradicating Lymphatic Filariasis by 2027.**

✓ One of the important strategies is 'Mission Mode India MDA Campaign' National Deworming Day (NDD) celebrated twice a year on 10 February and 10 August.

- **Collaborative approach:** Through Jan Bhagidaari (public participation) and a comprehensive "Whole of Government and Whole of Society" approach.

INTERNATIONAL INITIATIVES

- The **Global Programme to Eliminate Lymphatic Filariasis (GPELF) (by WHO)**

✓ To eradicate lymphatic filariasis through post-mass drug administration (MDA) surveillance across all endemic countries.

✓ Its ultimate goal is to reduce the population requiring MDA to zero, aiming to halt the spread of infection and provide necessary care to those affected.

- The **WHO's Road Map 2021–2030 outlines global targets and milestones for preventing, controlling, eliminating, or eradicating 20 diseases**, including lymphatic filariasis.

7.12. KYASANUR FOREST DISEASE (KFD)

Context

Karnataka 's Department of Health & Family Welfare recently conducted around 2500 tests to check the prevalence of Kyasanur Forest Disease.

ABOUT KYASANUR FOREST DISEASE (KFD)

- It is caused by the Kyasanur Forest disease virus (KFDV), a member of the Flaviviridae virus family.

TRANSMISSION



It primarily occurs via the forest tick *Haemaphysalis spinigera*.

No established person-to-person transmission.



Large animals like goats, cows, and sheep may get infected but play a limited role in disease transmission.

No evidence of transmission through unpasteurized milk.

- First observed in 1956 in the Kyasanur Forest area of Sorab Taluk, Shivamogga district, and is named after the region.
- It is commonly known as **monkey fever** because monkeys also get infected. The death of a monkey is considered a warning sign of a potential KFD outbreak.
- **Case-Fatality Rate:** Estimated case-fatality rate ranges from 3% to 5%.
- **Symptoms**

✓ Symptoms appear three to eight days after an infective tick bite, including fever, red eyes, severe headache, and body pain.

✓ Three-four days after the onset of initial symptoms, the patient may have severe muscle pain, vomiting, gastrointestinal issues, and bleeding problems.

✓ Biphasic illness for some, with a second wave of symptoms in the third week, including neurological manifestations.

- **Diagnosis:** Diagnosis can be made in the early stage of illness by molecular detection by PCR or virus isolation from blood. Later, serologic testing using enzyme-linked immunosorbent serologic assay (ELISA) can be performed.

- **Geographical Distribution:** Predominantly in southern India, including Karnataka, Kerala, Tamil Nadu, and Maharashtra.

- **Seasonality:** Peaks during the dry season (November to June) due to heightened human-tick interactions.

• Treatment

✓ No specific treatment, but early hospitalization and supportive therapy are crucial.

✓ Supportive therapy includes hydration maintenance and precautions for patients with bleeding disorders.

• Measures to avoid infection

✓ Forest department distributing DEPA oil, a tick repellent, to families entering the forest.

✓ DEPA oil to be applied to exposed skin for protection against ticks.

✓ State Government providing free treatment to KFD patients.

INTERNAL SECURITY

8.1. CHINA'S BORDER DEFENCE VILLAGES ALONG THE LAC

Context

Recently, Chinese people have started living in 'Xiaokang' border defence villages along China border with India's Northeastern region.

MORE ON THE NEWS

- Since 2019, China has been constructing villages along the **Line of Actual Control (LAC)**. However, these villages remained vacant until recently.
- In the past few months, residents have begun occupying some of these villages located along the LAC, specifically across from the **Lohit Valley and the Tawang sector in Arunachal Pradesh**.

Line of Actual Control (LAC)

- It serves as the boundary that separates territory controlled by India from that controlled by China.
- India recognizes the LAC as approximately 3,488 km in length, while China's perspective is that it is only around 2,000 km.
- The LAC is categorized into three sectors: the eastern sector covering Arunachal Pradesh and Sikkim, the middle sector situated in Uttarakhand and Himachal Pradesh, and the western sector located in Ladakh.

ABOUT XIAOKANG BORDER DEFENCE VILLAGES

- For the past five years, China has been building 628 well-off villages, known as Xiaokang villages, along India's borders with the Tibet Autonomous Region.
- These villages are spread across the Line of Actual Control (LAC), covering areas such as Ladakh and Arunachal Pradesh.
- These constructions are built on the basis of President Xi Jinping's strategy of "stabilising Tibet for the governance of frontier regions" and to meet the goal of building a 'xiaokang or moderately well off' society.
- **Structures:** It includes mostly double-storey, large and spacious buildings.
- **Purpose:** The purpose of the villages is serving both civilian and military purposes. They will act as a buffer and watch posts along the border and help prevent infiltration.

HOW IS INDIA RESPONDING TO IT?

Vibrant Villages Programme (VVP)

- Government has approved VVP, 2023, as a Centrally Sponsored Scheme 2023, for comprehensive development of the select villages in 46 blocks in 19 districts abutting northern border in the States of Arunachal Pradesh, Himachal Pradesh, Sikkim, Uttarakhand and UT of Ladakh.

A RACE TO SECURE BORDERS

INDIA

- Advanced airfields at Daulat Beg Oldie, Fukche, Nyoma, Tuting, Mechuka, Along, Ziro, Pasighat, Vijaynagar
- New roads include 1,800- km-long Frontier Highway in Arunachal, Sela Tunnel road project connecting Tawang with Guwahati, Balipara-Charduar-Tawang (BCT) road, Ladakh's Chisumle-Demchok Road
- New railways: 200 km Bhalukpong-Tawang line, 87 km Silapathar (Assam)-Along line, 217 km Rupai (Assam)-Pasighat line
- Vibrant Villages programme to develop 2,967 border villages in Arunachal, Sikkim, Uttarakhand, Himachal, Ladakh.

CHINA

- Construction, upgradation of 36 airports, and helipads in Tibet and Xinjiang since 2017: extended runways, blast pens in Ngari Burang, Shigatse Tingri, Lhasa- Gonggar airports
- Missile silos and sites military UAVs, electronic warfare units, frontline fighter jets stationed
- Roads like under construction Xinjiang-Tibet G695 highway, passing through Aksai Chin, Depsang Plains, Galwan Valley
- Sections of the Tibet-Yunnan railway to be connected to Tibet-Sichuan, Tibet-Xinjiang networks
- Construction of Xiaokang villages near the border.

China's strategic infrastructure drive and India's response to it



- It emphasizes the development of growth centers using the "Hub and Spoke Model," fostering social entrepreneurship and empowering youth and women through skill development.

Aims

- To enhance the quality of life for residents in identified border villages, addressing issues such as backwardness, illiteracy, and the lack of basic facilities and infrastructure.
 - ✓ To curb migration and subsequently enhance security in the border areas.
- **Objectives:** It includes the promotion of sustainable economic activities, leveraging local resources, and facilitating social empowerment to contribute to the overall growth and well-being of the identified border villages.

WAY FORWARD

- **Infrastructure Development:** India is prioritizing infrastructure projects like the Frontier Highway and border connectivity improvements to strengthen its presence along the LAC and deter Chinese incursions.
- **Strategic Partnerships:** Prime Minister Modi's visit to Lakshadweep and the India-Nepal power pact showcase

- India's proactive engagement with regional partners, countering China's influence in the Indian Ocean and Nepal.
- **Alternative Routes:** Projects like the Kaladan Multi-Modal Transit Transport Project provide India with strategic alternatives to bypass the vulnerable Chicken's Neck corridor, reducing dependence on Chinese-controlled routes.

8.2. VOLT TYPHOON

Context

Recently, the US Department of Justice and the FBI blocked a massive Chinese cyber-spying operation known as Volt Typhoon.

VOLT TYPHOON

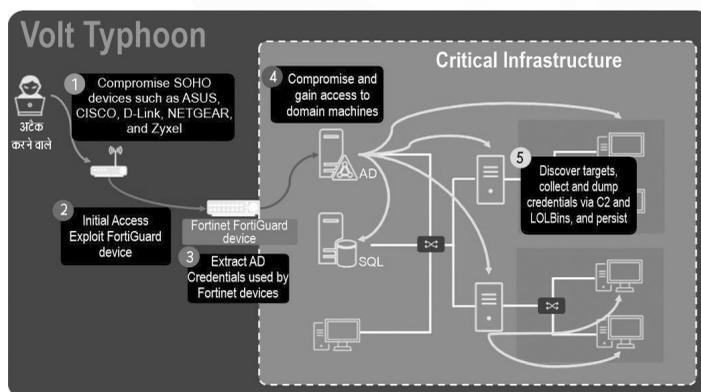
- It is a Chinese state-sponsored hacking organization that has been active at least since 2021.
- The primary objectives is information collection and counterintelligence.

TARGET

- It has targeted critical infrastructure organizations across the United States, including Guam.
- Volt Typhoon is targeting Western infrastructure, including naval ports, internet service providers, and utilities. Additionally, the use of preinstalled utilities for most victim interactions is rare.

Critical Infrastructure:

- It is a set of systems, networks, and public works that a government considers necessary for its operations and the safety of its population.



INITIAL ACCESS STRATEGY

- The Volt Typhoon attack pattern starts with getting control over public-facing devices or services.

HOW IT OPERATES?

- Attackers use compromised Small Office/Home Office (SOHO) devices to divert communications to and from certain networks.

They use the command line to:

- ✓ Collect data, notably information, from local and network machines, and save it in an archive file for exfiltration.
- ✓ To ensure continuity, use the stolen valid credentials.
- Volt Typhoon was a silent operator who routed traffic through hijacked network equipment, such as residential routers, and carefully removed evidence of intrusions from the target logs.

STEALTH FEATURES

- Volt Typhoon operates with ghost-like tactics, relying on readily available tools and manual commands to stay hidden.
- Secrecy is Volt Typhoon's game. They avoid detection by using legitimate tools and manual interaction, leaving minimal traces.

ATTACK PATTERN

- Volt Typhoon meticulously gathers information, pilfering credentials from local and network systems in a strategic sequence.
- Volt Typhoon's attack method systematically retrieves credentials from local and network sources.

TRAFFIC CONCEALMENT

- Leaving no digital footprints, Volt Typhoon ghosts through networks, hiding their malicious traffic within compromised home routers.
- Like a chameleon blending into its surroundings, Volt Typhoon hides its attacks by routing traffic through hijacked home routers, erasing their tracks for maximum stealth.

DETECTION CHALLENGES

- Defenders face an uphill battle, as Volt Typhoon blends in seamlessly with legitimate activity by using pre-installed tools and compromised network equipment.
- Distinguishing friend from foe becomes a near-impossible task for defenders due to Volt Typhoon's clever mix of tactics, leveraging both built-in utilities and hacked infrastructure.



9.1. CHILD PORNOGRAPHY

Context

Recently, the Madras High Court quashed a judicial proceeding and held that downloading child pornography is not an offence under Section 67B of the Information Technology (IT) Act, 2000.

MORE ON THE NEWS

- The High Court categorically said that watching child pornography in itself was not an offence as the accused had merely downloaded it onto his electronic gadget and had watched it in private.
- While two files related to child pornography were downloaded on the mobile phone of the accused which are sufficient to attract the application of **Section 67B(b) of the IT Act**, the High Court held that in order to constitute an offence, the accused must have published, transmitted, and created material depicting children in sexually explicit acts.
- The Madras High Court used its powers under **Section 482 of the Criminal Procedure Code (CrPC)** to prevent misuse of the court process and quash the judicial proceedings.
 - ✓ In the *State of Haryana vs Bhajan Lal Case (1992)*, the Supreme Court has laid down specific guidelines to exercise powers under **Section 482 of the CrPC (or extraordinary powers under Article 226)**. It says that such powers could be used where the allegations made in the first information report (FIR), even if taken at face value and accepted in their entirety, do not constitute an offence or make out a case against the accused.

Child Pornography / CSAM

- Protection of Children from Sexual Offences Act (POCSO) defines “child pornography” as any visual depiction of sexually explicit conduct involving a child which includes a photograph, video, digital or computer-generated image indistinguishable from an actual child, and image created, adapted, or modified but appears to depict a child.

WHAT DOES THE LAW SAY?

- **Section 67B of the Information Technology Act 2000:** It describes the punishment for publishing or transmitting material depicting children in sexually explicit acts, etc., in **electronic form**. It has **five sub-clauses**:
 - a. Deals with publishing or transmitting material depicting children engaged in sexually explicit acts or conduct;
 - b. Deals with acts including creating text or digital images, collecting, browsing, downloading, advertising, or distributing material depicting children in obscene or indecent or sexually explicit manner;

- c. Talks about cultivating, enticing or inducing children to online sexually explicit relationships;
 - d. Deals with facilitating abuse of children online; and
 - e. Talks about recording of own abuse or that of others pertaining to sexually explicit acts with children.
- **POCSO Act, 2012:** The Act has been enacted to protect children from offences of sexual assault, sexual harassment and pornography and provide for the establishment of Special Courts for the trial of such offences and related matters.
 - ✓ **Section 14** of the Act provides for strict punishment for using a child for pornographic purposes.
 - ✓ **Section 15** of the Act punishes storage or the possession of child pornographic material only if it is done with an intent to share or transmit, or display or distribute, or for commercial purposes.

OTHER INITIATIVES TAKEN BY GOVT. TO TACKLE CHILD PORNOGRAPHY

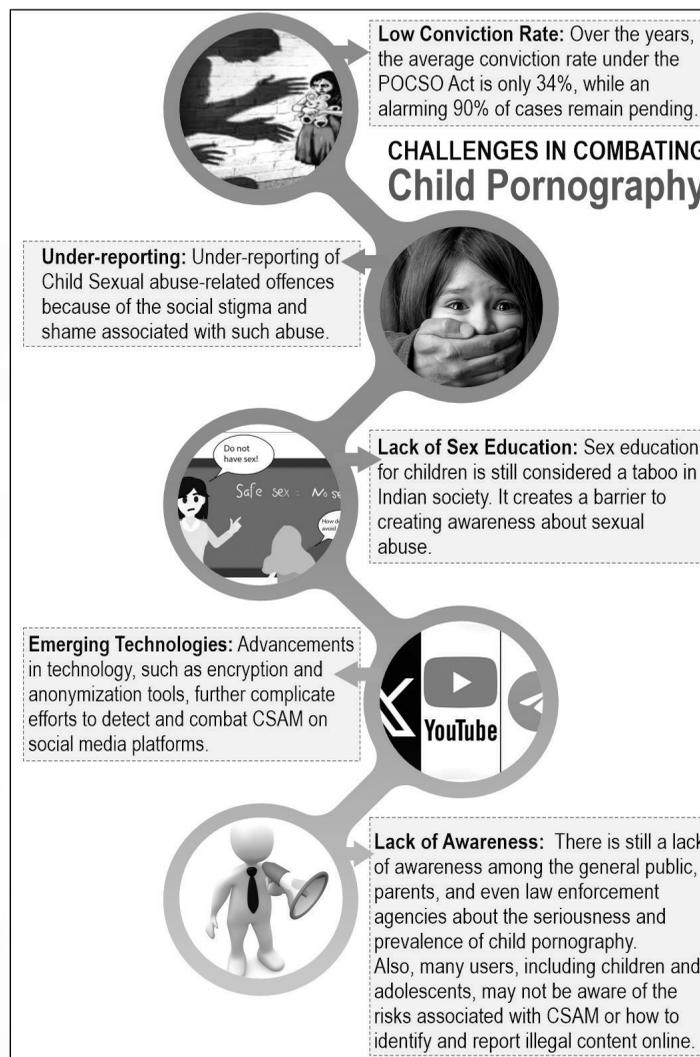
- The **IT (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021** make **social media platforms** accountable for their safety.
 - ✓ The Rules also require Significant Social Media Intermediaries (SSMIs) to endeavour to deploy technology-based measures to proactively identify child sexual abuse material.
- The government periodically blocks the websites containing extreme CSAM based on **INTERPOL’s “worst of list”** received through the Central Bureau of Investigation (CBI), the national nodal agency for Interpol in India.
- Several operations, such as **Operation Megh Chakra** and **Operation Carbon**, have been undertaken by CBI to fight against CSAM.
- **Kamlesh Vaswani Case (2013)** led to the disabling of nine (domain) URLs that hosted contents in violation of the morality and decency clause of **Article 19(2) of the Constitution**.
- The **Ministry of Electronics & IT (MeitY)**, through an **Information Security Education & Awareness (ISEA)** program, has been creating awareness among users about the importance of digital safety while using the Internet.
- The government ordered Internet Service Providers (ISPs)

to implement the **Internet Watch Foundation (IWF)**, UK and Canada list of CSAM websites on a dynamic basis and block access to child pornography websites.

- The **National Commission for Protection of Children (NCPCR)** has developed information, education and communication (IEC) material to support the Central and State governments in disseminating information and awareness on the POCSO Act 2012.
- The **National Crime Records Bureau (NCRB)** under an agreement with the **National Center for Missing & Exploited Children (NCMEC)** of the USA, regularly gets geo-tagged **CyberTipline** reports to prosecute those who upload CSAM from anywhere in India.
 - ✓ NCMEC is a private, non-profit organization to help find missing children, prevent child victimization, and report suspected instances of child sexual exploitation.

WAY FORWARD

- India should consider **joining INHOPE** and establishing its hotline to leverage Interpol's secure IT infrastructure to track the offenders.
 - ✓ **INHOPE**, a global network comprising 50 hotlines across 46 member countries, offers a platform for individuals to report CSAM anonymously.
- Recommendations of the **Jairam Ramesh Committee** on the issue of pornography on social media and its effect on children and society should be implemented in true spirit.
- The **POCSO Act could be amended** to include a distinct provision making the mere possession of CSAM a separate offence, addressing the inconsistency between the POCSO and the IT Act.
- Establishing a robust outreach system involving all the stakeholders, such as parents, schools, communities, law enforcement, etc. to enhance the implementation of legal frameworks and standards.



CONCLUSION

- According to Nobel Prize winner Kailash Satyarthi, "Every child matters. If we fail them, we fail ourselves." Thus, India's progress is inseparable from its children's security, safety and development.

9.2. SUB-CATEGORIZATION OF SCs/STs

Context

The Supreme Court is hearing a reference on whether Scheduled Castes (SCs)/Scheduled Tribes (STs) can be sub-categorized to make the Reservation Policy more effective.

MORE ON THE NEWS

- A seven-judge Constitution bench of the Supreme Court is examining the validity of its judgment in ***E V Chinniah vs State of Andhra Pradesh (2004)***, which held that SCs form a homogenous group and there cannot be any sub-division among them.
 - ✓ It also held that **Article 341** bars the State governments from "interfering" or "disturbing" the Presidential List, including through sub-classification.

- The Bench is examining whether sub-classification inside the SC/ST categories be permitted like in the case of other backward classes (OBCs) and if the State Legislatures are competent to introduce laws empowering the states to undertake this exercise.
- **Supreme Court's View:** Reservation policy should be "organic and evolving, not static". Thus, not allowing sub-classification of Scheduled Castes (SCs) will lead to a situation where the "advanced among" them "would grab all benefits".

ARGUMENTS IN SUPPORT OF SUB-CATEGORISATION



Welfare State Obligation: As a welfare state, India must uplift deprived sections and eradicate societal inequalities.



Addressing Inequalities: Reservation can sometimes create inequalities within the reserved castes. Sub-categorisation allows the state to address these internal disparities and ensure distributive justice.



Justice: Sub-categorisation can provide preferential treatment to the most marginalised within these groups, aligning with the principle of uplifting the "weakest out of the weak."



Evolution of Reservation: The framers of the Constitution did not envision reservation as a permanent measure, indicating the need for adaptability through measures like sub-categorisation.



Right to Equality: Denial of sub-classification may result in treating unequal groups equally, defeating the fundamental right to equality.



Diversity within Groups: Significant variations exist within Scheduled Castes, Scheduled Tribes, and socially and educationally backward classes, necessitating tailored measures to address diverse needs.

- ✓ In the ***Davinder Singh case of 2020***, a five-member Supreme Court bench unanimously upheld the constitutional validity of sub-categorization. It recommended that a larger constitutional bench provide a further ruling on the issue.
- **Government's View:** The Union Government has also favoured this sub-classification to emphasise its importance in realising the true objective of the reservation to benefit the historically discriminated, and ensuring a trickle-down effect.

WHAT IS SUB-CATEGORISATION?

- Scheduled Castes or Scheduled Tribes comprise diverse castes which are not homogenous in nature.

- Some castes within these categories remain significantly under-represented despite reservation policies.
- Reports have consistently underscored this inequality within the Scheduled Castes/Tribes, leading to efforts to establish special quotas within the categories.
- The concept of the "creamy layer" imposes an income ceiling on those eligible for reservation benefits.
 - ✓ While traditionally applied to Other Backward Castes (OBCs), the "creamy layer" concept was extended to promotions within Scheduled Castes for the first time in 2018.

ARGUMENTS AGAINST SUB-CATEGORISATION

- Traditional backwardness criteria may not adequately address the unique challenges faced by SC/ST communities, which have endured historical oppression and discrimination.
- Scheduled Castes deserve special treatment due to their long-standing experience of historic untouchability, warranting protective measures without further categorisation.
- The Supreme Court, in ***N M Thomas vs State of Kerala case***, classified Scheduled Castes as a distinct class. It underscores the importance of treating them as unified entities rather than further subdividing them.
- Sub-categorisation risks political exploitation, potentially leading to the manipulation of SC/ST voting blocs for electoral gains, undermining the genuine pursuit of social justice.

CONSTITUTIONAL PROVISIONS RELATED TO RESERVATION FOR SCS/STS IN INDIA

Reservation in Legislatures

- Part XVI deals with reserving seats for SCs and STs in Central and State legislatures.
- Articles 330 and 332 provide for the reservation of seats for SCs and STs in the Parliament and State Legislative Assemblies, respectively.

Reservation in Government Services

- Articles 15(4) and 16(4) empower the State and Central Governments to reserve seats in government services for SCs and STs.
- The Constitution (77th Amendment) Act, 1995 introduced Article 16(4A), allowing reservation in promotions.
- Subsequently, the Constitution (85th Amendment) Act, 2001 modified clause (4A) to provide consequential seniority to promoted SC and ST candidates.
- In ***M. Nagaraj v. Union of India (2006) case***, the Supreme Court
 - ✓ Upheld the constitutional validity of Article 16(4A) regarding reservation in promotions.
 - ✓ Established three constitutional requirements for valid reservation policies:

- Social and educational backwardness of SC and ST communities.
- inadequate representation of SC and ST communities in public employment.
- Reservation policy should not compromise the overall efficiency of administration.

Identification of Scheduled Castes (SC) and Scheduled Tribes (ST)

- **Constitutional authority:** The President, under Articles 341 and 342, has the power to identify SCs and STs respectively.
- **Presidential notification:** Specific castes and tribes are recognized as SCs and STs through presidential notification under Articles 341 and 342. However, any further modification to the Presidential list can only be done by the Parliament and State legislatures have no power in this regard.
- **Statewise variation:** Designation as SC or ST may differ between different states based on socio-economic and historical factors.

• The Supreme Court in *Jarnail Singh vs Lachhmi Narain Gupta (2018) case*

- ✓ Ruled that reservation in promotions doesn't necessitate the state to collect quantifiable data on the backwardness of SCs and STs.

- ✓ Affirmed that the concept of creamy layer is applicable to SC/STs.
- ✓ State cannot provide reservations in promotion to SC/ST individuals belonging to the creamy layer within their community.

Filling Unfilled Vacancies

- The Constitutional **81st Amendment Act, 2000 added Article 16(4B), permitting the state to fill unfilled vacancies reserved for SCs/STs in the succeeding year, bypassing the fifty per cent reservation ceiling.**

Reservation in Local Governance

- Article 243D provides for reservation of seats for SCs and STs in every Panchayat.
- Article 233T provides for reservation of seats for SCs and STs in every Municipality.

CONCLUSION

- **The benefits available through reservation are limited and need rational redistribution. Sub-classification is essential for making the reservation policy "organic and evolutionary."** Reservation policy must keep pace with the changing social dynamics; only then will it be able to achieve the intended objective of 'inclusion' in its broadest sense.

9.3. SANITATION MIRACLE IN RURAL INDIA

Context

Government data reveals that approximately 85% of villages in India have achieved the Open Defecation Free Plus (ODF Plus) status.

STATUS OF SANITATION IN RURAL INDIA

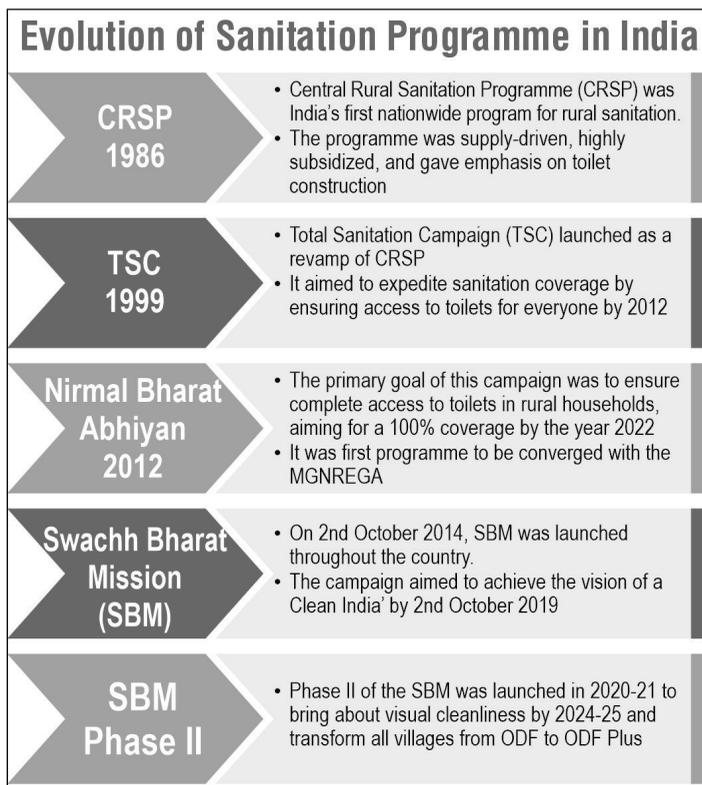
- As per government data, sanitation coverage in the country improved from 39% in 2014 to 100% in 2019.
- Under Phase II of the Swachh Bharat Mission-Grameen (SBM-G), the government aims to transform India from ODF to ODF Plus by 2024-25. Around 85% of villages in India have achieved ODF Plus status.
- The National Annual Rural Sanitation Survey (NARSS)-Round-3 (2019-20) showed that of the 95% of the rural population who had toilet access, 79% owned their toilets, 14% used shared toilets, and 1% used public toilets. The report also held that 96% of these toilets were functional, and had access to water.
- However, the same report noted that only 85% of the rural population used safe, functional, and hygienic toilets, revealing a 10% gap between toilet access and usage.
- NARSS-3 also revealed that access to toilets was highest for upper castes (97%) and lowest for Scheduled Castes (95%).

ODF and ODF Plus

- A city / ward can be notified/declared as ODF city/ ODF ward if, at any point of the day, not a single person is found defecating in the open.
- ODF Plus village is one which has sustained its Open Defecation Free (ODF) status along with implementing either solid or liquid waste management systems.
- As on date, more than 2.96 lakh villages have declared themselves ODF Plus, which is a significant step towards achieving the SBM-G phase II goals by 2024-25.

ISSUES WITH SANITATION COVERAGE IN INDIA

- **Household Size and Social Norms**
 - ✓ **Larger households:** The higher the household size, the greater the chances of not using the toilet. Overcrowding and social norms prevent all household members from using the same toilet.
 - ✓ **Detached bathrooms:** The chances of toilet use are also reduced if a household has a detached bathroom.
 - ✓ **Phase II of SBM-G:** Lacks provisions for multiple toilets in larger households or attached bathrooms, potentially hindering full adoption.



• Limited Water Access

- ✓ **Difficult water access:** Even with toilets available, insufficient water for proper hygiene hinders usage.

• Social Networks and Caste Dynamics

- ✓ **Social influence:** Networks play a crucial role in sanitation behaviour. In some cases, upper castes act as "brokers" enforcing sanitation norms on lower castes, creating power imbalances.
- ✓ **Network characteristics:** Sanitation networks vary across regions. Some villages require collective change, while others allow individual decisions.
- ✓ **Socio-economic disparities:** Toilet access and usage are

higher among upper castes compared to Scheduled Castes, highlighting the need for targeted interventions.

• Behavioural Change and Social Engineering

- ✓ **Beyond construction:** Behavioural change campaigns are crucial for sustained toilet use. Phase II of SBM-G might lack sufficient focus on social engineering to address regressive norms and caste hierarchies.
- ✓ **Holistic approach:** Sanitation behaviour is linked to overall living standards, including housing and access to basic services. Uncoordinated programs across these sectors hinder progress.

WAY FORWARD

- **Civil Society Participation:** Encourage active involvement of civil society in sanitation initiatives, aligning with programs like Namami Gange and Swachhta Pakhwada for holistic river and environmental cleanliness.
- **Behavioural Change and Culture of Cleanliness:** Implement targeted campaigns leveraging social networks to instil a culture of cleanliness. Integrate the Gobardhan Scheme to promote waste-to-energy solutions and efficient waste management practices.
- **Infrastructure Improvement:** Conduct comprehensive situation analysis and assessments to identify gaps in sanitation infrastructure. Ensure synergy among programs like Jal Jeevan Mission and Swachh Bharat for inclusive access to sanitation facilities.
- **Waste Disposal and Water Reuse:** Emphasize waste disposal strategies, incorporating waste conversion methods. Link Jal Shakti initiatives with Swachh Bharat to promote water reuse and sustainable water management practices.
- **Monitoring and Evaluation:** Establish robust monitoring and evaluation mechanisms (Swachh Survekshan) to track progress. Regularly assess the effectiveness of programs like Swachh Bharat and adapt strategies for continuous improvement.

9.4. MENTAL HEALTH

Context

A recent study by IIT Jodhpur has found that there is a significant economic burden of mental disorders in India, and self-reporting of mental health problems remains notably low.

KEY HIGHLIGHTS OF THE STUDY

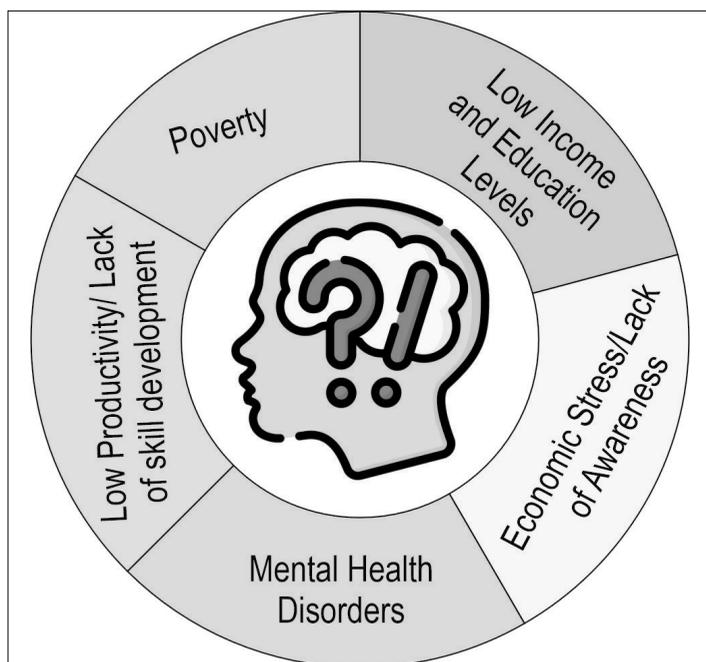
- The study, based on the **75th Round National Sample Survey (NSS) 2017-2018**, revealed that the self-reporting of mental illness was less than 1% in India.
- The private sector emerged as a major provider of mental health services, accounting for **66.1% of outpatient care and 59.2% of inpatient care**.
- **Out-of-pocket expenditure** remains high, mainly due to heavy reliance on the private sector to access mental healthcare.
- The study revealed that Individuals with higher incomes were

1.73 times more open to reporting health problems than those with lower incomes, uncovering a socioeconomic divide.

- **Only 23% of individuals** hospitalised for mental disorders had health insurance coverage at the national level.

ABOUT MENTAL HEALTH

- World Health Organization (WHO) defines Mental Health as a state of mental well-being that enables people to cope with the stresses of life, realise their abilities, learn well and work well, and contribute to their community.



• It is an integral component of health and well-being that underpins our individual and collective abilities to make decisions, build relationships and shape our world.

REASONS FOR INCREASING MENTAL HEALTH DISORDERS

- **Urbanization Stress:** Rapid urbanization and migration from rural to urban areas increase stress due to crowded living conditions, resource competition, and cultural adjustment.
- **Economic Pressure:** Income inequality contributes to financial stress, unemployment, and underemployment, which are significant triggers for mental health disorders.
- **High Academic Expectations:** Intense academic competition and pressure to excel in education place a heavy burden on students, often resulting in stress-related disorders like anxiety and depression.
- **Technological Advancements:** While technology offers many benefits, excessive use of social media, online gaming, and digital devices contributes to addiction and may exacerbate mental health issues, especially among the younger population.
- **Environmental Factors:** Pollution, overcrowding, and lack of green spaces in urban areas can impact mental well-being, contributing to stress, anxiety, and other mental health disorders.

MEASURES TAKEN TO TACKLE MENTAL DISORDER PROBLEMS

National

- **National Mental Health Programme (NMHP):** It aims to address the burden of mental disorders and shortage of qualified professionals. It includes schemes for modernising

Challenges in Tackling Mental Health Burden in India

- 

High Burden: National Mental Health Survey (NMHS) (in 2017) indicated that around 150 million individuals had mental illnesses that required treatment, causing high strain on public health services.
- 

Lack of Human Resources: Currently, as per WHO, for a population of 1,00,000, India has 0.3 psychiatrists, 0.12 nurses, 0.07 psychologists, and 0.07 health workers. These reflect an alarming shortage of human resources.
- 

Financial Constraints: India spends less than 1% of its total health budget on mental health. Financial limitations restrict public access to affordable mental health services, increasing out-of-pocket expenses.
- 

Lack of Awareness and high cost: More than 80% of individuals in India do not access mental health care services, primarily due to lack of awareness, prevalent stigma, and the high cost of care.
- 

Post-Treatment Gap: The absence of adequate rehabilitation services post-treatment undermines the efficacy of mental health interventions, leaving individuals without the necessary support for recovery.
- 

Loss to Economy: Delayed or untreated mental illness results in a loss of human capital and productivity, thereby adversely impacting the economy.

state mental hospitals and upgrading the psychiatric wings of medical colleges/general hospitals.

- **Mental Health Act 2017:** Guarantees access to mental healthcare and treatment for every affected person. It reduces the use of Section 309 IPC and provides support instead of punishment for attempted suicide.
- **Tele Mental Health Assistance and Networking Across States (Tele MANAS):** It aims to provide free tele-mental health services all over the country round the clock, particularly catering to people in remote or under-served areas.
- **Kiran Helpline:** It's a 24/7 toll-free helpline providing support for anxiety, stress, depression, and suicidal thoughts.
- **Manodarpan Initiative:** A Ministry of Education initiative to offer psychosocial support to students, family members, and teachers during the COVID-19 pandemic.

Global

- **World Mental Health Day:** Observed on October 10th annually, it aims to raise awareness about mental health issues worldwide and mobilize efforts to support mental health.
- **WHO’s Comprehensive Mental Action Plan:** Adopted by the 66th World Health Assembly, this plan (2013-2020) outlines strategies for improving mental health policies, services, and care globally.
- **Mental Health Atlas:** Launched by WHO in 2001 and released triennially (every three years), it provides data on mental health policies, legislation, financing, human resources, and service availability worldwide.
- **Suicide Prevention:** Included in the Sustainable Development Goals (SDG 3.4), suicide prevention is recognised as a global priority

comprehensive National Action Plan on Mental Health, specifying activity components, financial provisions, and facility-strengthening measures.

- **Minimum Package of Interventions:** Development of minimum intervention packages for mental health promotion, care, and rehabilitation.
- **Upgradation of Facilities:** Existing facilities for treating and rehabilitating individuals with mental illnesses need further improvement per the National Human Rights Commission mandates.
- **Strengthening Drug Logistics:** The drug logistics system at the state level requires strengthening, including procurement, distribution, and ensuring continuous availability of medications in all public sector health facilities.
- **National Mental Health Literacy Strategy:** Develop and implement a national strategy for mental health literacy, including Information, Education, and Communication (IEC) initiatives.

WAY FORWARD

- **National Action Plan:** Develop and implement a

9.5. ANNUAL DEATH PENALTY REPORT, 2023

Context

Recently, the Annual Death Penalty Report, 2023 was released by Project 39A.

KEY FINDINGS OF THE REPORT

- According to the Report, the Supreme Court and High Courts **together handed out just one death sentence, in 2023** and the rest were either commuted or acquitted altogether.
- The sole death confirmation came from the Karnataka High Court while the Supreme Court did not confirm any death sentences in 2023, the second time since 2021.
- According to the report, **in 2023, trial courts awarded death sentences to 120 prisoners, taking the total prisoners on death sentence to 561** at the end of December 2023.

(CrPC), all death sentences awarded by trial courts are to be confirmed by the concerned High Courts.

- Sexual offences continued to be the majority in death penalty cases, constituting more than 50% of the 120 death sentences imposed by trial courts.
- As per the report, despite the Supreme Court’s directive in the *Manoj v. State of Madhya Pradesh (2022) case*, the trial courts-imposed death sentences in 87% of cases without having adequate information about the accused.
- The report also highlighted that the passing of the **Bharatiya Nyaya Sanhita, 2023**, will increase the number of offences punishable by death to 18 from 12 under the Indian Penal Code, 1860.

Project 39A

- A criminal justice program associated with the National Law University, Delhi.
- It is inspired by Article 39-A of the Indian Constitution, a provision that furthers the intertwined values of equal justice and equal opportunity by removing economic and social barriers.

✓ This is the **highest number in nearly two decades**, and the second-highest since 2000, according to the NCRB’s Prison Statistics Reports.

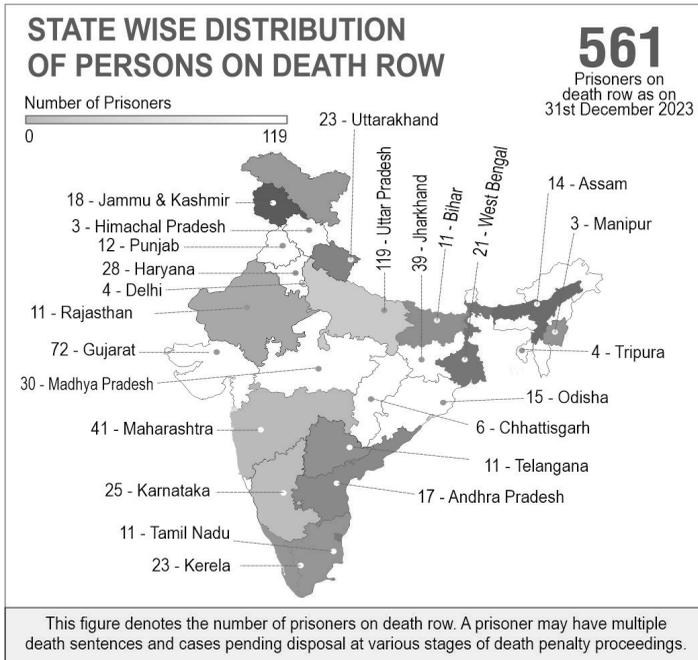
- However, the total death sentences awarded by trial courts saw a significant drop from last year - from 167 in 2022 to 120 in 2023.
- There was a **15% decrease in the disposal rate of death penalty confirmation** proceedings in High Courts, with 57 death penalty cases disposed of in 2023 compared to 68 in 2022.
- ✓ Under Section 366 of the Code of Criminal Procedure

Latest International Development

- Malaysia scraped the mandatory Death Penalty and Natural Life Imprisonment.
- Parliament of Ghana passed the Criminal Offences (Amendment) Bill: To abolish the death penalty and replace it with life imprisonment for the offences of murder, genocide, piracy and smuggling.
- The Washington State Governor signed a bill into law that eliminated the death penalty as a state-sanctioned punishment.

ABOUT DEATH PENALTY

- The Death Penalty is the execution of an offender sentenced to death after conviction by a court of law for a criminal offence.
- The term death penalty is sometimes used interchangeably



with capital punishment, though the imposition of the penalty is not always followed by execution (even when it is upheld on appeal), because of the possibility of commutation to life imprisonment.

- **India retains the death penalty for certain offences**, making it one of the countries globally that still practice capital punishment.
 - ✓ More than 70% of the world's countries have abolished death penalty in law or practice.
- India voted **against a draft resolution on the use of the death penalty** at the UN General Assembly. The country asserted that the resolution contradicts its statutory law, which permits executions only in the "rarest of rare" cases.

STATUS OF CAPITAL PUNISHMENT IN INDIA

Evolution

- India retained colonial laws, including the CrPC (1898), and the Indian Penal Code, of 1860, which allowed for six punishments, including death.
- **1955:** Parliament repealed Section 367(5), CrPC 1898, making the death penalty no longer the norm, and courts did not need special reasons for why they were not imposing the death penalty in cases where it was a prescribed punishment.
- **1973:** Code of Criminal Procedure (CrPC) was re-enacted, introducing changes to Section 354(3) viz. Judges were now mandated to provide special reasons for imposing the death penalty.

SUPREME COURT VIEWS ON THE VALIDITY OF CAPITAL PUNISHMENT

- **Jagmohan Singh vs State of Uttar Pradesh (1973):** The Supreme Court (SC) held that according to Article 21, the deprivation of life is constitutionally permissible if it is done via procedure established by law.

- **Rajendra Prasad vs State of Uttar Pradesh (1979):** The SC held that if the criminal jeopardizes social security in a planned, persistent manner, then his/her fundamental rights may be annihilated.
- **Bachan Singh vs State of Punjab (1980):** The Constitutional bench of SC pronounced the dictum of rarest of rare cases according to which the death penalty is not awarded except rarest of rare cases.
- **Macchi Singh vs State of Punjab (1983):** The SC laid down certain guidelines on whether the case falls under the rarest of rare cases or not.
- **Deena v. Union of India (1983):** The SC upheld the constitutionality of hanging as a method of execution.
- **Rishi Malhotra v. Union of India (2017):** The Supreme Court directed the Union govt. to establish a committee to examine alternative methods of execution that could cause death more quickly and less painfully.

DEBATES ON THE ABOLITION OF DEATH PENALTY

Arguments Against Abolition	Arguments in Favour of Abolition
<ul style="list-style-type: none"> • Deterrent Effect <ul style="list-style-type: none"> ✓ It deters potential criminals from committing heinous crimes like murder or terrorism due to the fear of execution. • The 35th Law Commission Report (1962) underscores the importance of deterrents in maintaining law and order. • Rarest of Rare Cases <ul style="list-style-type: none"> ✓ The Supreme Court's ruling in Bachan Singh vs. the State of Punjab (1980) upheld the death penalty but restricted in rarest of rare cases. • Right to Appeal (Article 21) <ul style="list-style-type: none"> ✓ It allows for multiple appeals, ensuring a thorough judicial process and minimizing the risk of wrongful execution. • Endorsement by Agencies <ul style="list-style-type: none"> ✓ Some agencies, like the National Investigation Agency (NIA) dealing with terrorism, may favour the death penalty for especially heinous crimes. ✓ This reflects the belief that it provides a strong response to acts considered detrimental to national security. 	<ul style="list-style-type: none"> • Retribution vs. Reformation <ul style="list-style-type: none"> ✓ It focuses on vengeance (retribution) by the state, rather than rehabilitation or reform of the offender. • Mental Health Concerns: <ul style="list-style-type: none"> ✓ The United Nations Commission on Human Rights opposes the death penalty for individuals with mental illness. • Ineffective Deterrence <ul style="list-style-type: none"> ✓ Its utility as a deterrent is often questioned due to the low number of executions and the continued occurrence of heinous crimes in countries. • Socially Disproportionate <ul style="list-style-type: none"> ✓ It disproportionately affects the poor, minorities, and marginalized groups in India. • No Reduction in Suffering <ul style="list-style-type: none"> ✓ It does not reduce the suffering caused by the crime. Instead, it adds another layer of suffering for the families of both the victim and the offender, perpetuating a cycle of violence. • Global Trend and Constitutional Concerns <ul style="list-style-type: none"> ✓ India stands against the global trend of abolishing the death penalty, with over 100 countries having done so.

WAY FORWARD

- **Stricter Application:** Ensure proper implementation of the “rarest of rare” criteria established in the Bachan Singh case.
- **Non-lethal Methods:** Adoption of alternative execution methods like electrocution, the gas chamber, firing squad, and lethal injection (ensure ethical and humane practices).
- **Parliamentary Standing Committee on Home Affairs:** Its 246th Report on the Bharatiya Nyaya Sanhita 2023, took note of submissions by various experts on the need to abolish the death penalty or the systemic changes to be introduced upon its retention.

- **Law Commission 262nd report:** It recommended abolishing the death penalty for all except terrorism-related offences.
- **Human Rights Dialogue:** Engage with international bodies and human rights organizations to address ethical concerns and promote global consensus.

CONCLUSION

- The death penalty in India needs to adapt to the recent changes in the criminal justice system around the world. This approach ensures a commitment to justice, and human rights, and aligns with the evolving standards of the international community.

9.6. WHO RECOGNIZED LONELINESS AS A PUBLIC HEALTH CRISIS

Context

WHO identified ‘loneliness’ as a serious global health threat with mortality effects comparable to smoking 15 cigarettes a day.

KEY HIGHLIGHTS

- An estimated **one in four older people experience social isolation, and between around 6 to 15% of adolescents experience loneliness.**
- **Loneliness has serious impacts on mental and physical health, longevity, and quality of life.**
- There are various reasons such as obesity, smoking, and lack of physical activity for increasing the risk of loneliness.
- Around 15% of adolescents and 25% of older people worldwide experience loneliness, with figures potentially underestimated.

Definition: Loneliness is **feeling alone and disconnected from others, even when surrounded by people.** It’s a sense of emptiness or isolation.

IMPACTS

- **Health Impact**
 - ✓ Loneliness is associated with severe health consequences, **including a higher risk of stroke, anxiety, dementia, depression, and suicide.**
 - ✓ Loneliness is associated with a **50% increased risk of dementia** and a **30% increased risk of coronary artery disease or stroke** in older adults.
 - ✓ Loneliness contributes to mental health issues such as decreased confidence, hopelessness, anxiety, tiredness, and lack of motivation.
- **Economic Impact:** Loneliness can lead to adverse economic outcomes, with potential consequences for education and job satisfaction.

CHALLENGES

- **Cultural Stigma:** Loneliness is often ignored or seen as a passing phase in India, and discussing mental health is stigmatized, making it difficult to address the problem effectively.
- **Unemployment:** Educated young individuals in India, despite their education, face higher unemployment and

loneliness rates, indicating a structural problem in the Indian economy.

- **Rising Disease Burden:** Loneliness increases the risk of various diseases, adding to India’s growing burden of communicable and non-communicable diseases.
- **Inadequate Healthcare Infrastructure:** India’s healthcare system lacks staff, infrastructure, and budget, complicating the response to the loneliness epidemic.

DEALING WITH LONELINESS: WAY FORWARD

- **Self-Care:** Develop personalized self-care rituals focusing on the mind, body, and soul.
- **Reprogram Subconscious Mind:** Embrace mindfulness and meditation to reprogram the subconscious mind. Seek professional help proactively when needed.
- **Engage in Hobbies:** Identify and participate in activities that bring joy, allocating scheduled time for hobbies like painting, pottery, photography, or trekking.
- **Volunteer Activities:** Dedicate time to social causes, volunteering at old age homes, orphanages, or NGOs for fulfillment.
- **Rejuvenate Relationships:** Foster meaningful relationships and build a support system to combat loneliness.
- **Community-Based Solutions:** Tackling loneliness may need community-focused strategies addressing structural inequities rather than just clinical approaches.
- **Holistic Approach:** Combating loneliness in India requires a multifaceted approach, including improving mental health literacy, enhancing healthcare infrastructure, and addressing social inequalities.
- As loneliness gains recognition as a public health issue, India must continuously adapt its strategies to effectively support those affected by this silent epidemic. To address loneliness, the WHO initiates a commission by promoting social connections and implementing solutions globally.

9.7. SENIOR CARE

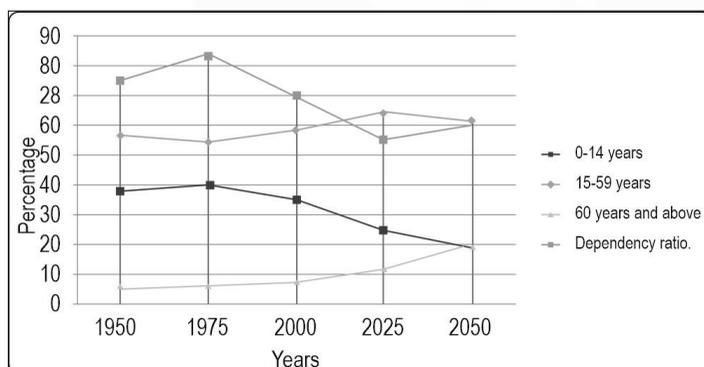
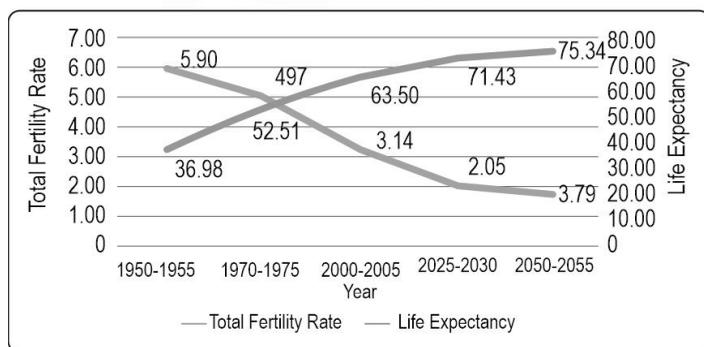
Context

Recently, NITI Aayog released a paper on Senior Care reforms.

KEY HIGHLIGHTS

Increasing Elderly Population

- In India, senior citizens (people aged 60 years and above) comprise a little over **10% of the population**. By 2050, the elderly population is projected to rise to **319 million (19.5% of the total population)**.
- The total dependency ratio, which stood at **56.92 in 2020**, is expected to rise to **61.22 by 2050**. This can be attributed to
 - ✓ **Decline in TFR:** The total fertility rate (TFR) stood at 3.4 in 2000 and declined to 2 as per the latest SRS (Sample Registration System) data.
 - ✓ **Increase in Life Expectancy:** the life expectancy at birth rose from 35.8 in 1950 to 62.5 in 2000 and is further projected to rise to 75 by 2050.



- As per the World Health Organization (WHO), the proportion of the global population aged 60 and above is projected to increase twofold, rising from 12% in 2015 to **22% by the year 2050**.

Silver Economy

- The economic sector that focuses on activities, products, and services tailored for the elderly is known as the “silver economy.”
- Currently, India’s silver economy is valued at around ₹73,082 crore rupees and is anticipated to experience significant growth in the foreseeable future.

Dimensions	Issues/Challenges	Solutions
Health Domain	<p>Physical: Every 4th Indian over 60 years reported having poor health, with 75% of the elderly having one or more chronic diseases.</p> <p>Mental: Around 20% of the elderly in India have mental health issues.</p> <p>Inadequate infrastructure for seniors: Lack of tailored emergency response systems, and old-age homes for the elderly.</p>	<p>Enhancing Health Literacy: Improve health-related knowledge among seniors and caregivers.</p> <p>Mental Health and Emergency Services: Prioritize mental well-being and emergency response for seniors.</p>
Social Domain	<p>Awareness of social security acts/measures: Further, more than a third (35%) of elderly people could not utilize various schemes.</p> <p>Living Patterns: Globalization, migration, and the disintegration of traditional family setups have reduced the amount of family support and day-to-day psychosocial support.</p> <p>Feminization of Aging and Gender: 54% of women are widows and are at higher risk of social exclusion due to a lack of social and financial security.</p>	<p>Establishing Peer Support Groups: Create networks for seniors to share experiences and support one another.</p> <p>Legal and Welfare Awareness: Inform seniors about their rights, legal safeguards, and available welfare schemes.</p> <p>Legal Reforms: Strengthen laws for elderly welfare and ensure efficient resolution of cases in maintenance tribunals.</p>
Digital Domain	<p>Digital Divide: Nearly 85.8% of the elderly were found to be digitally and computer illiterate, with COVID further increasing the learning gap.</p>	<p>Digital Literacy Campaigns: Launch workshops to boost digital skills and utilize artificial intelligence, IoT, big data, and machine learning for routine senior care procedures.</p>

<p>Economic Domain</p>	<p>Employment: Employment rates are approximately 50% for males and 22% for females among senior citizens in India, with a higher rate observed in rural areas. Financial Status: 70% of the elderly are dependent on everyday maintenance on family or pension, with 78% being without pension cover. Financial Abuse and Fraud: The WHO estimates that 6.8% of people aged 60 years or over are subject to financial abuse, including fake investment opportunities, phishing, etc.</p>	<p>Reskilling Programs: Offering skill updates for better employment opportunities among the elderly. Enhanced Public Fund Coverage: Expand public funds and implement saving plans for financial security for elders. Tax Reforms and Geriatric Health Insurance: Adjusting tax policies and encouraging private sector development of senior-specific insurance products.</p>
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VARIOUS MEASURES FOR THE PROTECTION OF SENIOR CITIZENS IN INDIA

- **Constitutional Provisions**
 - ✓ **Article 41:** Encourages right to work, education, and public assistance for the elderly.
 - ✓ **Article 46:** Promotes educational and economic interests of weaker sections, including elders.
- **Legal Measures**
 - ✓ **Hindu Adoption and Maintenance Act:** Section 20 of the Hindu Adoption and Maintenance Act, 1956 makes it an obligation to maintain an aged parent
 - ✓ **Criminal Procedure Code:** Under Section 125 of the Criminal Procedure Code, elder parents can claim maintenance from their children

- ✓ **Income Tax Act:** Sections of the Income Tax Act allow senior citizens to claim a tax discount.
- ✓ **Maintenance and Welfare of Parents and Senior Citizens Act 2007:** Ensures the maintenance and welfare of older citizens.
- **Policy Support:**
 - ✓ **National Policy for Older Persons (1999):** Outlines a comprehensive framework for the well-being of Senior Citizens.
- **Welfare Schemes and Programs:**
 - ✓ **National Social Assistance Program (NSAP):** Provides old age and disability pensions.
 - ✓ **Atal Vayo Abhyudaya Yojana (AVYAY):** Supports social and cultural activities for elders.
 - ✓ **Rashtriya Vayoshri Yojana (RVY):** Provides assistive devices to the elderly.

GROWING SILVER ECONOMY

- **Home Care Services**
 - ✓ The size of the home healthcare market in India was estimated at USD 6.2 billion (50840 crore) in 2020, and it is projected to reach USD 21.3 billion (1.74 lakh crore) by 2027.
 - ✓ The home healthcare market can lead to a 15–30% reduction in infrastructure and operational costs compared to hospital costs for the same treatment.
- **Health Technology:**
 - ✓ The health-tech market will reach USD 5 billion (41,000 crore) by 2027.
- **The government measures to advance the concept of a silver economy include:**
 - ✓ **SACRED Portal:** The portal aims to facilitate the connection between senior citizens and private sector job providers for re-employment opportunities.
 - ✓ **SAGE:** It seeks to promote and incentivize the development of senior care products and services.

Developing R&D base in healthcare industry 

SMEs and startups coming up with innovative solutions. 

New ICT solutions such as care robotics 

Health mobile applications that assist with tracking 

Big Pharma companies developing integrated therapeutic solutions 

Delaying retirement and providing highly skilled tech jobs 

Providing low qualified population opportunity to reskill 

The growth of silver economy in India will enable subsidized services required for universal access to senior care especially for the bottom of the pyramid segment.

PRACTICE MCQ

Q 1. Consider the following statements regarding the International Criminal Court (ICC) and the International Court of Justice (ICJ):

1. While the ICC can hear cases involving individuals only, the ICJ can hear cases involving both States and individuals.
2. While the ICJ is a part of the UN system, the ICC is not.
3. Both the courts are situated in the Hague, the Netherlands.

Which of the above statements are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

Q 2. With reference to Panchayats, consider the following statements:

1. The State Government's devolution of funds is the largest source of funds for the Panchayats.
2. The functions of the panchayats are listed in the 11th Schedule of the Constitution.
3. Panchayats generate less than one-tenth of their total revenue on their own.

How many of the above statements is/are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

Q 3. Consider the following statements regarding the fiscal deficit in India:

1. The FRBM Act of 2003 mandated for achieving a fiscal deficit of 3% by 2008-09.
2. The FRBM Review Committee proposed yearly targets to achieve a fiscal deficit of 2.5% of GDP by 2022-23.
3. In the interim budget 2024-2025, the government announced its intention to bring down the fiscal deficit to 5.1% of the GDP.

How many of the above statements is/are correct?

- | | |
|---------------|--------------|
| (a) Only one | (b) Only two |
| (c) All three | (d) None |

Q 4. Consider the following Indian States:

1. Nagaland
2. Mizoram
3. Tripura
4. Assam

How many of the above Indian States do NOT share a boundary with Myanmar?

- (a) Only one
- (b) Only two
- (c) Only three
- (d) All four

Q 5. With reference to the Central Bureau of Investigation (CBI), consider the following statements:

1. CBI is a statutory body that derives its power to investigate from the Delhi Special Police Establishment Act of 1946.
2. CBI requires prior permission from the Government to probe public servants in corruption cases under the Prevention of Corruption Act.
3. Under the CVC Act, 2003, the Director of CBI has a fixed tenure of two years.

How many of the above statements is/are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

Q 6. Consider the following statements:

1. Public Debt of the state is a Subject under the State List of the Seventh Schedule of the Constitution.
2. The State government has to obtain the permission of the Central Government to raise any loan from the market.
3. The Central Government can impose a Net Borrowing Ceiling (NBC) on the States under Article 293 of the Constitution.

How many of the above statements is/are correct?

- | | |
|---------------|--------------|
| (a) Only one | (b) Only two |
| (c) All three | (d) None |

Q 7. Which of the following is correct about 'Operation Megh Chakra'?

- It was the codename for the Indian Army operation to take full control of the Siachen Glacier in Ladakh.
- It is a pan-India drive of the Central Bureau of Investigation (CBI) to fight against the proliferation of child sexual abuse material (CSAM)
- It is an initiative of the Delhi government for cloud seeding to combat the air pollution crisis in the national capital.
- It is an initiative of the Union Government to utilise and harness the benefits of Cloud Computing.

Q 8. Consider the following statement regarding the decision-making process of the Election Commission of India (ECI) in resolving party symbol disputes.

- The ECI gets the power to recognise political parties and allot symbols under the Election Symbols (Reservation and Allotment) Order, 1968.
- Paragraph 15 of the Symbols Order provides a procedural mechanism to be followed by the ECI to resolve the dispute among rival parties.
- The ECI relies on a "three tests principle" to determine the legitimacy of rival claimants.
- The ECI may freeze a party's symbol if it cannot determine clear majority support for any of the rival claimants.

Which of the above statements are correct?

- 1, 2 and 3 only
- 2, 3 and 4 only
- 1, 3 and 4 only
- 1, 2, 3 and 4

Q 9. Consider the following statements regarding 'Deep Tech' in India:

- India ranks third globally in terms of the number of Deep Tech startups.
- The National Deep Tech Startup Policy (NDTSP) aims to leverage Deep Tech for economic growth and societal development.
- India's R&D spending as a percentage of GDP is higher than the global average.

Which of the above statements are correct?

- | | |
|------------------|------------------|
| (a) 1 and 2 only | (b) 2 and 3 only |
| (c) 1 and 3 only | (d) 1, 2 and 3 |

Q 10. With reference to Reservation for Scheduled Castes (SCs) and Scheduled Tribes (STs), consider the following statements:

- The Parliament has the authority to identify SCs under Article 341 of the constitution.
- The Jarnail Singh vs Lachhmi Narain Gupta (2018) case is related to the subcategorization of SCs and STs.
- The concept of 'creamy layer' does not apply to SCs.

How many of the above statements is/are correct?

- Only one
- Only two
- All three
- None

Q 11. With reference to Mental Health, consider the following statements:

- The Ministry of Health and Family Welfare (MoHFW) launched the National Mental Health Programme (NMHP) in 2023.
- Mental Health Atlas is released by the World Health Organization (WHO).
- The Kiran Helpline was launched to provide 24/7 toll-free support for anxiety, stress, depression, and suicidal thoughts.

How many of the above statements is/are correct?

- Only one
- Only two
- All three
- None

Q 12. Consider the following statements regarding Rural Sanitation Programs in India:

- The Total Sanitation Campaign (TSC) was the first nationwide program for rural sanitation.
- Nirmal Bharat Abhiyaan was the first programme to be converged with MGNREGA.
- Swachh Bharat Mission (SBM) Phase-II focuses on Open Defecation Free Plus (ODF Plus) and Solid and Liquid Waste Management (SLWM).

Which of the above statements are correct?

- 1 and 2 only
- 2 and 3 only
- 1 and 3 only
- 1, 2 and 3

Q 13. Consider the following statement regarding the Annual Death Penalty Report, 2023:

1. It is released by the National Crime Records Bureau (NCRB).
2. According to the report, the Supreme Court and the High Courts together handed out just one death sentence, in 2023.

Which of the above statements is/are correct?

- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2

Q 14. With reference to the Indian Ocean Conference, consider the following statements:

1. The 7th edition of the Indian Ocean Conference was held in Dhaka, Bangladesh.
2. The inaugural edition was held in Singapore in 2016.
3. The Conference is organized annually by the Ministry of External Affairs of India.

How many of the above statements is/are correct?

- (a) Only one (b) Only two
(c) All three (d) None

Q 15. Consider the following pairs:

Strait	Connects
1. Strait of Malacca	Atlantic and Pacific Oceans near southern Chile
2. Strait of Hormuz	Red Sea with the Gulf of Aden and the Indian Ocean
3. Strait of Bab-al-Mandab	Persian Gulf with the Gulf of Oman and the Arabian Sea

How many of the above pairs are correctly matched?

- (a) Only one pair
(b) Only two pairs
(c) All three pairs
(d) None of the pairs

Q 16. Consider the following countries:

1. Australia
2. China
3. India
4. Japan
5. United States

Which of the above countries are a member of the Minerals Security Partnership (MSP)?

- (a) 1, 2 and 3 only (b) 1, 2, 4 and 5 only
(c) 1, 3, 4 and 5 only (d) 1, 2, 3, 4 and 5

Q 17. Consider the objectives of the Minerals Security Partnership (MSP):

1. To encourage public and private investments in critical mineral supply chains.
2. To provide countries with military assistance in securing critical minerals.
3. To promote responsible mining practices and environmental protection.

Which of the above statements are correct?

- (a) 1 and 2 only (b) 2 and 3 only
(c) 1 and 3 only (d) 1, 2 and 3

Q 18. With reference to the Preamble, consider the following statements:

1. Dr Ambedkar favoured including the term 'Secular' in the original Preamble.
2. Socialism is one of the key values given in the Directive Principles of State Policy.
3. The Preamble is considered an integral part of the Constitution.
4. The Preamble is enforceable in a court of Law.

How many of the above statements is/are correct?

- (a) Only one
(b) Only two
(c) Only three
(d) All four

Q 19. The Preamble to the Constitution of India is

- (a) a part of the Constitution but has no legal effect
(b) not a part of the Constitution and has no legal effect either
(c) a part of the Constitution and has the same legal effect as any other part
(d) a part of the Constitution but has no legal effect independently of other parts

Q 20. Regarding the Thanthai Periyar Wildlife Sanctuary recently seen in the news, consider the following statements:

1. It has been declared as the 18th wildlife sanctuary by the Tamil Nadu government.
2. It is within the catchment area of the Periyar River.
3. It is identified as a crucial tiger corridor.

How many of the above statements is/are correct?

- (a) Only one (b) Only two
(c) All three (d) None

Q 21. Regarding the Smart Cities Mission (SCM) recently seen in the news, consider the following statements:

1. Madurai is the only city to achieve 100% of its targets under the SCM.
2. Cities of North-Eastern States are among the top performers in achieving the targets.
3. The period of implementation of SCM has been extended up to June 2024.

Which of the above statements are correct?

- (a) 1 and 2 only (b) 2 and 3 only
(c) 1 and 3 only (d) 1, 2 and 3

Q 22. Consider the following statement regarding the Minimum Support Price (MSP):

1. It is declared by the Commission for Agricultural Costs and Prices (CACP).
2. CACP utilizes the A2 method for determining the cost of production.
3. Currently, MSP is declared for 23 crops.

How many of the above statements are correct?

- (a) Only one (b) Only two
(c) All three (d) None

Q 23. Consider the following:

1. Areca nut
2. Barley
3. Coffee
4. Finger millet
5. Groundnut
6. Sesamum
7. Turmeric

The Cabinet Committee on Economic Affairs announces the Minimum Support Price for which of the above?

- (a) 1, 2, 3 and 7 only
(b) 2, 4, 5 and 6 only
(c) 1, 3, 4, 5 and 6 only
(d) 1, 2, 3, 4, 5, 6 and 7

Q 24. With reference to the Wildlife (Protection) Act, 1972, consider the following statements:

1. The National Board for Wildlife (NBWL), an apex body chaired by the Prime Minister, was constituted under the act.
2. Schedule V of the act lists the names of animals declared as vermin.
3. Wild Boar is listed under Schedule V of the Act.

Which of the above statements are correct?

- (a) 1 and 2 only (b) 2 and 3 only
(c) 1 and 3 only (d) 1, 2 and 3

Q 25. With reference to the Electoral Bond Scheme (EBS), consider the following statements:

1. Electoral Bonds are interest-free bearer instruments resembling a Promissory Note.
2. It can be donated only to those political parties securing at least 1% of the votes in the last general election to the House of the People or a Legislative Assembly.
3. Recently, the Supreme Court declared the EBS as unconstitutional and violative of Article 19(1)(a).

Which of the above statements are correct?

- (a) 1 and 2 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) 1, 2 and 3

Q 26. Consider the following statements:

1. The Test of Proportionality is a legal approach, commonly applied by constitutional courts globally to resolve conflict between two rights or claims.
2. The test was laid down by the Supreme Court in the Kesavananda Bharati case.

Which of the statements given above is/are correct?

- (a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Q 27. With reference to the creation of new states/alteration of the boundaries of states, consider the following statements:

1. Article 2 of the Constitution deals with the formation of new States and alteration of areas/names of existing States.
2. The government has to obtain a prior recommendation from the President before introducing the bill in the Parliament.
3. Before recommending the bill, the President is required to refer it to the respective state legislature for expressing their views.

Which of the above statements are correct?

- (a) 1 and 2 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) 1, 2 and 3

Q 28. Consider the following statements:

1. The 6th Schedule provides autonomy to the tribal communities by establishing autonomous district councils (ADCs)
2. Presently, there are 10 ADCs in the four states of Nagaland, Meghalaya, Mizoram, and Tripura.
3. Ladakh is also demanding protection under the 6th Schedule to protect the region's culture, language and environment.

Which of the above statements are correct?

- (a) 1 and 2 only (b) 2 and 3 only
(c) 1 and 3 only (d) 1, 2 and 3

Q 29. With reference to Pulses, consider the following statements:

1. India is the largest producer, consumer, as well as importer of pulses globally.
2. Urad (black gram) can be cultivated as both kharif and rabi crop.
3. Tur (Arhar) alone accounts for nearly half of the pulse production.

How many of the above statements is/are correct?

- (a) Only one (b) Only two
(c) All three (d) None

Q 30. With reference to the Eastern Rajasthan Canal Project (ERCP), consider the following statements:

1. It is a tristate project between Rajasthan, Uttar Pradesh and Madhya Pradesh.
2. It will benefit the Malwa and Chambal regions of Madhya Pradesh.
3. It involves rivers like Kalisindh, Banganga, Parbati, Luni and Betwa.

How many of the above statements is/are correct?

- (a) Only one (b) Only two
(c) All three (d) None

Q 31. With reference to Snow Leopard, consider the following statements:

1. India has the highest number of snow leopards in the world.
2. It is listed as Critically Endangered in the IUCN-Red List of Threatened Species.
3. Hemis National Park of Himachal Pradesh has a significant number of Snow leopards in India

How many of the statements given above are correct?

- (a) Only one (b) Only two
(c) All three (d) None

Q 32. Consider the following statements regarding the Corruption Perceptions Index (CPI) in Asia Pacific:

1. The Asia Pacific region shows significant improvement in the CPI for 2023.
2. New Zealand and Singapore maintain their positions at the top of the index globally.
3. The average CPI score for the Asia Pacific region stagnates at 45.

How many of the statements given above are correct?

- (a) Only one
(b) Only two
(c) All three
(d) None

Q 33. Consider the following pairs:

Ramsar Sites	State
1. Karaivetti Bird Sanctuary	Tamil Nadu
2. Magadi Kere Conservation Reserve	Kerala
3. Longwood Shola Reserve Forest	Karnataka

How many of the above pairs is/are correct?

- (a) Only one
(b) Only two
(c) All three
(d) None

Q 34. Consider the following statements regarding the Subika Paintings:

1. The Subika painting style is intricately linked to the Meitei community.
2. The founder's name is mentioned in the Cheitharol Kumbaba.
3. It is depicted through visual images.

How many of the above statements is/are correct?

- (a) Only one
(b) Only two
(c) All three
(d) None of the above

Q 35. Recently, the term "Volt Typhoon" was in news, it is:

- (a) Cyclone that form throughout the South Pacific and Indian Ocean.
(b) Balance of barometer gradient.
(c) Sponsored hacking organization.
(d) Environmental Control Device.

Q 36. With reference to Deep Tech Policy, consider the following statements:

1. The policy advocates for establishing an Open Science and Data Sharing platform.
2. It establishes a Single Window Platform for a Unified IP Framework customized for startups.

Which of the statements given above is/are correct?

- (a) Only 1
- (b) Only 2
- (c) Both 1 and 2
- (d) None of the above

Q 37. Consider the following statements regarding the Water (Prevention and Control of Pollution) Bill, 2024:

1. The bill seeks to amend the Environment (Protection) Act, of 1986.
2. Under the proposed legislation, State governments will define the process for appointing chairpersons of State Pollution Control Boards.

Which of the above-given statements is/are correct?

- (a) Only 1
- (b) Only 2
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Q 38. Consider the following statements with respect to the atmospheric river:

1. Atmospheric rivers form in tropical regions.
2. Atmospheric rivers can transport up to 15 times the volume of the Mississippi River.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 and 2

Q 39. Consider the following statements regarding the Black-necked Crane:

1. It is native to South America.
2. It is classified as Vulnerable on the IUCN Red List.
3. It is protected under Schedule I of the Wild Life (Protection) Act, 1972.

How many of the statements given above is/are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

Q 40. Consider the following statements regarding the Kilkari Program:

1. It is launched by the Ministry of Women and Child Development.
2. Its objective is to deliver audio messages about pregnancy to new and expectant mothers.
3. Currently it is operational in all States and UTs of India.

How many of the statements given above is/are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

Q 41. Consider the following statements regarding Maharishi Dayanand Saraswati:

1. He advocated the doctrine of Karma and reincarnation.
2. He strongly opposed child marriage and polygamy.
3. He founded the Satyasodhak Samaj.

How many of the statements given above is/are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

Q 42. Consider the following statements regarding the SWATI Portal:

1. It aims to address gender disparity in STEM fields.
2. It is developed by the Ministry of Women and Child Development.
3. It includes its database for achievements of women achievers in every field.

How many of the statements given above is/are correct?

- (a) Only one
- (b) Only two
- (c) All the three
- (d) None

Q 43. Consider the following statements regarding Dhokra Shilpkala:

1. It is exclusively practiced by the Gond tribal community in Madhya Pradesh.
2. The lost wax casting method is used to create intricate metal sculptures in this art.
3. Artisans of Dhokra Shilpkala draw inspiration from Hindu mythology and ancient scriptures.

How many of the statements given above is/are correct?

- (a) Only one
- (b) Only two
- (c) All the three
- (d) None

Q 44. With reference to Annual Death Penalty Report (2023), consider the following statements:

1. It is released by the Ministry of Law & Public Grievances.
2. Bihar stands out with the largest death sentence row population.

Which of the statements given above is/are correct?

- (a) Only 1
- (b) Only 2
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Q 45. Consider the following statements regarding the 'Smart Gram Panchayat' project:

1. It will help to bridge the rural-urban digital divide and foster accountability and efficiency in local self-governance.
2. The initiative is funded under the Pradhan Mantri Gram Sadak Yojana (PMGSY).
3. It aims to extend the PM-WANI (Prime Minister's Wi-Fi Access Network Interface) Service.

How many of the statements given above is/are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

Q 46. Consider the statements regarding High-Altitude Pseudo Satellites (HAPS):

1. They are unmanned air vehicles that can vary with variable positions in sync with the movement of satellites.
2. They can fly at an altitude of 18-20 km from the ground, almost double the heights attained by commercial airplanes.

Which of the statements given above is/are correct?

- (a) Only 1
- (b) Only 2
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Q 47. Which statements about Bochasanwasi Akshar Purushottam Swaminarayan Sanstha (BAPS) are correct?

- (a) It is a socio-political organization advocating for Hindu nationalism.
- (b) It is a socio-spiritual Hindu faith, emphasizing practical spirituality and social welfare.
- (c) It is a socio-economic organization that primarily focuses on promoting economic development in rural areas.
- (d) It is a commercial enterprise specializing in international trade and commerce.

Q 48. 'T K Viswanathan' panel is related to which of the following sectors?

- (a) Reforms in the Banking Sector
- (b) Reforms in the Insurance Sector
- (c) Reforms in Insolvency and Bankruptcy Code
- (d) Reforms in External Trade

Q 49. Consider the following statements regarding Sangam: Digital Twin initiative:

1. It aims to utilize Digital Twin technology for infrastructure planning and design.
2. This initiative is launched by the Ministry of Culture.
3. It encourages collaboration among industry pioneers, startups, MSMEs, academia, and innovators.

How many of the statements given above is/are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

Q 50. Consider the following statements regarding the Northern pintail:

1. They are endemic to north India.
2. They are classified as critically endangered by the IUCN.

Which of the statements given above is/are correct?

- (a) Only 1
- (b) Only 2
- (c) Both 1 and 2
- (d) Neither 1 nor 2

ANSWER KEY

1. b	6. b	11. b	16. c	21. c	26. a	31. d	36. c	41. b	46. B
2. b	7. b	12. b	17. c	22. a	27. b	32. b	37. d	42. b	47. b
3. c	8. c	13. b	18. b	23. b	28. c	33. a	38. c	43. b	48. c
4. b	9. a	14. a	19. d	24. a	29. b	34. b	39. a	44. D	49. a
5. a	10. d	15. d	20. b	25. d	30. a	35. c	40. a	45. b	50. d

MAINS ANSWER WRITING

Tips for UPSC Mains
Answer Writing

- Q 1.** Discuss the challenges involved in achieving fiscal consolidation in India. Also, suggest a comprehensive strategy for sustainable fiscal management. (10 marks/150 words)
- Q 2.** Discuss the implications of the ongoing civil war in Myanmar on India's geopolitical and security landscape. (10 marks/150 words)
- Q 3.** In light of recent allegations by the States regarding the weakening of fiscal federalism by the Central Government, examine the underlying factors contributing to the erosion of fiscal federalism in India. (10 marks/150 words)
- Q 4.** Subcategorization of Scheduled Castes (SCs) and Scheduled Tribes (STs) is imperative for the Reservation Policy to remain relevant. Analyze. (10 marks/150 words)
- Q 5.** While the Swachh Bharat Mission-Grameen (SBM-G) has brought a "sanitation miracle" in rural India, several challenges remain. Critically evaluate. (10 marks/150 words)
- Q 6.** In light of the gradual elimination of death penalty globally, critically examine the utility of death penalty in India. Also, discuss the steps required to ensure a just and humane criminal justice system. (10 marks/150 words)
- Q 7.** Discuss the significance of India's membership in the Minerals Security Partnership (MSP). Also, discuss the challenges faced by India in assuring resilient critical minerals supply chains. (10 marks/150 words)
- Q 8.** Highlighting the significance of the Preamble to the Indian Constitution, discuss how the Preamble reflects the core values and aspirations of the Indian Republic. (10 marks/150 words)
- Q 9.** Smart Cities Mission (SCM), although a novel idea, is not free of institutional challenges. Critically analyze. (10 marks/150 words)
- Q 10.** Even after nearly two decades of passage of the Forest Rights Act of 2006, the recognition and implementation of forest-dweller rights in India remains an unfulfilled dream. Analyze. (10 marks/150 words)
- Q 11.** Discuss the role of the International Court of Justice (ICJ) in preventing genocide. Analyze the effects of its ruling on the Israel-Hamas conflict. (15 marks/250 words)
- Q 12.** Discuss the significance of financial decentralisation in the context of Panchayats in India. Also, Evaluate the effectiveness of their internal resource generation capabilities for local governance and development. (15 marks/250 words)
- Q 13.** The Central Bureau of Investigation (CBI) was envisaged as the watchdog of corruption in India. However, its credibility has been called into question in recent years. Critically examine. (15 marks/250 words)
- Q 14.** The recent verdicts of the Election Commission of India (ECI) in Shiv-Sena and NCP disputes have led to several political parties raising questions over impartiality in the functioning of ECI. Critically examine. (15 marks/250 words)
- Q 15.** Critically evaluate the potential of deep tech for India's economic development, considering both its opportunities and challenges. Analyze the effectiveness of existing government initiatives like the National Deep Tech Startup Policy (NDTSP). (15 marks/250 words)
- Q 16.** Discuss the feasibility of making Minimum Support Price (MSP) a legal right. Also, suggest measures for addressing the concerns of farmers while ensuring the sustainability of the agriculture sector. (15 marks/250 words)

Q 17. Examine challenges posed by human-wildlife conflicts. Discuss the role of the Wildlife Protection Act (WPA) of 1972 in mitigating human-wildlife (HWC) conflict in India.

(15 marks/250 words)

Q 18. Discuss the constitutional provisions involved in creating new states in India, focusing on the recent demands for statehood in Ladakh.

(15 marks/250 words)

Q 19. Discuss the significance of pulse cultivation in India's agricultural landscape. Analyse the challenges hindering self-sufficiency in pulse production in India.

(15 marks/250 words)

Q 20. Critically examine the challenges and opportunities associated with the Intergovernmental Panel on Climate Change's (IPCC) assessment reports in informing global climate action.

(15 marks/250 words)

APPROACH

Q 1. Introduction

- Introduce either with the concept of fiscal consolidation OR by highlighting the current fiscal deficit situation in India, citing relevant data.

Body

- Discuss the challenges of fiscal consolidation in India such as high subsidy burden, limited fiscal space for infra and social capital development, etc.
- Discuss the strategies for sustainable fiscal management such as increasing capital expenditure, rationalization of subsidies, efficient tax collection, formalizing the economy, widening the tax net, etc.

Way Forward

- Need for a multi-pronged approach to address India's fiscal imbalance.

Q 2. Introduction

- Introduce with a brief background of the ongoing Myanmar Civil War.

Body

- Highlight some implications for India, such as – strategic implications, security implications, economic implications, and social implications.
- Explore a few solutions in brief such as balancing the interests of both Bangladesh and Myanmar on the Rohingya issue, focusing on robust economic cooperation, etc.

Conclusion

- Conclude by suggesting how India needs to augment its security-centric approach with a people-centric approach.

Q 3. Introduction

- Introduce by defining the term Fiscal Federalism

Body

- Enlist the factors for the erosion of Fiscal Federalism such as – Impact of GST on State autonomy, increasing share of Cess and Surcharges, Centrally Sponsored Schemes, etc.
- Briefly highlight some measures the Centre can take to reduce the trust deficit.

Conclusion

- Conclude by highlighting that federalism is one of the basic features of the Constitution and how fiscal federalism can be the bedrock for the inclusive development of India.

Q 4. Introduction

- Give a brief explanation of subcategorization.

Body

- Discuss constitutional provisions for Reservation for SCs and STs
- Enlist some Arguments in favour of subcategorization
- Resource cornering by a few empowered
- Diversity within SCs/STs
- Supreme Court view and recent constitutional bench observations

Conclude

- Conclude by emphasizing that reservation policy must keep pace with the changing social dynamics.

Q 5. Introduction

- Briefly introduce by defining Swachh Bharat Mission-Grameen (SBM-G).

Body

- First highlight some of the achievements of SBM-G such as – a significant increase in toilet access and ODF Plus status achieved in many villages.
- Also discuss some of the challenges like the gap between

access and usage due to factors like household size, social norms, limited water access, lack of focus on behavioural change, etc.

Way Forward

- Suggest potential solutions like promoting civil society participation, targeted behavioural change campaigns, improved infrastructure, and integrated waste management strategies under schemes like Namami Gange and Gobardhan.

Q 6. Introduction

- Briefly highlight the status of death penalty in India and globally.

Body

- Discuss both arguments in favour and against the abolition of death penalty
- Highlight the Supreme Court’s views on the validity of death penalty

Way Forward

- Briefly suggest steps for a just and humane criminal justice system in India.

Q 7. Introduction

- Briefly introduce by defining Minerals Security Partnership.

Body

- Discuss the significance of India’s involvement in the MSP such as – shift towards sustainable mobility, reliable and diversified supply chains for critical minerals, reducing dependence on China, boost to indigenous electronics and semiconductor manufacturing, etc.
- Highlight the challenges faced by India on both domestic and external fronts in assuring a resilient supply chain of critical minerals.

Way Forward

- Emphasize the critical role of the MSP in strengthening global critical mineral supply chains for a sustainable future.

Q 8. Introduction

- Brief overview of the Preamble

Body

- **Give the significance of the Preamble**
 - ✓ Key to the minds of the framers of the Constitution.
 - ✓ Preamble is used as a guiding light.
 - ✓ Is a part of the basic structure.
- **Highlight how it reflects the core values and aspirations of the Indian Republic**

- ✓ Justice (Economic, Political, Social)
- ✓ Democratic
- ✓ Sovereign etc.

Conclusion

- Write a balanced conclusion on how the preamble helps in rational interpretation of the Constitution.

Q 9. Introduction

- Introduce SCM with its objectives in brief

Body

- Highlight the progress made under the Mission
- Discuss various challenges in terms of funding, execution, etc.
- **Suggest some measures to tackle the challenges**
 - ✓ Tailored Plans for Smaller Cities
 - ✓ IT Security Measures
 - ✓ Governance Structure Enhancement, etc.

Conclusion

- Conclude by writing how India, with increasing urbanisation, needs SCM more than ever to provide cities where people can thrive in a sustainable way.

Q 10. Introduction

- Briefly introduce the concept of forest-dweller as Given in FRA 2006.

Body

- Provide an overview of the Forest Rights Act, 2006, highlighting its objectives and key provisions.
- **Significance of Forest-Dweller Rights:**
 - ✓ Explain how recognising forest-dweller rights empowers marginalised communities and promotes social justice.
 - ✓ Discuss the role of these rights in sustainable forest management and biodiversity conservation, emphasising forest dwellers’ traditional knowledge and practices.
- **Challenges in Recognition and Implementation:**
 - ✓ Identify bureaucratic indifference, political opportunism, and resistance from foresters as key challenges in implementing forest-dweller rights.

Conclusion

- Conclude by highlighting the need for proper implementation of the Act.

Q 11. Introduction

- Introduce by highlighting ICJ (also called the World Court) as the principal judicial organ of the United Nations

Body

- First, discuss the ICJ’s jurisdiction under Article IX of the Genocide Convention and its limitations in cases relating to genocides committed by Individuals.
- Highlight the provisional (Interim) measures taken by the ICJ and their effect on the Israel-Hamas conflict.
- Also highlight the limitations of ICJ in enforcing its orders.

Conclusion

- Conclude by highlighting that even though the ruling may be largely symbolic but can have tangible consequences on the ground.

Q 12. Introduction

- Define financial decentralisation and its implementation by the 73rd Amendment Act of 1992.

Body

- Discuss the significance of financial decentralisation for Panchayats, such as improved accountability, democratic development, self-sufficiency, etc.
- Highlight the sources of funds for Panchayats in India, including devolution and grants by Centre and States (Article 280, 243I) and their own resource generation under the 11th Schedule.
- Discuss the challenges in generating internal resources in terms of the lack of effective devolution of functions and functionaries.

Way Forward

- Enlist some points to enhance effectiveness, such as recommendations of 2nd ARC, NCRWC, etc.

Q 13. Introduction

- Introduce briefly by describing the establishment of CBI as the premier investigating agency to tackle bribery and corruption in India.

Body

- Briefly discuss the origin of CBI during World War II and its powers under the Delhi Special Police Establishment (DSPE) Act of 1946.
- Highlight the reasons for its declining credibility such as – being used as a tool of political vendetta, withdrawal of general consent by several states, impact on autonomy due to recent amendment in the DSPE Act, etc.
- Also, highlight the impact of its declining credibility such as loss of public trust, delay in investigation, adverse impact on governance, etc.

Way Forward

- Suggest some remedial measures in this regard, eg- enacting a new law to address limitations in the existing DSPE Act governing the CBI.

Q 14. Introduction

- Highlight the ECI’s recent verdicts in the NCP and Shiv Sena disputes.

Body

- Discuss in brief the decision-making process of ECI in resolving disputes among parties over symbols.
- Highlight the concerns raised by several political parties regarding the ECI’s impartiality such as – sole reliance on the test of majority in the party’s legislative wing, not taking into account the disqualification petitions pending before the speaker, etc.
- Also highlight the challenges before ECI in deciding such disputes due to irregular organizational elections, internal elections being reduced to appointments, rampant defections and delay in decision-making by the Speaker, etc.

Way Forward

- Give recommendations of NCRWC, the 170th report of the Law Commission regarding the need for comprehensive legislation relating to internal democracy within parties.

Q 15. Introduction

- Introduce by briefly defining deep tech

Body

- Highlight various opportunities of deep tech like driving economic growth, job creation, global competitiveness, etc.
- Discuss some of the challenges like shortage of funding, lack of skilled professionals, regulatory hurdles, lack of infrastructure, concerns regarding data privacy, and misuse of deep-tech.
- Briefly explain the goals and objectives of the NDTSP and its effectiveness in addressing the challenges mentioned above.

Way Forward

- Suggest additional measures to unlock the full potential of deep tech in India eg- increased funding for R&D, public-private partnerships, skill development programs, etc.

Q 16. Introduction

- Briefly introduce by defining the MSP.

Body

- Arguments for legalizing MSP: such as Market distortion, Fiscal burden, Consumer bias, Ineffectiveness, Limited coverage, etc.

- Arguments against legalizing MSP: such as Farmer protection, Stability and predictability, Incentive for production, etc.

Way Forward

- Suggest alternative approaches like improved market access, promoting sustainable practices and implementation of the Swaminathan Commission's formula.

Q 17. Introduction

- Define human-wildlife conflict and highlight the increasing number of it.

Body

- **Challenges of Human-Wildlife Conflicts:**
 - ✓ Loss of lives and livelihoods.
 - ✓ Threats to biodiversity conservation.
 - ✓ Risk of disease transmission.
- **Role of the Wildlife Protection Act (WPA) of 1972**
 - ✓ Overview of WPA's provisions and objectives.
 - ✓ Regulatory measures for wildlife conservation.
 - ✓ Protection of endangered species and habitats.
 - ✓ Conflict resolution mechanisms.
- **Impact and Effectiveness Assessment:**
 - ✓ Evaluate the WPA's impact on mitigating HWC.
 - ✓ Identify gaps in implementation and enforcement.

Way Forward

- Recommendations for Improvement such as – Strengthening enforcement mechanisms, Increasing community participation, Integrating scientific research and traditional knowledge, etc.

Q 18. Introduction

- Give a brief background for the demand for statehood in Ladakh

Body

- Enlist specific reasons for the Demand for statehood in Ladakh
 - ✓ Strategic location
 - ✓ Unique culture
 - ✓ Distinct tribal population.
 - ✓ Fragile Environment etc
- **Explain constitutional provisions**
 - ✓ Article 3 of the Constitution
 - ✓ Procedures given under Article 3

Conclusion

- The union government can deliberate with all stakeholders regarding the demand for statehood while providing some immediate measures for autonomy to reduce the trust deficit.

Q 19. Introduction

- Highlight the status of pulses in India.

Body

- **Significance of Pulse Cultivation:**
 - ✓ Addressing Food Security
 - ✓ Enhancing Soil Fertility
 - ✓ Promoting Sustainable Farming Practices
- **Challenges in Pulse Production:**
 - ✓ Low Productivity
 - ✓ Climate Vulnerability
 - ✓ Residual Crop Status
 - ✓ Preference for Cash Crops
 - ✓ Post-Harvest Losses

Conclusion

- Conclude by writing about the goal of becoming self-sufficient in pulse production by 2027.

Q 20. Introduction

- Briefly introduce about IPCC and its assessment reports.

Body

- **Highlight their role in informing global climate action.**
 - ✓ **Challenges:** Such as balancing scientific rigour, ensuring inclusivity and addressing data access concerns, maintaining objectivity and avoiding biases, effectively communicating complex findings to policymakers and the public, etc.
 - ✓ **Opportunities:** Providing a comprehensive scientific basis for policy decisions, raising public awareness and building consensus for action, identifying knowledge gaps and prompting further research and innovation.

Way Forward

- Briefly suggest ways to address challenges and leverage opportunities to combat climate change.

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